

**REPORT PREPARED FOR THE
FLORIDA HURRICANE CATASTROPHE FUND**



CLAIMS-PAYING CAPACITY ESTIMATES

OCTOBER 9, 2018

ONCE FINALIZED, THE STATEMENT OF THE FHCF'S ESTIMATED BORROWING CAPACITY, ESTIMATED CLAIMS-PAYING CAPACITY, AND PROJECTED YEAR-END BALANCE REQUIRED UNDER S. 215.555(4)(c)2., F.S., WILL BE PUBLISHED IN THE FLORIDA ADMINISTRATIVE REGISTER AS REQUIRED BY LAW.

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I. Introduction

The Florida Hurricane Catastrophe Fund ("FHCF") is a tax-exempt trust fund created by the State of Florida in 1993 and is administered by the State Board of Administration of Florida under Section 215.555, Florida Statutes. Its sole purpose is to stabilize the State's property insurance markets by providing contractually specified coverage that provides reimbursement for a portion of residential property insurers' hurricane losses. Participation is mandatory for authorized property insurers, subject to limited exceptions.

Participating insurers pay the FHCF annual reimbursement premiums as consideration for this coverage. The reimbursement premiums are based on insured values of covered properties, as reported annually to the FHCF. The FHCF statute requires the annual adoption of a reimbursement premium formula that generates "actuarially indicated" premiums as defined by law. An insurer's premium is proportionate to its coverage selection at a percentage level and its share of the FHCF's total risk exposure.

The annual reimbursement contract provides for reimbursement of a percentage of an insurer's residential hurricane losses in excess of its "retention" which is determined under a statutory formula. Reimbursement is provided at one of three percentage levels (90%, 75%, or 45%) selected in advance by the insurer.

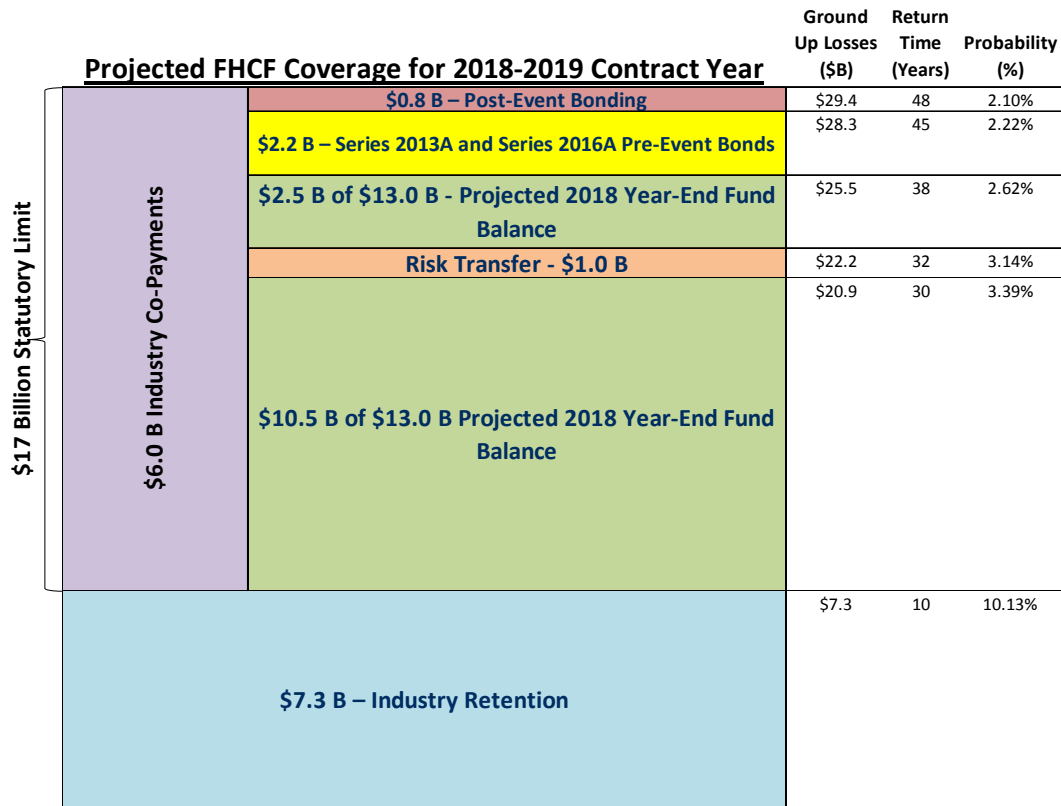
The FHCF may obtain funds to pay its contractual reimbursement obligations from the following available potential sources:

- (1) *Accumulated reimbursement premiums*
- (2) *Recoveries from reinsurance and other risk-transfer mechanisms*
- (3) *Pre-event bond proceeds and other pre-event liquidity resources*
- (4) *Proceeds of post-event revenue bonds issued under Section 215.555(6), Florida Statutes, and secured by emergency assessments, if needed*
- (5) *Emergency assessments under Section 215.555(6)(b), Florida Statutes, if needed*
- (6) *Investment earnings on accumulated reimbursement premiums and emergency assessments*

The actual and potential obligations of the FHCF are limited by statute. For the contract year June 1, 2018 – May 31, 2019, the maximum potential liability of the FHCF is \$17 billion, with total liquid resources of \$16.2 billion, which is \$800 million below the maximum potential liability and therefore would require \$800 million of post-event borrowing. In addition, the FHCF statute limits the Fund's reimbursement liability to its actual claims-paying capacity, which may depend on financial market



conditions at the time of sale if any post-event revenue bonds are needed to pay claims. The following chart summarizes the FHCF's projected coverage for the 2018-2019 contract year based on assumptions in the 2018 ratemaking formula report, as prepared by Paragon Strategic Solutions, the FHCF's consulting actuary.



Not drawn to scale

Ground-up losses exclude 5% of loss adjustment expenses ("LAE") on the industry co-payments.

In this chart the relevant data are aggregated for FHCF participating insurers. The references to probabilities, probable maximum losses, and cash exhaustion are shown for illustrative purposes only. The probabilities in this chart are presented as if all of the participating insurers had uniform exposures and loss experiences. In actual practice, each participating insurer has its own retention and coverage limits based upon its actual exposures, and therefore each participating insurer has its own unique probability of triggering its FHCF coverage and reaching its FHCF coverage limit.

Pursuant to Section 215.555(4)(c)(2), Florida Statutes, "in May and October of the contract year, the board shall publish in the Florida Administrative Register a statement of the fund's estimated borrowing capacity, the fund's estimated claims-paying capacity, and the projected balance of the fund as of December 31." The purpose of these claims-paying capacity estimate reports is to provide an estimate of the borrowing and claims-paying capacity of the FHCF for the 2018 season in order to assist the FHCF's participating insurers in determining their reimbursements.

Providing estimates at these particular times of the year is useful from the perspective that some insurers operate in multiple states and tend to purchase their private reinsurance effective January, while many other insurers operate solely in Florida and purchase their private reinsurance prior to June, effective June 1st of each year.



II. The Process

As in prior years, in order to estimate the FHCF's borrowing capacity for the 2018 and 2019 seasons, we took the following three steps:

- (1) *Evaluated market conditions for the FHCF using our internal resources.* Raymond James & Associates, Inc. ("Raymond James"), a full service broker-dealer with approximately \$14 billion in market capitalization (NYSE: RJF, www.raymondjames.com), serves as the independent

Raymond James and the FHCF staff utilized the resources of the FHCF's five senior managing underwriters to estimate FHCF bonding capacity

financial advisor to the FHCF. Raymond James also serves as an advisor to numerous other governmental catastrophe insurance entities across the country and our experience includes the evaluation and placement of risk transfer programs in the traditional and capital markets, the issuance of pre-event bonds and other liquidity mechanisms, the issuance of post-event bonds, and serving as an investment consultant. We rank number one as financial advisor to state-sponsored public insurance entities and are among the top 10 municipal underwriters in the country and participate daily in the market for fixed income securities similar to those the FHCF has issued or would issue to help meet its reimbursement obligations after an event and have served as advisor or underwriter on the issuance of over \$40 billion of debt and related financial instruments for the FHCF and other governmental catastrophe insurance entities around the country since 2005. Raymond James currently has over \$750 billion of assets under management.

- (2) *Solicited formal written feedback from the five current senior managing underwriters of the FHCF's financial services team.* These firms – Bank of America / Merrill Lynch, Citi, J.P. Morgan, Morgan Stanley and Wells Fargo – are among the largest financial services firms in the world, and each one has an extensive experience and expertise with FHCF securities and similar instruments for other municipal issuers. They all were also part of the team for the successful execution of the Series 2013A and Series 2016A pre-event financings. In the solicitation for the preparation of this report, we asked them to provide their estimates, given certain assumptions, of the FHCF's bonding capacity. As always, in our written request for feedback, we sought to ensure that the underwriters had a clear understanding of the purpose of asking them to provide such estimates and the uses therefore. A copy of the solicitation and the response of each of the managers is contained in Appendix A.
- (3) *We evaluated the written feedback and determined a recommended bonding capacity estimate for inclusion in this report.*



III. Analytical Considerations

The FHCF has very strong debt repayment capabilities. From a credit standpoint, the ability to levy emergency assessments on all property and casualty insurance lines except workers' compensation, medical malpractice, federal flood, and accident and health lines is similar to a statewide sales tax on an essential product with an underlying premium base of \$46.8 billion. The

The major constraint, if any in the future, for the FHCF in achieving its maximum reimbursement obligation is potential limitation of market access and capacity, not a lack of assessment capability or credit strength

strength of this pledged revenue stream is the primary reason the three major rating agencies – Moody's, Standard & Poor's, and Fitch – rate the FHCF's debt Aa3, AA, and AA, respectively. To put these ratings in perspective, less than 5% of U.S. corporations have ratings in the AA category by all three rating agencies.

While the FHCF statute does limit the amount of assessments that can be levied – 6% for losses attributable to one contract year and 10% for losses attributable to all years – these percentages, when applied to the current assessment base of \$46.8 billion¹ mean the FHCF could levy annual assessments of as much as \$2.81 billion for losses from hurricanes occurring in one contract year and as much as \$4.68 billion for losses from hurricanes occurring over multiple contract years. These annual amounts, in conjunction with the other available resources of the FHCF, are estimated to be more than sufficient to support enough bonds to enable the FHCF to meet its maximum initial season obligation and subsequent season coverage as well, assuming that the fixed income markets continue to function in a normal manner and the FHCF has market access to issue such bonds at the current market rate for the initial season, or even at inflated rates of 7%.

Market conditions have significantly improved over the last nine years with the U.S. and global interest rates still at low levels from a historical perspective and fixed rate issuance at all-time highs, which enabled the FHCF to successfully execute the \$2 billion Series 2013A and \$1.2 billion Series 2016A taxable pre-event financings in 2013 and 2016, respectively. However, market conditions and access are never guaranteed, especially after an event or multiple events, and therefore always carry marginal uncertainty, which is critical to understanding the potential challenges the FHCF may face, especially after a large event. In addition, the FHCF also purchased reinsurance for the first time for the 2015 season in the amount of \$1 billion at an attachment point of \$12.5 billion and then again in 2016 and 2017 transferred \$1 billion of risk to the global markets through traditional reinsurance, each at attachment points of \$11.5 billion. For the 2018 season, the FHCF transferred \$1 billion of risk through traditional reinsurance at an attachment point of \$10.5 billion.

¹ See Appendix B for an analysis of the size and growth of the FHCF's assessment base over time.



Under section 215.555(4) (b) 1, Florida Statutes, an insurer is prohibited from electing a lower coverage percentage upon renewal of its FHCF reimbursement contract if any post-event revenue bonds are outstanding. However, since the defeasance of all outstanding FHCF post-event revenue bonds in 2014, some participating insurers elected to take advantage of global risk transfer markets and lowered their coverage percentage selection starting in the 2015-2016 contract year. The average coverage percentage selection has dropped from 89.9% for the 2014-2015 contract year to 73.1% for the 2018-2019 contract year, a reduction of over 18%. As a result of these changes, the copayment amount for a \$17 billion FHCF payout increased from \$1.8 billion for the 2014-2015 Contract Year to approximately \$6.0 billion for the 2018-2019 Contract Year. As reflected in the table below, for the 2018-2019 Contract Year, the FHCF has \$16.2 billion of liquidity resources, which is \$800 million below its maximum statutory obligation of \$17 billion. After an event and depending on the market conditions and interest rates, the FHCF may be able to either draw on its pre-event bond proceeds and repay the pre-event bonds by issuing post-event bonds, or the FHCF could issue post-event bonds in the amount of \$3.0 billion and leave its pre-event bond proceeds outstanding for a subsequent season(s). The table below shows the FHCF's obligations and its projected liquidity resources for the 2018-2019 Contract Year.

FHCF Obligations and Liquidity Resources – 2018-2019 Contract Year	Amount (\$B)
Total Potential FHCF Obligations	\$17.0
Projected 2018 Year-End Fund Balance	\$13.0
Risk Transfer	\$1.0
Series 2013A and Series 2016A Pre-Event Bonds Balance	\$2.2
Total Liquidity Resources	\$16.2
Total Liquidity Resources Below Potential Obligations	\$0.8

If the FHCF were to leave all its Series 2013A and Series 2016A pre-event bond proceeds outstanding, the potential maximum amount of post-event bonding needed is projected to be approximately \$3.0 billion for the 2018-2019 contract year. The FHCF could execute this size of transaction in multiple series over a 12-month period – this issuance amount is standard in the taxable and tax-exempt markets. For example, annual par amount issued over a calendar year by a single municipal issuer has exceeded \$3.0 billion over 50 times since 2013.

The FHCF's 2018-2019 Contract Year liquidity resources reflect losses and loss reserves from Hurricane Irma, which initially made landfall on September 10th in the Florida Keys as a Category 4 hurricane, but quickly weakened to a Category 1 storm by September 11th. The FHCF's ultimate losses and loss reserves from Hurricane Irma at this time are estimated to be \$3.20 billion by Paragon Strategic Solutions Inc., the FHCF's consulting actuary.



Largest 25 Taxable Municipal Issuances By Par Amount Since 2013					
Rank	Issuer Name	State	Year of Sale	Issue Description	Par (\$MM)
1	Grand Parkway Transport Corp	TX	2013	Subordinated Tier Toll Rev Bonds	\$2,920
2	California	CA	2013	Various Purpose GO Bonds	\$2,472
3	Regents of the Univ of California	CA	2017	General Revenue Bonds	\$2,459
4	New York Transportation Dev Corp	NY	2016	Special Facilities Bonds	\$2,410
5	New Jersey Economic Dev Auth	NJ	2013	School Facs Constr Ref Bonds	\$2,253
6	New Jersey Economic Dev Auth	NJ	2015	School Facilities Con Ref Bonds	\$2,178
7	California	CA	2018	Various GO & Refunding Bonds	\$2,147
8	NYS Utility Debt Securitization Auth	NY	2013	Restructuring Bonds	\$2,022
9	FL Hurricane Catastrophe Fin. Corp.	FL	2013	Revenue Bonds	\$2,000
9	Port Authority of NY & NJ	NY	2013	Consolidated Bonds	\$2,000
10	Los Angeles Comm College Dt	CA	2015	GO Refunding Bonds	\$1,893
11	San Jose City Successor Redev Agcy	CA	2017	Sr Tax Allocation Refunding Bonds	\$1,678
12	Regents of the Univ of California	CA	2015	Ltd Project Revenue Bonds	\$1,671
13	Regents of the Univ of California	CA	2013	General Revenue Bonds	\$1,594
14	JobsOhio Beverage System	OH	2013	Stwide Sr Ln Liquor Profits Bonds	\$1,511
15	Los Angeles USD	CA	2018	General Obligation Bonds	\$1,350
16	SC Pub Svc Au (Santee Cooper)	SC	2013	Revenue Obligations	\$1,341
17	California	CA	2017	High-Speed Passenger Train Bonds	\$1,248
18	New Jersey Economic Dev Auth	NJ	2014	School Fas Constr Ref Bonds	\$1,229
19	Florida St Board Admin Fin Corp	FL	2016	Revenue Bonds	\$1,200
20	Regents of the Univ of California	CA	2015	General Revenue Bonds	\$1,179
21	Oklahoma Dev Finance Auth	OK	2018	Health System Revenue Bonds	\$1,162
22	Chicago City-Illinois	IL	2017	General Obligation Project Bonds	\$1,160
23	California State Univ Trustees	CA	2017	Systemwide Revenue Bonds	\$1,147
24	Regents of the Univ of California	CA	2017	General Revenue Bonds & Notes	\$1,136
25	SC Pub Svc Au (Santee Cooper)	SC	2015	Revenue Bonds	\$1,104

Source: Thomson Financial for long-term negotiated taxable issuances from January 1, 2013 to August 31, 2018.

Largest 25 Tax-Exempt Municipal Issuances By Par Amount Since 2013					
Rank	Issuer Name	State	Year of Sale	Issue Description	Par (\$MM)
1	Illinois	IL	2017	General Obligation Bonds	\$4,500
2	Puerto Rico	PR	2014	General Obligation Bonds	\$3,500
3	NJ Tobacco Settlement Fin Corp	NJ	2018	Tobacco Settlement Bonds	\$3,147
4	California	CA	2016	GO Various Purpose Ref Bonds	\$2,951
5	Grand Parkway Transport Corp	TX	2013	Sub Tier Toll Rev Tender Bonds	\$2,920
6	California	CA	2017	GO Var Purpose & Refunding Bonds	\$2,793
7	New Jersey Trans Trust Fund Au	NJ	2016	Revenue Notes	\$2,741
8	California	CA	2016	GO Various Purpose & Ref Bonds	\$2,653
9	California	CA	2013	GO Various Purpose Bonds	\$2,630
10	California	CA	2017	GO Various Purpose & Ref Bonds	\$2,538
11	North Texas Tollway Auth (NTTA)	TX	2017	2nd Tier System Rev & Ref Bonds	\$2,509
12	California	CA	2013	Various Purp GO Refunding Bonds	\$2,472
13	Regents of the Univ of California	CA	2013	General Revenue Bonds	\$2,459
14	California	CA	2014	GO Various Purpose & Ref Bonds	\$2,370
15	Foothill/Eastern Transp Corridor Agy	CA	2013	Toll Road Refunding Revenue Bonds	\$2,275
16	New Jersey Economic Dev Auth	NJ	2013	School Facs Constr Ref Notes	\$2,253
17	California	CA	2018	GO & Various Purpose Ref Bonds	\$2,181
18	New Jersey Economic Dev Auth	NJ	2015	School Facilities Con & Ref Bonds	\$2,178
19	Hudson Yards Infrastructure Corp	NY	2017	Second Indenture Revenue Bonds	\$2,142
20	California	CA	2013	General Obligation Bonds	\$2,097
21	NYC Sales Tax Asset Rec Corp	NY	2014	Sales Tax Asset Revenue Bonds	\$2,035
22	NYS Utility Debt Securitization Auth	NY	2013	Restructuring Bonds	\$2,022
23	Metropolitan Transport Auth (MTA)	NY	2017	Transport Rev Ref Green Bonds	\$2,021
24	Port Authority of NY & NJ	NY	2015	Consolidated Bonds	\$2,000
25	Bay Area Toll Authority (BATA)	CA	2017	Toll Bridge Revenue Bonds	\$1,954

Source: Thomson Financial for long-term negotiated tax-exempt issuances from January 1, 2013 to August 31, 2018.



After a hurricane event, the FHCF most likely will not need to do one single large financing. Based on a higher attachment point and the past payout patterns the FHCF could also easily meet its 2018-2019 obligations by issuing one or two series of bonds over a period of 12 months or longer, if needed. Accordingly, it is also helpful to evaluate which issuers in the municipal market (both taxable and tax-exempt) have issued the most debt in a 12-month period. The charts below show the largest amount issued every year since 2013 has exceeded \$3.0 billion.

Largest 25 Issuers By Issued Par Amount In 2013			Largest 25 Issuers By Issued Par Amount In 2014			Largest 25 Issuers By Issued Par Amount In 2015		
Rank	Issuer Name	Par (\$MM)	Rank	Issuer Name	Par (\$MM)	Rank	Issuer Name	Par (\$MM)
1	California	\$8,450	1	California	\$6,243	1	NYS Dorm Authority	\$9,093
2	New York City-New York	\$5,574	2	Texas Transportation Commission	\$5,522	2	California	\$6,380
3	Regents of the Univ of California	\$4,702	3	NYS Dorm Authority	\$4,182	3	NYC Transitional Finance Auth	\$5,475
4	Illinois	\$3,354	4	NYC Transitional Finance Auth	\$3,831	4	Chicago City-Illinois	\$4,241
5	Empire State Development Corp	\$3,283	5	Massachusetts	\$3,616	5	Connecticut	\$3,611
6	Massachusetts	\$3,226	6	Puerto Rico	\$3,500	6	Regents of the Univ of California	\$3,350
7	NYC Transitional Finance Auth	\$3,207	7	Connecticut	\$3,283	7	Texas Transportation Commission	\$3,301
8	NYS Dorm Authority	\$3,031	8	New York City-New York	\$2,998	8	Metropolitan Transport Auth (MTA)	\$3,111
9	New Jersey Economic Dev Auth	\$3,018	9	Washington	\$2,856	9	New York City-New York	\$3,070
10	Washington	\$2,936	10	Michigan Finance Authority	\$2,825	10	Port Authority of NY & NJ	\$3,025
11	Grand Parkway Transport Corp	\$2,920	11	Chicago City-Illinois	\$2,585	11	Michigan Finance Authority	\$2,802
12	Metropolitan Transport Auth (MTA)	\$2,763	12	Port Authority of NY & NJ	\$2,533	12	Washington	\$2,569
13	Connecticut	\$2,730	13	Houston City-Texas	\$2,524	13	Massachusetts	\$2,552
14	NYC Municipal Water Fin Auth	\$2,392	14	Illinois	\$2,427	14	New Jersey Economic Dev Auth	\$2,448
15	Foothill/Eastern Transp Corridor Agy	\$2,275	15	NYC Municipal Water Fin Auth	\$2,391	15	Miami-Dade Co-Florida	\$2,168
16	New Jersey Turnpike Authority	\$2,137	16	Metropolitan Transport Auth (MTA)	\$2,348	16	Illinois Finance Authority	\$2,144
17	Dallas & Fort Worth Cities-Texas	\$2,067	17	Bay Area Toll Authority (BATA)	\$2,213	17	NYC Municipal Water Fin Auth	\$2,033
18	NYS Utility Debt Securitization Auth	\$2,022	18	NYC Sales Tax Asset Rec Corp	\$2,035	18	NYS Housing Fin-Mortgage Agcy	\$1,763
19	Florida Hurricane Catastrophe Fin	\$2,000	19	Pennsylvania Turnpike Commission	\$1,982	19	Golden State Tobacco Sec Corp	\$1,692
20	California St Public Works Board	\$1,912	20	New Jersey Economic Dev Auth	\$1,972	20	North Texas Tollway Auth (NTTA)	\$1,627
21	Port Authority of NY & NJ	\$1,850	21	NYC Housing Dev Corp	\$1,932	21	Honolulu City & Co-Hawaii	\$1,588
22	SC Pub Svc Au (Santee Cooper)	\$1,848	22	NYS Housing Fin-Mortgage Agcy	\$1,893	22	Wisconsin	\$1,570
23	NYS Thruway Authority	\$1,831	23	Maryland	\$1,887	23	San Antonio City-Texas	\$1,541
24	Jefferson Co-Alabama	\$1,785	24	Los Angeles Comm College Dt	\$1,843	24	Massachusetts Dev Finance Agcy	\$1,527
25	NYC Housing Dev Corp	\$1,773	25	Wisconsin	\$1,762	25	Kansas Development Fin Auth	\$1,504

Largest 25 Issuers By Issued Par Amount In 2016			Largest 25 Issuers By Issued Par Amount 2017			Largest 25 Issuers By Issued Par Amount 2018YTD		
Rank	Issuer Name	Par (\$MM)	Rank	Issuer Name	Par (\$MM)	Rank	Issuer Name	Par (\$MM)
1	California	\$8,921	1	California	\$8,869	1	California	\$4,328
2	NYS Dorm Authority	\$5,863	2	NYS Dorm Authority	\$7,435	2	NJ Tobacco Settlement Fin Corp	\$3,147
3	Metropolitan Transport Auth (MTA)	\$5,192	3	NYC Transitional Finance Auth	\$6,503	3	NYC Transitional Finance Auth	\$3,082
4	Massachusetts	\$4,826	4	Metropolitan Transport Auth (MTA)	\$5,645	4	Denver City and Co-Colorado	\$2,955
5	NYC Transitional Finance Auth	\$4,750	5	California Health Facs Fin Auth	\$3,782	5	Connecticut	\$2,708
6	Massachusetts Dev Finance Agcy	\$4,132	6	New York City-New York	\$3,743	6	New York City-New York	\$2,565
7	New York City-New York	\$3,882	7	Wisconsin	\$3,487	7	NYS Dorm Authority	\$2,543
8	Connecticut	\$3,657	8	Massachusetts	\$3,101	8	Golden State Tobacco Sec Corp	\$2,496
9	Chicago City-Illinois	\$3,513	9	New Jersey Turnpike Authority	\$3,080	9	Regents of the Univ of California	\$2,059
10	Illinois	\$3,362	10	Bay Area Toll Authority (BATA)	\$2,813	10	Main Street Natural Gas Inc	\$2,022
11	Illinois Finance Authority	\$3,327	11	Chicago City-Illinois	\$2,809	11	Port Authority of NY & NJ	\$1,987
12	New York Transportation Dev Corp	\$3,255	12	Illinois Finance Authority	\$2,631	12	Houston City-Texas	\$1,900
13	California Health Facs Fin Auth	\$3,214	13	Regents of the Univ of California	\$2,621	13	PA Commonwealth Financing Auth	\$1,900
14	Pennsylvania	\$2,841	14	Wisconsin Public Finance Auth	\$2,594	14	Southeast Alabama Gas Dt	\$1,692
15	New Jersey Trans Trust Fund Au	\$2,741	15	Massachusetts Dev Finance Agcy	\$2,572	15	Grand Parkway Transport Corp	\$1,484
16	Pennsylvania Turnpike Commission	\$2,713	16	North Texas Tollway Auth (NTTA)	\$2,509	16	California Municipal Fin Auth	\$1,434
17	Univ of Texas Sys Bd of Regents	\$2,628	17	Pennsylvania Turnpike Commission	\$2,281	17	Texas Water Development Board	\$1,421
18	Michigan Finance Authority	\$2,567	18	New Jersey Economic Dev Auth	\$2,209	18	New York Transportation Dev Corp	\$1,383
19	Regents of the Univ of California	\$2,391	19	Hudson Yards Infrastructure Corp	\$2,142	19	Massachusetts	\$1,298
20	Wisconsin	\$2,197	20	Philadelphia City-Pennsylvania	\$2,014	20	California Statewide CDA (CSCDA)	\$1,262
21	Indiana Finance Authority	\$2,165	21	Miami-Dade Co-Florida	\$1,957	21	Los Angeles USD	\$1,202
22	Miami-Dade Co-Florida	\$1,957	22	Triborough Bridge & Tunnel Auth	\$1,924	22	New Jersey Trans Trust Fund Au	\$1,196
23	California Statewide CDA (CSCDA)	\$1,950	23	Houston City-Texas	\$1,830	23	Oklahoma Dev Finance Auth	\$1,178
24	Chicago City BOE	\$1,930	24	Texas A&M University System	\$1,786	24	San Francisco City & Co Airport Comm	\$1,158
25	Texas Transportation Commission	\$1,894	25	NYS Housing Fin-Mortgage Agcy	\$1,775	25	NYC Municipal Water Fin Auth	\$1,097

Source: Thomson Financial for long-term issuances from January 1, 2013 to August 31, 2018.

In reviewing this history of large municipal issuers, however, it is important to note that the FHCF has been a relatively infrequent but large issuer of debt. Since 2006, the FHCF has completed seven bond issues totaling \$12.1 billion (three tax-exempt issues totaling \$2.6 billion and four taxable issues totaling \$9.5 billion), of which \$3.2 billion in pre-event debt has been issued since 2012 with \$2.2 billion currently outstanding. By comparison, for example, since 2013, the State of California has completed over 60 long-



term bond issues totaling over \$43 billion and the New York State Dormitory Authority has completed over 160 long-term bond issues totaling over \$32 billion. The FHCF's debt has always been issued with relatively short maturities ranging from 1-7 years (although it has the authority to issue debt with maturities of up to 30 years). California's issues, by comparison, have had maturities ranging from 1-34 years, and the New York State Dormitory Authority has had maturities ranging from 1-30 years.

As a less frequent issuer with relatively less debt outstanding and primarily at the shorter end of the yield curve, the FHCF is not as well covered by investor credit analysts in the primary or secondary markets who invest at the long-end of the yield curve, even though it has very strong credit ratings. This relative lack of long-term exposure and investor familiarity could potentially be a limiting factor in determining the FHCF's potential market access for larger amounts and/or longer maturities in the short run.

Analysis of potential market acceptance of large amounts of FHCF debt must include not only relevant historical references, but also an evaluation of current market conditions and cash flow needs. In this regard, conditions seem to be excellent in both tax-exempt and taxable municipal markets, as well as in the corporate market.

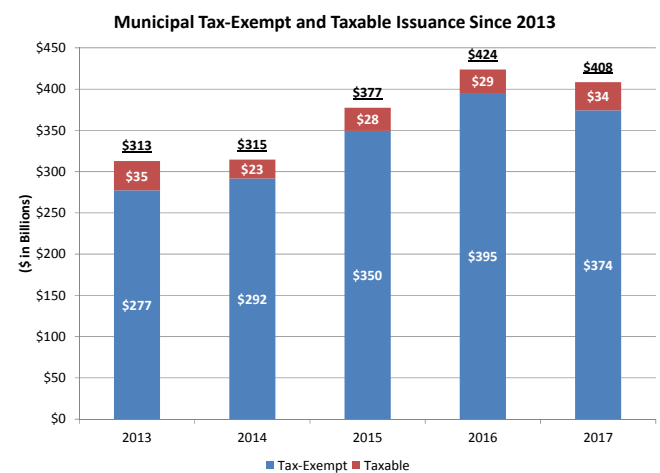
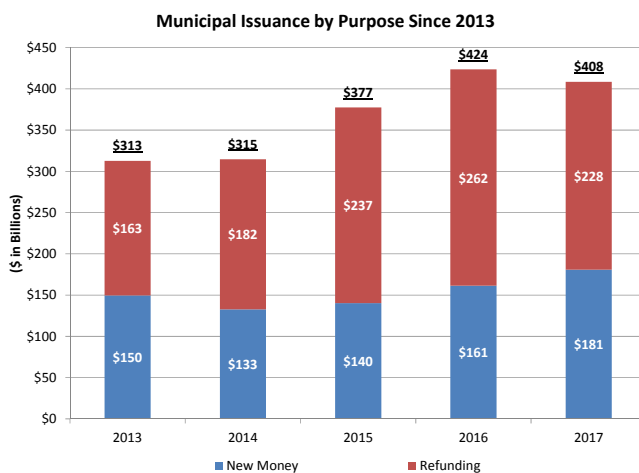
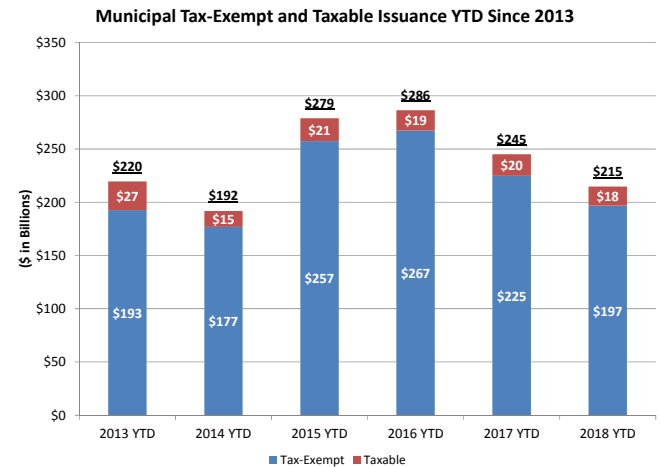
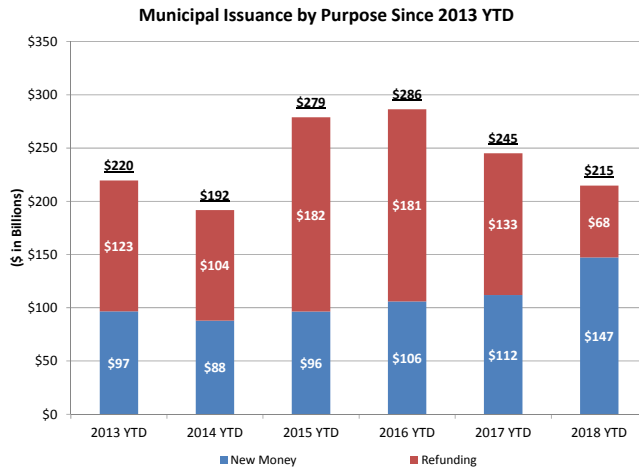
In 2017, corporate issuance of \$1.67 trillion (\$1.4 trillion investment grade, \$283 billion high yield, and \$27 billion convertible) surpassed the previous record issuance of \$1.55 trillion (\$1.3 trillion investment grade, \$240 billion high yield, and \$22 billion convertible) in 2016. Year-to-date 2018, corporate bond issuance is \$947 billion, or 17% lower than the \$1.1 trillion issued over the same time period in 2017. The corporate bond market has topped \$1 trillion each year since 2011 as interest rates have been consistently historically low.

While corporate bond issuance has reached record levels since 2011, most issuances are for financial engineering rather than to build manufacturing plants or infrastructure to fund growth – i.e., more issuances are to fund mergers and acquisitions or stock buybacks, which include CVS's 2018 issuance of \$40 billion to fund its acquisition of Aetna, AT&T's 2017 issuance of \$38 billion to fund its acquisition of TimeWarner, Apple's 2017 issuance of \$27 billion to fund stock buybacks, Verizon's 2017 issuance of \$26 billion to fund its acquisition of Yahoo.

For 2017, municipal long-term issuance was relatively flat to 2016 with \$408 billion of issuance. For year-to-date 2018, municipal long-term negotiated issuance is 15% lower than the same time period in 2017 with \$224 billion of issuance. A majority of municipal issuance over the past few years has been issued for refundings to capitalize on low interest rates, which is evidenced by the amount of new money issuance for 2017 – \$181 billion, or 44% of the total \$326 billion of long-term issuance – versus eleven



years ago – in 2007, \$274 billion, or 64% of the total \$429 billion of issuance, was for new money projects. As part of the Tax Reform Bill of 2018, the tax-exempt provision for advance refundings was eliminated, which has affected the volume of refundings in 2018 – 31% of municipal issuance year-to-date has been for refundings.



Source: Thomson Financial for municipal long-term issuances from January 1, 2013 to August 31, 2018.

The reduction in both the corporate and municipal markets in 2018 year-to-date is a reflection of recent tax-law changes, which have allowed for repatriation of overseas cash as well as the elimination of state and local tax deductions of over \$10,000. There is strong investor demand in both the tax-exempt and taxable markets; however, global market conditions can be volatile after a large or multiple global or U.S. events. Nonetheless, the FHCF has multiple factors working in its favor independent of market trends, including, but not limited to: (1) the FHCF is a well-regarded, highly-rated credit (AA category), closely associated with (though not guaranteed by) the State of Florida, a blue-chip name in the market; (2) in February 2016, the FHCF successfully priced \$1.2 billion of Series 2016A taxable pre-event bonds with 3 and 5-year maturities at a true interest cost of 2.52%, which re-established the strength of the FHCF credit in the taxable market; and (3) similar to its pre-event financings, any post-event bond



issuances of the size the FHCF may need to undertake would also be included in the various benchmark indices market observers use to track market performance, so institutional money managers seeking to at least match indexed returns may have a strong additional incentive to buy FHCF bonds, particularly if they are offered at interest rates marginally higher than those usually associated with typical AA rated credits.

Estimating the FHCF's post-event bonding capacity is an inexact science. To do so requires a consideration of the factors above, an extrapolation about what market conditions might exist after hurricanes of various sizes, and an evaluation of the many subjective and substantive considerations surrounding these estimates and the uses thereof. Certainty is not a defining characteristic of an exercise like this; nor can the results be responsibly guaranteed. Nevertheless, with the proper experience, market perspective and analysis, we can make estimates suitable for the FHCF's requirements – conservative estimates, not guaranteed to be accurate, but responsibly determined using the best available sources.

One additional note of caution is that financial markets can be highly volatile and uncertain at various times. Such uncertainty may create an additional risk for participating insurers who rely on the FHCF for reimbursements. Although financial market conditions have significantly improved since the Great Recession of 2007 and are currently very conducive to favorable debt issuance, it is not possible to guarantee financial market conditions into the future for long-term sustainability of the FHCF. The FHCF's estimated post-event borrowing capacity is subjective and depends heavily on the opinions of its five senior managing underwriters' and our evaluation of their responses to our questions. As such, participating insurers should recognize the potential impact that financial markets can have on the FHCF's claims-paying ability for a subsequent or future seasons. The following pages provide current bonding and claims-paying capacity estimates.



IV. Bonding and Claims-Paying Capacity Estimates

To estimate the FHCF's bonding capacity, we used the general process described in Section II and detailed in Appendix A. The specific wording of the capacity question we asked the FHCF's senior managing underwriters was as follows:

The preliminary estimated bonding capacity of the FHCF for the current contract year is \$8.0 billion

*"Please provide us with your firm's opinion on the potential tax-exempt and/or taxable post-event market capacity over the next 0-12 and 12-24 months at rates that are at or above the current "market" scale, as needed."*²

We considered all data elements, and based on cash flow requirement projections from Paragon Strategic Solutions Inc., the FHCF's consulting actuary, guidance from FHCF staff about potential payout timing, and a desire for prudence, as in the past we continue to use the capacity estimates for the first 12 months in formulating the bonding capacity estimate for the initial season.

In general, it would take a hurricane event resulting in ground-up losses exceeding \$25.5 billion to exhaust the FHCF's cash balance, and the FHCF has projected liquid resources of \$16.2 billion, or \$800 million below its potential maximum obligation of \$17.0 billion, which includes \$2.2 billion of pre-event bonds and \$1.0 billion of risk transfer. The amount of debt that the FHCF can raise within the first twelve months is helpful for the FHCF and participating insurers in protecting their financial solvency as well as for the FHCF to preserve its available pre-event bond proceeds of \$1.65 billion for a subsequent season (\$550 million matures on July 1, 2019 and therefore will not be available for the 2019-2020 contract year).

We are also comfortable including estimates that contained some above-market interest rate capacity estimates in recognition of the fact that the FHCF has ample assessment capability within its statutory limits to issue bonds, even at significantly higher rates³. For purposes of calculating the potential assessment impact of the FHCF's bonding needs, we have calculated the assessment rate if the FHCF post-event bonds carry interest rates at current market levels as well as at an "above market" interest rate of 7%. There is also some overlap between tax-exempt and taxable capacity estimates as the investor base has changed and market acceptance has increased for municipal taxable bonds and the success of the Series 2013A and Series 2016A pre-event taxable financings, which may marginally reduce the capacity for tax-exempt debt. A summary of the senior managers' responses is shown in the following table:

² The complete information request and all responses are included in Appendix A.

³ For example, a 30-year bond issue at a 7% interest rate sized to produce the maximum potential FHCF obligation (\$3.0 billion), for the current contract year, assuming no pre-event bonds are used to pay claims and no pre-event bonds are refinanced, would require an annual assessment of only 0.51%, well below the 6% statutory cap.



FHCF Post-Event Estimated Bonding Capacity						
	Bank of America / Merrill Lynch	Citi	J.P. Morgan	Morgan Stanley	Wells Fargo	Average ¹
Bonding Estimates						
Tax-Exempt:						
0-12 Months	\$2-\$3B	\$3.5-\$4.0B	\$4-\$5B	\$3.5-\$4B	\$6-\$8B	\$4.3B
12-24 Months	\$2-\$3B	\$3.5-\$4.0B	\$3-\$4B	\$3-\$4B	\$3-\$5B	\$3.5B
Total tax-exempt	\$4-\$6B	\$7-\$8B	\$7-\$9B	\$6.5-\$8B	\$9-\$13B	\$7.8B
Taxable:						
0-12 Months	\$3.5-\$4.5B	\$3-\$4B	\$2.5-\$3.5B	\$4-\$5B	\$3-\$4B	\$3.7B
12-24 Months	\$3.5-\$4.5B	\$4-\$5B	\$2.5-\$3.5B	\$4.5-\$5B	\$2-\$3B	\$3.8B
Total taxable	\$7-\$9B	\$7-\$9B	\$5-\$7B	\$8.5-\$10B	\$5-\$7B	\$7.5B
Tax-Exempt and Taxable						
0-12 Months Total	\$5.5-\$7.5B	\$6.5-\$8.0B	\$6.5-\$8.5B	\$7.5-\$9B	\$9-\$12B	\$8.0B
12-24 Months Total	\$5.5-\$7.5B	\$7.5-\$9.0B	\$5.5-\$7.5B	\$7.5-\$9B	\$5-\$8B	\$7.3B
0-24 Months Total	\$11-\$15B	\$14-\$17B	\$12-\$16B	\$15-\$18B	\$14-\$20B	\$15.3B

¹ Averages are rounded to the nearest hundred million dollars

As discussed earlier, we believe that using only the 0-12 months number to compute an average is a prudent approach to estimating bonding capacity for the initial season. Using this methodology yields an estimated bonding capacity of approximately \$8.0 billion and this capacity is significantly above what would be needed to meet the FHCF's potential obligations for the initial season if it were to leave its already issued pre-event bond proceeds outstanding, even if one conservatively expects that the FHCF payout after an event will need to occur within the first twelve months. However, when considering the larger picture of the FHCF's ability to pay additional claims for a subsequent season, the FHCF's bonding capacity beyond 0-12 months is also an important factor. Each of the senior managers believes that the FHCF would have significant additional capacity in the period 12-24 months after an event⁴. This additional capacity, could be used to fund a portion of the amount potentially needed for the 2019-2020 contract year or subsequent season losses, in the approximate amounts as shown on the following pages.

Estimated Claims-Paying Capacity

Estimated claims-paying capacity of the FHCF is equal to the sum of the projected year-end fund balance plus risk transfer placement (\$1 billion for the 2018-2019 contract year), any other financing resources available, and the estimated bonding capacity. The FHCF projects that its year-end fund balance for the 2018-2019 contract year is \$13.0 billion, its risk transfer placement is \$1 billion for the 2018-2019 contract year, and it has an estimated bonding capacity of \$8.0 billion (which includes repayment of pre-event bond proceeds in the amount of \$2.2 billion), which equals a total estimated claims-paying capacity of \$22.0 billion, or \$5.0 billion above its statutory limit of \$17.0 billion.

The subsequent season may have some remaining additional bonding capacity from the initial season in the amount of \$7.3 billion, but for purposes of this analysis we assume the available initial season bonding capacity in the amount of \$8.0 billion is also available for the subsequent or 2019-2020

⁴ The longer the time frame for estimation purposes, the greater the degree of uncertainty.



contract year. For any remaining losses beyond the FHCF's estimated claims-paying capacity for the 2019-2020 season, the FHCF may have additional 12-24 month bonding capacity of up to \$7.3 billion available.

Under this scenario, if an event happens, we assume that the FHCF would leave its pre-event bond proceeds outstanding and issue \$3.0 billion of post-event bonds to fund its maximum potential obligation for the 2018-2019 contract year. For the 2019-2020 contract year, the FHCF can then use its estimated bonding capacity of \$8.0 billion (which includes repayment of pre-event bond proceeds) and the \$1.1 billion of reimbursement premiums projected to be accumulated during the subsequent season for total funding sources of \$9.1 billion, or approximately 54% of its potential maximum statutory obligation of \$17 billion for the 2019-2020 season. Under this scenario, the FHCF would need only an additional \$7.9 billion in funding sources in order to reach its maximum statutory obligation of \$17 billion for the 2019-2020 contract year.

(\$ in Billions, Totals may not add due to rounding)	2018-2019 Contract Year	2019-2020 Contract Year
FHCF Potential Coverage Obligation		
FHCF Coverage Obligation (A)	\$17.0	\$17.0
FHCF Estimated Funding Sources Available		
Projected FHCF Year-End Fund Balance (B)	\$13.0	\$1.1
Risk Transfer (C)	\$1.0	\$0.0
2013A and 2016A Pre-Event Bond Proceeds Available ¹ (D)	\$2.2	\$1.7
Total Liquid Resources Available (B + C + D) = (E)	\$16.2	\$2.8
Additional Funds / Potential Borrowing Need (E - A) = (F)	(\$0.8)	(\$14.2)
FHCF Claims-Paying Capacity		
Projected FHCF Year-End Fund Balance (B)	\$13.0	\$1.1
Risk Transfer (C)	\$1.0	\$0.0
Estimated FHCF Borrowing Capacity ¹ (G)	\$8.0	\$8.0
Total Estimated Claims-Paying Capacity (B + C + G) = (H)	\$22.0	\$9.1
Total Estimated Claims-Paying Capacity as a % of FHCF Coverage Obligation (H / A) = (I)	129%	54%
Amount Above / (Below) Coverage Obligation (H - A) = (J)	\$5.0	(\$7.9)

Totals may not add due to rounding.

¹ Estimated borrowing capacity is inclusive of any repayment of pre-event bond proceeds. Pre-event bonds are available as a liquidity resource for the 2018-2019 contract year in the amount of \$2.2 billion but we are assuming no pre-event bonds will be used to pay claims for the 2018-2019 contract year and therefore will be available to pay claims for the 2019-2020 contract year in the amount of \$1.65 billion (\$550 million matures on July 1, 2019).

Under this scenario, the breakdown of the potential assessments required for the FHCF's potential borrowing needs and repayment of pre-event bond proceeds are shown in the table on the following page based on current market interest rates and an "above market" interest rate of 7% over a 30-year period, for informational purposes only. As seen in the table on the following page, even with an "above market" rate of 7%, the FHCF has significant remaining assessment capabilities within its 6% statutory cap.



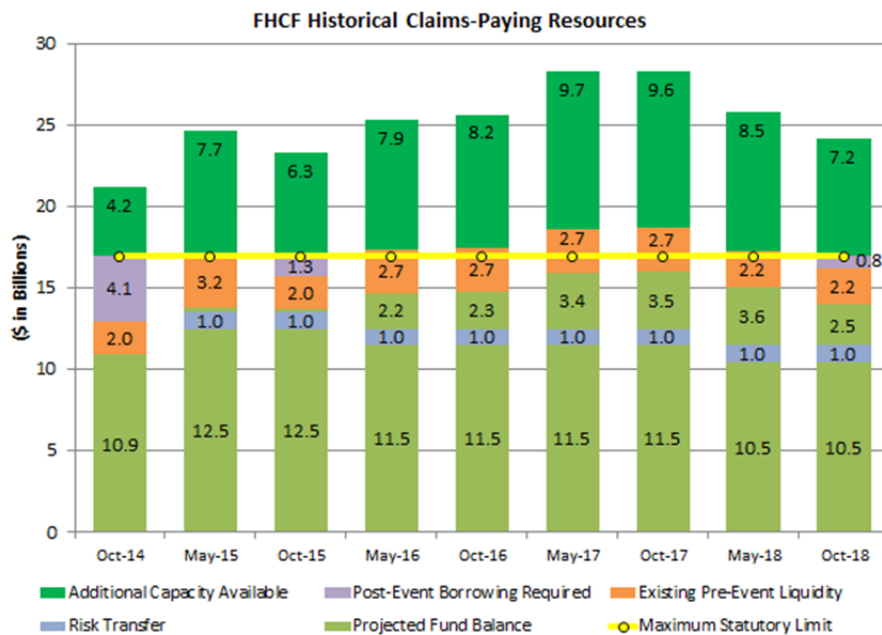
(\$ in Billions)	2018-2019 Contract Year	2019-2020 Contract Year
Total Potential Borrowing	\$3.0	\$8.0
Assessment % if Financed at Current Market Rates	0.41%	N/A
Assessment % if Financed at "Above Market" Rate of 7%	0.51%	1.36%

For the 2019-2020 Contract Year, the FHCF is projecting a claims-paying capacity of \$9.1 billion, or 54% of its statutory limit.

Historical Perspective on Estimated Claims-Paying Capacity

The estimated claims-paying capacity of the FHCF over time is subject to changes in the projected fund balance, risk transfer amount, available pre-event liquidity, and estimates of bonding capacity. While the projected fund balance climbed steadily from 2006 to 2017 without a major hurricane that triggered the FHCF, the estimated \$3.20 billion of Hurricane Irma losses in 2017 reduced the estimated FHCF's projected fund balance to approximately \$13.0 billion for the 2018-2019 Contract Year. During this time the senior managers' estimates of the FHCF's bonding capacity have stabilized, but have significantly varied during other time periods, reflecting both the big picture fundamental changes to the market described in Section III and the impact of market volatility at the time we asked them for estimates. The current average estimate for 0-12 months of \$8.0 billion is \$200 million lower than it was in May 2018.

The chart below shows the total estimated initial season claims-paying resources of the FHCF since October 2014 with projected fund balance (light green), existing pre-event liquidity (orange), \$1 billion of risk transfer for every year since starting in the 2015-2016 contract years (blue), post-event borrowing required (purple), if needed, and maximum statutory limit (yellow) with additional capacity available above (dark green) the maximum statutory limit.



Numbers may not add due to rounding.

The additional capacity above the maximum statutory limit reflects the estimated borrowing capacity plus any additional funds available.



The chart on the previous page reflects the history of the FHCF's claims-paying resources. The outstanding pre-event notes, risk transfer, and the projected fund balance are reliable amounts since they are known prior to an event, but the post-event bonding capacity can vary depending on financial market conditions after a hurricane event. It is important that the FHCF's claims-paying capacity estimates be reasonable and prudent in order to minimize financial risk for participating insurers for subsequent seasons and long-term sustainability.

Even though the range has narrowed and stabilized, it is interesting to compare the range of the estimates during this time period, which is indicative of the level of uncertainty and variability among the team of senior managers with regard to the FHCF's bonding capacity. The table below shows the aggregate ranges for each estimate since October 2014.

Post-Event Estimated Bonding Capacity Over 12 Months (Senior Managers' Range)										
(\$ in Billions)	Oct-14	May-15	Oct-15	May-16	Oct-16	May-17	Oct-17	May-18	Oct-18	Oct. 2018 - May 2018 Change
Overall Range	\$5.5-\$14	\$5-\$12	\$4.5-\$12	\$4.5-\$12	\$5.5-\$12	\$5-\$12	\$6-\$12	\$6.5-\$12	\$5.5-\$12	↔

The range of estimates shown in the table reflects the fundamental underlying uncertainty of the markets and the bonding capacity estimating process for the FHCF. We believe the process of using a survey of the opinions of the best experts with the most relevant experience, and employing a prudent approach to pick among several potential estimates of capacity, provides a reasonable estimate that suits the purposes of the FHCF and the needs of its participating insurers. While the FHCF is \$800 million below fully funding the initial season, it has additional capacity available after an event for the subsequent season. This additional capacity still does not provide a guaranteed source of liquidity or claims-paying capacity for subsequent seasons, and the actual bonding results achieved by the FHCF after a hurricane could vary substantially from this estimate for subsequent seasons. The FHCF has \$16.2 billion of liquidity, moderately below its potential maximum statutory obligation of \$17 billion for the 2018-2019 contract year. For the subsequent season, the FHCF has a projected potential claims-paying capacity of \$9.1 billion (assuming no pre-event bonds will be used to pay claims for the 2018-2019 contract year), or up to approximately 54% of its maximum statutory obligation of \$17 billion for the 2019-2020 contract year.



Appendix A – Bonding Capacity Solicitation & Senior Manager Responses

From: Sasha Stipanovich
Sent: Friday, September 14, 2018 12:49 PM
Cc: Kapil Bhatia
Subject: FHCF Bonding Capacity Analysis

FHCF Senior Manager Team:

We need your input in preparation for presenting the FHCF's statutorily required semiannual bonding capacity estimate at the FHCF Advisory Council Meeting scheduled for October 9th.

We would like to know your opinion of the FHCF's tax-exempt and taxable bonding capacity over a 0-12 month and 12-24 month period. We are still comfortable including estimates that contain some above-market interest rate capacity estimates in recognition of the fact that the FHCF has ample assessment capability within its statutory limits to issue bonds, even at above market rates, if needed. We use an above-market estimate of 7%, which is several hundred basis points above the FHCF's expected current market rates in order to add more conservatism to the analysis.

In order to prepare the FHCF Bonding Capacity Report for October 2018, we need the following data elements from you by Friday, September 21st:

1. Please provide a 30-year tax-exempt scale for the FHCF using the MMD at the close of business Wednesday, September 19th. This scale should be the one that you believe reflects a "market" scale given the FHCF's credit with no capacity constraints. Please use serial bonds and 20, 25, and/or 30-year term bonds, as needed, over a 30-year amortization period (7/1/19 - 7/1/48) with 5.0% coupons throughout when writing the scale. Base the scale on an uninsured financing given the FHCF's current underlying ratings of Aa3/AA/AA (Moody's / S&P / Fitch).
2. Please provide a 30-year taxable scale using the Treasury curve at the close of business Wednesday, September 19th. This scale should be the one that you believe reflects a "market" scale given the FHCF's credit with no capacity constraints. Please use serial bonds and 20, 25, and/or 30-year term bonds, as needed, over a 30-year amortization period (7/1/19 - 7/1/48) with par-ish coupons throughout when writing the scale. Again, base the scale on an uninsured financing given again the FHCF's current underlying ratings of Aa3/AA/AA (Moody's / S&P / Fitch).
3. Please provide us with your firm's opinion on the potential tax-exempt and/or taxable post-event market capacity over the next 0-12 and 12-24 months at rates that are at or above the current "market" scale, as needed. In addition, please include and describe briefly in your response if there is any overlap in tax-exempt / taxable capacity.

FHCF Post-Event Market Capacity			
Time Period	Tax-Exempt	Taxable	Total
0-12 Months			
12-24 Months			

We would like to have to your responses back by close of business Friday, September 21st. Additionally, we would like a representative from your firm (banker and/or underwriter) to be present at the meeting either via phone or in-person

to answer any questions. If you have any questions or comments, please call or e-mail Kapil Bhatia (727-567-1791, kapil.bhatia@raymondjames.com) or Sasha Stipanovich (727-567-1790, sasha.stipanovich@raymondjames.com).

Sasha Stipanovich
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RAYMOND JAMES®

Memorandum



To: Florida Hurricane Catastrophe Fund

From: Bank of America Merrill Lynch

Date: September 21, 2018

Subject: Florida Hurricane Catastrophe Fund – October 2018 Bonding Capacity Analysis

Bank of America Merrill Lynch ("BofAML") is pleased to provide the Florida Hurricane Catastrophe Fund ("FHCF") with our firm's estimates and views of the FHCF's post-event bonding capacity and current market borrowing costs.

Market Commentary

Since FHCF's last capacity report, the municipal market has continued to feel the impact of the Tax Cut and Jobs Act ("TCJA"), most notably the 13.4% decline in overall issuance volume primarily from the inability to advance refund tax-exempt bonds. However, new money financings have actually increased 31.8% year-over-year and accounted for almost 70% of 2018 issuance volume. Recently, discussions around "Tax Reform 2.0" have gotten underway to modify and make permanent several key provisions in the TCJA but we do not anticipate these series of bills garnering the necessary 60 votes to make it through the Senate. Across the broader market, economic fundamentals remain stable and Fed officials lean neutral to hawkish given core PCE is expected to persist around the Fed's 2.0% target this year and expected to increase to 2.1% in 2019. The market continues to expect two additional interest rate increases this year and potentially three more in 2019. The market is pricing in an implied probability of 100% for a 25 basis point rate hike at the Fed's upcoming September meeting next week and an 81% probability of a 25 basis point rate hike in December 2018. This is in addition to continued balance sheet normalization by the Fed. While expected real GDP growth is expected to be around 2.9% this year and 2.7% next year, the prospect of an extended trade war is a near-term risk that could be a major drag on the economy.

Municipal bond funds have seen net inflows of approximately \$8.9 billion year to date. In recent weeks, fund flows have turned negative. Weekly municipal bond fund flows are comparable to 2017 figures, with \$12.3 billion of inflows and \$3.3 billion of outflows. Since our last bonding capacity analysis presented at the May meeting, yields on the longer end of the tax-exempt MMD curve (10+ years) have increased an average of 15 basis points. Within 10 years, rates are little changed from our prior update. In the taxable market, while rates on the long end have not changed significantly from the May 2018 report, rates for years 1 through 3 have experienced a significant increase, averaging 29 basis points, reflecting both the rate hike at the June Fed meeting and market expectations of further rate hikes by the Fed. The movements in the short- and long-end of the yield curve have flattened the yield curve, extending a trend that began in mid-2017. Also of note, the 30-year MMD yield is approximately equal to the 30-year Treasury yield, indicating continued compression of long term yields and long-term supply-demand imbalances between taxable and tax-exempt markets. New issue supply in the municipal market thus far in 2018 has averaged approximately \$6.1 billion per week, with 2018 total issuance projected to be approximately 12% below 2017 levels.

As we have stated in the past, despite the market dynamics in play in the current environment, a transaction or series of transactions by the FHCF and possibly other insurance-related entities in the State of Florida (Citizens, FIGA) after a hurricane event has been generally untested and may significantly impact market dynamics for a specific transaction. In the pages that follow, we provide BofAML's estimate of the FHCF's current borrowing costs, as well as our view on the FHCF's unconstrained issuance capacity in the current market. If you have any questions, please contact the BofAML team.

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1. Please provide a 30-year tax-exempt scale for the FHCF using the MMD at the close of business Wednesday, September 19th. This scale should be the one that you believe reflects a “market” scale given the FHCF’s credit with no capacity constraints. Please use serial bonds and 20, 25, and/or 30-year term bonds, as needed, over a 30-year amortization period (7/1/19 - 7/1/48) with 5.0% coupons throughout when writing the scale. Base the scale on an uninsured financing given the FHCF’s current underlying ratings of Aa3/AA/AA (Moody’s / S&P / Fitch).

Below, we have provided a 30-year tax-exempt scale reflecting our view of the FHCF’s estimated current market borrowing costs based on an uninsured financing, Aa3/AA/AA ratings from Moody’s, S&P and Fitch, respectively, and no capacity constraints.

Tax-Exempt Scale					
Term	Maturity (July 1)	Coupon	MMD	Spread	Yield
1	2019	5.000%	1.84%	10	1.940%
2	2020	5.000%	1.92%	15	2.070%
3	2021	5.000%	2.00%	20	2.200%
4	2022	5.000%	2.08%	25	2.330%
5	2023	5.000%	2.17%	30	2.470%
6	2024	5.000%	2.27%	35	2.620%
7	2025	5.000%	2.36%	38	2.740%
8	2026	5.000%	2.45%	40	2.850%
9	2027	5.000%	2.52%	43	2.950%
10	2028	5.000%	2.59%	45	3.040%
11	2029	5.000%	2.66%	48	3.140%
12	2030	5.000%	2.72%	50	3.220%
13	2031	5.000%	2.77%	50	3.270%
14	2032	5.000%	2.81%	50	3.310%
15	2033	5.000%	2.86%	50	3.360%
16	2034	5.000%	2.91%	50	3.410%
17	2035	5.000%	2.96%	50	3.460%
18	2036	5.000%	3.01%	50	3.510%
19	2037	5.000%	3.07%	50	3.570%
20	2038	5.000%	3.11%	50	3.610%
21	2039		3.13%		
22	2040		3.15%		
23	2041		3.16%		
24	2042		3.17%		
25	2043	5.000%	3.18%	55	3.730%
26	2044		3.19%		
27	2045		3.20%		
28	2046		3.21%		
29	2047		3.22%		
30	2048	5.000%	3.23%	55	3.780%

2. Please provide a 30-year taxable scale using the Treasury curve at the close of business Wednesday, September 19th. This scale should be the one that you believe reflects a “market” scale given the FHCF’s credit with no capacity constraints. Please use serial bonds and 20, 25, and/or 30-year term bonds, as needed, over a 30-year amortization period (7/1/19 - 7/1/48) with par-ish coupons throughout when writing the scale. Again, base the scale on an uninsured financing given again the FHCF’s current underlying ratings of Aa3/AA/AA (Moody’s / S&P / Fitch).

Below, we have provided a 30-year taxable scale reflecting our view of the FHCF’s estimated current market borrowing costs based on an uninsured financing, Aa3/AA/AA ratings from Moody’s, S&P and Fitch, respectively, and no capacity constraints.

Taxable Scale					
Term	Maturity (July 1)	Coupon	UST	Spread	Yield
1	2019	3.280%	2.580%	70	3.280%
2	2020	3.560%	2.810%	75	3.560%
3	2021	3.740%	2.890%	85	3.740%
4	2022	3.710%	2.960%	75	3.710%
5	2023	3.860%	2.960%	90	3.860%
6	2024	3.890%	3.040%	85	3.890%
7	2025	3.990%	3.040%	95	3.990%
8	2026	4.030%	3.080%	95	4.030%
9	2027	4.130%	3.080%	105	4.130%
10	2028	4.180%	3.080%	110	4.180%
11	2029	4.260%	3.080%	118	4.260%
12	2030	4.340%	3.080%	126	4.340%
13	2031	4.420%	3.080%	134	4.420%
14	2032	4.500%	3.080%	142	4.500%
15	2033	4.580%	3.080%	150	4.580%
16	2034				
17	2035				
18	2036				
19	2037				
20	2038	4.630%	3.230%	140	4.630%
21	2039				
22	2040				
23	2041				
24	2042				
25	2043				
26	2044				
27	2045				
28	2046				
29	2047				
30	2048	4.730%	3.230%	150	4.730%

3. Please provide us with your firm’s opinion on the potential tax-exempt and/or taxable post-event market capacity over the next 0-12 and 12-24 months at rates that are at or above the current “market” scale, as needed. In addition, please include and describe briefly in your response if there is any overlap in tax-exempt / taxable capacity.

In the table below, we have provided our current tax-exempt and taxable “unconstrained” FHCF capacity estimates. We believe that sufficient demand exists at these capacity levels to complete a transaction of the sizes provided below and the risk of cross-market cannibalization is low.

FLORIDA HURRICANE CATASTROPHE FUND POST-EVENT MARKET CAPACITY (\$ BILLION)			
Time Period	Tax-Exempt	Taxable	Total
0-12 Months	\$2.0-3.0	\$3.5-4.5	\$5.5-7.5
12-24 Months	\$2.0-3.0	\$3.5-4.5	\$5.5-7.5
0-24 Months	\$4.0-6.0	\$7.0-9.0	\$11.0-15.0

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Memorandum

To: Florida Hurricane Catastrophe Fund

From: Citigroup Global Markets Inc. ("Citi")

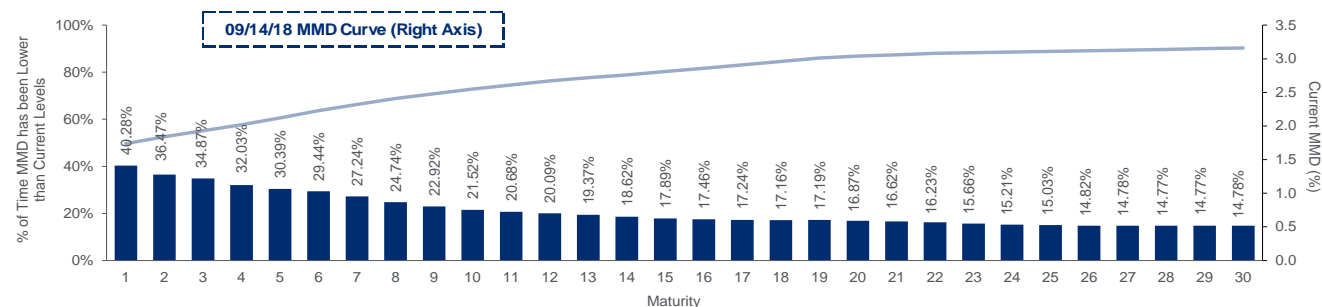
Date: September 21, 2018

Re: FHCF May 2018 Capacity Analysis

Citigroup is pleased to provide the Florida Hurricane Catastrophe Fund (the "FHCF") with an updated estimated post-event bond capacity analysis.

Municipal interest rates have trended higher since January 1, 2018. 30-year MMD has moved up nearly 62 basis points over that span of time. This move is in large part due to tax-reform and future Fed rates expectations. Credit spreads have continued to remain tight given the general market supply. Supply was expected, and has proven to be, significantly lower in 2018. Municipal bond funds have reported inflows of +\$140 million for the week ending September 19th after reporting outflows of -\$136 million previously. Bond funds have now netted approximately \$9.1 billion of inflows this year. Total new issue supply is currently about \$237 billion YTD, -19% lower from the supply levels seen this time last year. Despite the changing dynamics in the muni market, rates in the middle part and long end of the curve have only been lower 14-21% of the time since 1986. That said, both Citi's forecast and Economists' Consensus (per Bloomberg) predict a rising rate environment throughout the rest of the year. The Federal Reserve has guided at least one more interest rate hike in 2018, with the next one likely to come next week.

% of Time MMD has been Lower Since 1986

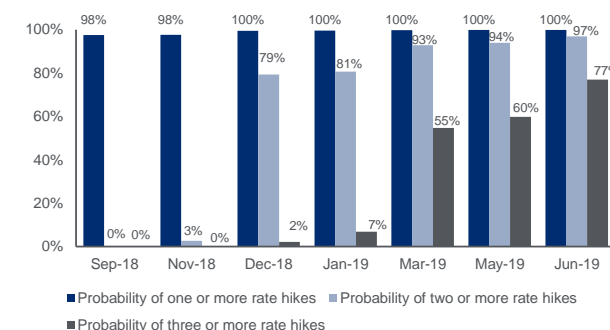


Source: Thomson Reuters, data as of September 14, 2018.

Yield Curve Flattening. In connection with the previous increase in the Fed Fund rates, short term fixed rates have increased in a commensurate fashion. However, supply and flight to quality dynamics have kept long term rates historically low, causing the yield curve to flatten. The graph to the right illustrates this effect of the 1-year treasury yield rising 240 bps from near historic lows in 2015 (30 year to 1 year slope of 244 bps) while 30-year yields rose by just 73 bps over that same period, resulting in a flat Treasury yield curve with just 57 bps of spread between 1- year and 30-year treasuries as of September 14th.

Expectations of Next Fed Increase in Rates

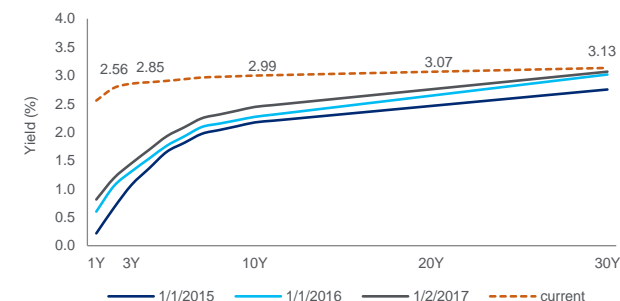
After keeping rates steady at the last FOMC meeting, the Fed is likely to hike rates two more times, with the next hike likely to come in September



Source: Current rates and expectation of Fed hike as of September 14, 2018

US Treasury Yield Curve

US Treasuries weakened across the curve and continued to flatten over the past week



Source: Current rates of September 14, 2018

1. Please provide a 30-year tax-exempt scale for the FHCF using the MMD at the close of business Wednesday, September 19th. This scale should be the one that you believe reflects a “market” scale given the FHCF’s credit with no capacity constraints. Please use serial bonds and 20, 25, and/or 30-year term bonds, as needed, over a 30-year amortization period (7/1/19 - 7/1/48) with 5.0% coupons throughout when writing the scale. Base the scale on an uninsured financing given the FHCF’s current underlying ratings of Aa3/AA/AA (Moody’s / S&P / Fitch).

Tax-Exempt Scale				
Year	Sep 19 MMD*	MMD Spread	Coupon	Base Yield
2019	1.82%	15	5.00%	1.97%
2020	1.90%	20	5.00%	2.10%
2021	1.98%	25	5.00%	2.23%
2022	2.06%	30	5.00%	2.36%
2023	2.15%	35	5.00%	2.50%
2024	2.25%	40	5.00%	2.65%
2025	2.34%	42	5.00%	2.76%
2026	2.44%	43	5.00%	2.87%
2027	2.51%	45	5.00%	2.96%
2028	2.58%	48	5.00%	3.06%
2029	2.65%	50	5.00%	3.15%
2030	2.71%	50	5.00%	3.21%
2031	2.77%	50	5.00%	3.27%
2032	2.81%	50	5.00%	3.31%
2033	2.86%	50	5.00%	3.36%
2034	2.91%	50	5.00%	3.41%
2035	2.96%	50	5.00%	3.46%
2036	3.01%	50	5.00%	3.51%
2037	3.07%	50	5.00%	3.57%
2038	3.11%	50	5.00%	3.61%
2039	3.13%			
2040	3.15%			
2041	3.16%			
2042	3.17%			
2043	3.18%	50	5.00%	3.68%
2044	3.19%			
2045	3.20%			
2046	3.21%			
2047	3.22%			
2048	3.23%	50	5.00%	3.73%

*July Interpolated MMD

2. Please provide a 30-year taxable scale using the Treasury curve at the close of business Wednesday, September 19th. This scale should be the one that you believe reflects a “market” scale given the FHCF’s credit with no capacity constraints. Please use serial bonds and 20, 25, and/or 30-year term bonds, as needed, over a 30-year amortization period (7/1/19 - 7/1/48) with par-ish coupons throughout when writing the scale. Again, base the scale on an uninsured financing given again the FHCF’s current underlying ratings of Aa3/AA/AA (Moody’s / S&P / Fitch).

Taxable Scale					
Year	TSY	Sep 19 TSY	TSY Spread	Coupon	Yield
2019	2 Year	2.81%	40	3.210%	3.210%
2020	2 Year	2.81%	50	3.310%	3.310%
2021	3 Year	2.89%	60	3.490%	3.490%
2022	5 Year	2.96%	55	3.510%	3.510%
2023	5 Year	2.96%	65	3.610%	3.610%
2024	7 Year	3.04%	70	3.740%	3.740%
2025	7 Year	3.04%	80	3.840%	3.840%
2026	10 Year	3.08%	85	3.930%	3.930%
2027	10 Year	3.08%	90	3.980%	3.980%
2028	10 Year	3.08%	100	4.080%	4.080%
2029					
2030					
2031					
2032	10 Year	3.08%	130	4.380%	4.380%
2033					
2034					
2035					
2036					
2037					
2038	30 Year	3.23%	130	4.530%	4.530%
2039					
2040					
2041					
2042					
2043					
2044					
2045					
2046					
2047					
2048	30 Year	3.23%	140	4.630%	4.630%

3. Please provide us with your firm's opinion on the potential tax-exempt and/or taxable post-event market capacity over the next 0-12 and 12-24 months at rates that are at or above the current "market" scale, as needed. In addition, please include and describe briefly in your response if there is any overlap in tax-exempt / taxable capacity.

FHCF Post-Event Market Capacity			
Time Period	Tax-Exempt	Taxable	Total
0-12 Months	\$3.5-4.0 bn	\$3.0-4.0	\$6.5-8.0
12-24 Months	\$3.5-4.0 bn	\$4.0-5.0	\$7.5-9.0
Total	\$7.0-8.0 bn	\$7.0-9.0	\$14.0-17.0

Our capacity numbers assume no overlap between the tax-exempt and taxable sectors.

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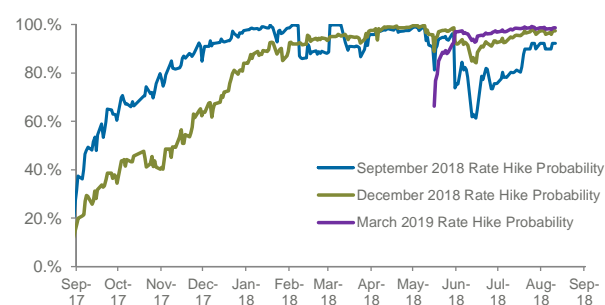
To: Florida Hurricane Catastrophe Fund
 From: J.P. Morgan
 Date: September 21, 2018
 Subject: FHCF Estimated Bonding Capacity and Pricing

Please find below J.P. Morgan's estimate of the Florida Hurricane Catastrophe Fund's ("FHCF") potential bonding capacity over the next 0-12 and 12-24 months, based on current market conditions. In addition, we have provided indicative pricing for tax-exempt and taxable offerings, as requested.

Market Update and Recent Developments^{1,2}

Last week, the U.S. Treasury curve flattened amid mixed economic data and subsiding broader macroeconomic concerns, with 2-, 5-, 10-, and 30-year yields increasing by 8, 8, 5, and 3 basis points, respectively, week over week. Despite disappointing inflation figures, J.P. Morgan Research continues to look for a gradual firming in inflation over the longer-term, and anticipates that this month's soft inflation data will have little impact on the Fed's outlook of continued gradual tightening. August Consumer Price Index data came in short of consensus expectations, increasing by 0.2% versus expectations of 0.3%, with the year-over-year figure increasing 2.7%, just shy of expectations of 2.8%. Moreover, PPI data for the month declined for the first time in 18 months by 0.1%, versus consensus expectations of a 0.2% increase. The labor market continued to tighten, with initial jobless claims at 204,000 versus consensus expectations of 210,000. August retail sales came in slightly short of expectations, with core and control retail sales up only 0.1%; however, June and July core figures were revised significantly upwards by 0.1% and 0.3%, respectively. Amid this mixed economic data, J.P. Morgan Research continues to anticipate 3.5% annualized real 3Q GDP growth, and two more rate hikes this year. Market participants are currently pricing in a 99.8% probability of a hike at the next Fed meeting on September 26th.

Market Implied Fed Rate Hike Probability



Source: Bloomberg, World Interest Rate Probability – Fed Effective, as of 9/14/2018

JPM U.S. Treasury Interest Rate Forecast (%)

	9/14/18	10/14/18	12/31/18	3/31/19	6/30/19	9/30/19
	Current	1m ahead Forecast	4Q18 Forecast	1Q19 Forecast	2Q19 Forecast	3Q19 Forecast
Fed Funds	1.92%	2.15%	2.40%	2.65%	2.90%	3.15%
3M LIBOR	2.34%	2.35%	2.70%	3.10%	3.25%	3.40%
2Y UST	2.78%	2.80%	3.05%	3.20%	3.35%	3.55%
5Y UST	2.90%	2.90%	3.10%	3.20%	3.35%	3.55%
10Y UST	2.99%	3.00%	3.20%	3.30%	3.40%	3.50%
30 UST	3.13%	3.15%	3.25%	3.30%	3.40%	3.45%

Source: J.P. Morgan Research, *US Fixed Income Markets Weekly*, 9/14/2018, jpm.com;
 Rates as of 9/14/2018

JPM Tax-Exempt Yield Forecast (%)

	9/14/18	10/14/18	12/31/18	3/31/19	6/30/19	9/30/19
AAA MMD	Current	1m ahead Forecast	4Q18 Forecast	1Q19 Forecast	2Q19 Forecast	3Q19 Forecast
2Y	1.84%	1.85%	2.05%	2.15%	2.20%	2.35%
5Y	2.12%	2.15%	2.25%	2.35%	2.45%	2.65%
10Y	2.55%	2.55%	2.70%	2.85%	2.85%	3.00%
30Y	3.16%	3.15%	3.20%	3.30%	3.35%	3.50%
10Y MMD/UST Ratio	85.00%	85.00%	84.00%	86.00%	84.00%	86.00%
30Y MMD/UST Ratio	101.00%	101.00%	99.00%	100.00%	99.00%	101.00%

Source: J.P. Morgan Research, *US Fixed Income Markets Weekly – Municipals*, 9/14/2018, jpm.com; Rates as of 9/14/2018

Aside from economic data releases, market participants also focused their attention on Hurricane Florence and its potential economic impact. A recent Moody's report estimated property damage and other costs at \$17-22 billion, which would place Florence in the top 10 costliest U.S. storms ever. J.P. Morgan Research anticipates that the hurricane may significantly affect the economies of the impacted regions, but will not largely affect quarterly GDP data for the \$20 trillion U.S. economy. Within the Moody's Analytics report, there is a \$1-2 billion estimated loss to economic output, which is 0.2% of US GDP.

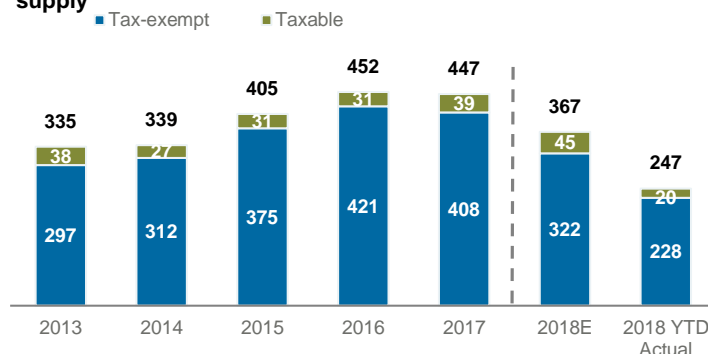
¹ J.P. Morgan Research, *US Fixed Income Markets Weekly*, 9/14/2018, jpm.com

² J.P. Morgan Research, *US Fixed Income Markets Weekly – Municipals*, 9/14/2018, jpm.com

J.P.Morgan

In the municipal market, MMD yields also increased week-over-week, with 2-, 5-, 10-, and 30-year yields rising by 4, 4, 6, and 6 bps, respectively. Municipal bond funds experienced inflows of \$121 million for the week ending September 12, increasing YTD investment to \$11.2 billion. Long-term funds, however, reported outflows of \$168 million, contributing to a continued steepening at the long-end of the MMD curve. Unlike the flattening UST curve, the MMD curve has steepened through 2018YTD, with the 2-year to 30-year spread wider by 33 basis points. J.P. Morgan Research notes that this is largely a function of increased demand for the short end of the curve, and decreased demand for the longer dated portion of the curve from banks/insurance companies following tax reform. Looking ahead, projected long-term municipal issuance in recent weeks remains below the five-year weekly issuance average of approximately \$7 billion. J.P. Morgan Research anticipates a positive net supply of municipal issuance of \$2 billion across the months of September and October, in contrast to the negative supply observed through each of the summer months. Next week's projected issuance of \$3.0 billion is \$4 billion below the 5 year average for the equivalent week (\$7.0 billion). Total new issuance volume for 2018 is expected to decrease significantly from recent years, with 2018 projected issuance at \$367 billion compared to total issuance of \$452 billion in 2016 and \$447 billion in 2017.

J.P. Morgan Research expects \$322 billion of long-term tax-exempt supply



Source: Bloomberg, Thomson Reuters SDC; as of 9/14/2018, J.P. Morgan Research, *US Fixed Income Markets Weekly – Municipals*, 9/14/2018, jpm.com; Forecast as of 9/14/2018

Potential Market Capacity

Based on market conditions as of close of business Wednesday, September 19th, J.P. Morgan estimates that FHCF could sell \$4-5 billion of tax-exempt bonds and \$2.5-

Indicative Post-Event Market Capacity as of September 19, 2018

Time Period	Tax-exempt	Taxable	Total
0 - 12 Months	\$4-5 billion	\$2.5-3.5 billion	\$6.5-8.5 billion
12 - 24 Months	\$3-4 billion	\$2.5-3.5 billion	\$5.5-7.5 billion
Total	\$7-9 billion	\$5-7 billion	\$12-16 billion

3.5 billion of taxable bonds over the next 0-12 months at the market rate assumptions provided. Over the following 12-24 month period, FHCF could sell an additional \$3-4 billion of tax-exempt bonds and \$2.5-3.5 billion of taxable bonds. This would provide FHCF a total post-event market capacity of \$7-9 billion tax-exempt and \$5-7 billion taxable, for a total of \$12-16 billion.

In order to accomplish an issuance of maximum size, FHCF would likely want to access both the tax-exempt and taxable markets across one or more offerings. Although the post-event bonds would qualify for tax-exemption, the taxable markets may provide additional depth of institutional buyers. By issuing taxable bonds in addition to tax-exempt bonds, FHCF would access certain investors that do not typically participate in tax-exempt offerings, and are not able to use the tax-exemption of municipal bonds. FHCF would likely see a significant increase in capacity by offering both a tax-exempt and taxable series as part of the same issuance, with the ultimate goal being to maximize the tax-exempt issuance. The capacity estimates above do consider the capacity overlap from investors that participate in both the tax-exempt and taxable markets, while prioritizing tax-exempt capacity over taxable.

On the following pages, please find J.P. Morgan's estimated 30-year tax-exempt and taxable scales assuming market conditions as of the close of business Wednesday, September 19th. The scales assume FHCF's current underlying ratings of Aa3/AA/AA.

J.P.Morgan

Florida Hurricane Catastrophe Fund - Tax-exempt Scale

Year	Maturity	Sinker/Term	Int. MMD	Spread	Coupon	Stated Yield
1	7/1/2019		1.82%	15	4.00%	1.97%
2	7/1/2020		1.90%	20	5.00%	2.10%
3	7/1/2021		1.98%	25	5.00%	2.23%
4	7/1/2022		2.06%	28	5.00%	2.34%
5	7/1/2023		2.15%	30	5.00%	2.45%
6	7/1/2024		2.25%	34	5.00%	2.59%
7	7/1/2025		2.34%	37	5.00%	2.71%
8	7/1/2026		2.44%	40	5.00%	2.84%
9	7/1/2027		2.51%	42	5.00%	2.93%
10	7/1/2028		2.58%	45	5.00%	3.03%
11	7/1/2029		2.65%	47	5.00%	3.12%
12	7/1/2030		2.71%	50	5.00%	3.21%
13	7/1/2031		2.77%	50	5.00%	3.27%
14	7/1/2032		2.81%	50	5.00%	3.31%
15	7/1/2033		2.86%	50	5.00%	3.36%
16	7/1/2034		2.91%	50	5.00%	3.41%
17	7/1/2035		2.96%	50	5.00%	3.46%
18	7/1/2036		3.01%	50	5.00%	3.51%
19	7/1/2037		3.07%	50	5.00%	3.57%
20	7/1/2038		3.11%	50	5.00%	3.61%
21	7/1/2039	*	3.13%			
22	7/1/2040	*	3.15%			
23	7/1/2041	*	3.16%			
24	7/1/2042	*	3.17%			
25	7/1/2043	T	3.18%	50	5.00%	3.68%
26	7/1/2044	*	3.19%			
27	7/1/2045	*	3.20%			
28	7/1/2046	*	3.21%			
29	7/1/2047	*	3.22%			
30	7/1/2048	T	3.23%	50	5.00%	3.73%

Assumes MMD as of close of business Wednesday, September 19th and an optional redemption date of 7/1/2028 at par.

J.P.Morgan

Florida Hurricane Catastrophe Fund - Taxable Scale

Year	Maturity	Sinker/Term	UST	Spread	Coupon	Stated Yield
1	7/1/2019		2.61%	40	3.01%	3.01%
2	7/1/2020		2.80%	45	3.25%	3.25%
3	7/1/2021		2.89%	50	3.39%	3.39%
4	7/1/2022		2.95%	60	3.55%	3.55%
5	7/1/2023		2.95%	70	3.65%	3.65%
6	7/1/2024		3.04%	75	3.79%	3.79%
7	7/1/2025		3.04%	85	3.89%	3.89%
8	7/1/2026		3.07%	90	3.97%	3.97%
9	7/1/2027		3.07%	95	4.02%	4.02%
10	7/1/2028		3.07%	100	4.07%	4.07%
11	7/1/2029		3.07%	105	4.12%	4.12%
12	7/1/2030		3.07%	110	4.17%	4.17%
13	7/1/2031		3.07%	115	4.22%	4.22%
14	7/1/2032		3.07%	120	4.27%	4.27%
15	7/1/2033		3.07%	125	4.32%	4.32%
16	7/1/2034	*	3.22%			
17	7/1/2035	*	3.22%			
18	7/1/2036	*	3.22%			
19	7/1/2037	*	3.22%			
20	7/1/2038	T	3.22%	115	4.37%	4.37%
21	7/1/2039	*	3.22%			
22	7/1/2040	*	3.22%			
23	7/1/2041	*	3.22%			
24	7/1/2042	*	3.22%			
25	7/1/2043	*	3.22%			
26	7/1/2044	*	3.22%			
27	7/1/2045	*	3.22%			
28	7/1/2046	*	3.22%			
29	7/1/2047	*	3.22%			
30	7/1/2048	T	3.22%	125	4.47%	4.47%

Assumes UST rates as of close of business Wednesday, September 19th and a make-whole call.

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To: Florida Hurricane Catastrophe Fund

Date: September 21, 2018

From: Morgan Stanley

Subject: Florida Hurricane Catastrophe Fund
Semi-annual Bonding Capacity Analysis – October 2018

Morgan Stanley is pleased to provide to the Florida Hurricane Catastrophe Fund (“FHCF”) our Firm’s Semi-annual Bonding Capacity Analysis.

TREASURY MARKET UPDATE

At the the close of business on September 19, 2018 the 2Y UST (2.805%) and the 5Y UST (2.959%) closed at their respective YTD highs. These YTD highs in yield are significantly higher than the corresponding 2018 YTD lows (by 92 bps, 75 bps), illustrating large movements in yield that the short to intermediate part of the Treasury market has experienced so far in 2018. On the longer end of the curve, there has been relatively less movement. The 10Y (3.082%) and 30Y UST (3.235%), closed at 67 and 50 bps higher in yield than their respective 2018 YTD lows.

Rate Hike Expectations. After decreasing the week prior, market-implied probabilities for a December hike bumped back up to 100%. Over the next 12 months, the market is pricing 68.1bp of cumulative hikes.

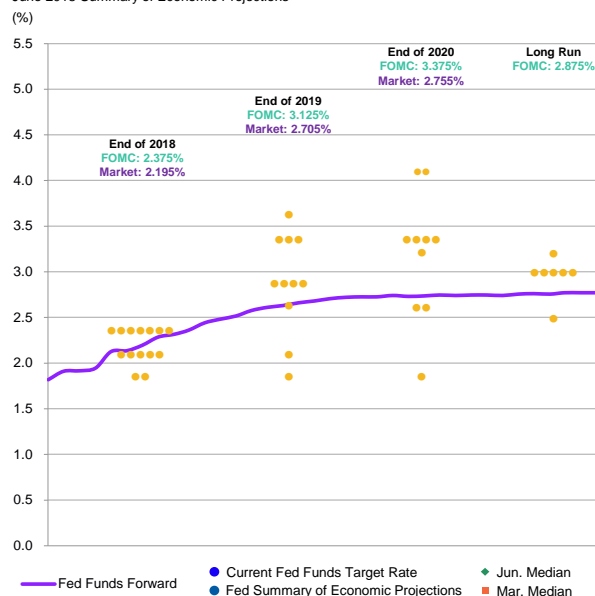
MUNICIPAL MARKET HIGHLIGHTS

Despite upward pressure, rates remain close to historical lows and have traded in a relatively tight band this year. After underperforming during the first half of the year, municipals should continue to outperform treasuries in the short-end of the yield curve due to positive market technicals (strong demand from SMAs and moderate supply). In the last month, MMD rates outperformed UST rates across the curve, as the 5Y, 10Y and 20Y MMD all experienced less of an increase in yield than their Treasury counterparts. Both the tax-exempt and taxable curves have flattened this year as the Fed has raised short-term rates and has set clear expectations that there will be two more rate hikes this year (week of September 24th and December). Due to the flatness of the yield curve investors currently pick up 68% of total tax-exempt yield in the first 5 years and 81% in 10 years as compared to this time last year where only 44% of absolute yield was available in 5 years and 69% in 10 years.

Municipal Bond Fund Net Inflows. In the week of September 12th, 2018, Lipper reported \$136.49 million of net outflows from municipal bond funds, comprised of \$121.89 million long term inflows, \$81.13 million of intermediate inflows, \$339.52 million of short term outflows, and \$55.50 million of high yield inflows. For the year muni bond fund flows are net positive \$11.7 billion and the market has seen only 10 weeks of outflows thus far.

Federal Reserve Expectations for US Interest Rates

June 2018 Summary of Economic Projections

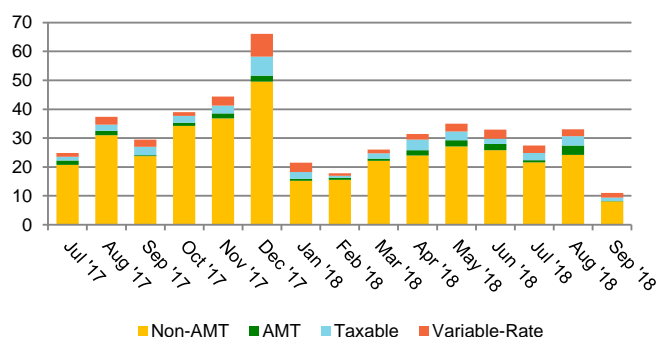


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Lower Issuance Volume in 2018. Since the start of 2018, the market has produced \$236.58 billion of issuance, which is down ~19% in volume from this time last year (\$292.13 billion by the end of September 2017). The fall in issuance volume is largely driven by the elimination of tax-exempt advance refundings and subsequent reduction in the pool of potential refunding bonds. Municipal bond issuance for August totaled \$33.03 billion, down by 4.3% from \$37.37 billion during the same period last year.

Long-Term Municipal New Issuance Volume

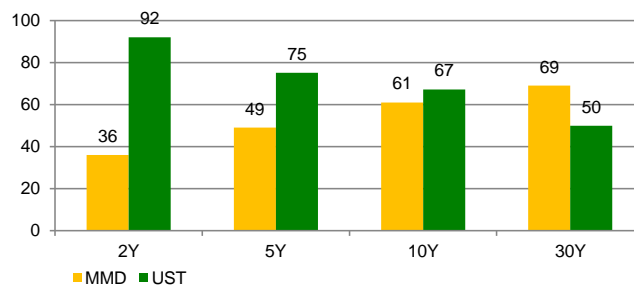
2018YTD = \$236.58 Bn (Down 19% YoY)
Monthly Issuance (\$Bn)



MMD	2Y	5Y	10Y	30Y
Current:	1.92	2.17	2.59	3.23
YTD Change:	0.36%	0.49%	0.61%	0.69%
2018 YTD Low:	1.51	1.66	1.98	2.54
2018 YTD High:	1.92	2.19	2.59	3.23

MMD and UST Movement YTD

December 29, 2017 to September 19, 2018



UST	2Y	5Y	10Y	30Y
Current:	2.81	2.96	3.08	3.24
YTD Change:	0.92%	0.75%	0.67%	0.50%
2018 YTD Low:	1.89	2.21	2.41	2.74
2018 YTD High:	2.81	2.96	3.11	3.25

PRICING VIEWS

Current 30Y UST yields remain at higher levels since the beginning of the year and are now 1 basis point off its 2018 highs, 50 basis points above its 2018 lows and 11 basis points higher than where it was at the time of our last bonding capacity analysis in May of 2018. Similar to UST yields, current 30Y MMD yields have increased and are reaching a new high for 2018, 50 basis points above its 2018 lows and are 15 basis points higher than where it was at the time of our last bonding capacity analysis in May of 2018.

On the following pages, we have provided our estimate of current pricing levels and bonding capacity over a 0-12 month and 12-24 month period.

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1. Please provide a 30-year tax-exempt scale for the FHCF using the MMD at the close of business Wednesday, September 19nd. This scale should be the one that you believe reflects a “market” scale given the FHCF’s credit with no capacity constraints. Please use serial bonds and 20, 25, and/or 30-year term bonds, as needed, over a 30-year amortization period (7/1/19 - 7/1/48) with 5.0% coupons throughout when writing the scale. Base the scale on an uninsured financing given the FHCF’s current underlying ratings of Aa3/AA/AA (Moody’s / S&P / Fitch).

FHCF Pricing Views: 30-Year Tax-Exempt Scale					
Year	Maturity	MMD (09/19/2018) ⁽¹⁾	Spread (bps)	Coupon	Yield
1	2019	1.820%	10	5.000%	1.920%
2	2020	1.900%	20	5.000%	2.100%
3	2021	1.980%	30	5.000%	2.280%
4	2022	2.060%	35	5.000%	2.410%
5	2023	2.150%	40	5.000%	2.550%
6	2024	2.250%	42	5.000%	2.670%
7	2025	2.340%	44	5.000%	2.780%
8	2026	2.440%	46	5.000%	2.900%
9	2027	2.510%	48	5.000%	2.990%
10	2028	2.580%	48	5.000%	3.060%
11	2029	2.650%	48	5.000%	3.130%
12	2030	2.710%	48	5.000%	3.190%
13	2031	2.770%	48	5.000%	3.250%
14	2032	2.810%	48	5.000%	3.290%
15	2033	2.860%	48	5.000%	3.340%
16	2034	2.910%	48	5.000%	3.390%
17	2035	2.960%	48	5.000%	3.440%
18	2036	3.010%	48	5.000%	3.490%
19	2037	3.070%	48	5.000%	3.550%
20	2038	3.110%	48	5.000%	3.590%
21	2039				
22	2040				
23	2041				
24	2042				
25	2043	3.180%	50	5.000%	3.680%
26	2044				
27	2045				
28	2046				
29	2047				
30	2048	3.230%	50	5.000%	3.730%

Notes:

Based on July Interpolated MMD⁽¹⁾

2. Please provide a 30-year taxable scale using the Treasury curve at the close of business Wednesday, September 19. This scale should be the one that you believe reflects a “market” scale given the FHCF’s credit with no capacity constraints. Please use serial bonds and 20, 25, and/or 30-year term bonds, as needed, over a 30-year amortization period (7/1/19 - 7/1/48) with par-ish coupons throughout when writing the scale. Again, base the scale on an uninsured financing given again the FHCF’s current underlying ratings of Aa3/AA/AA (Moody’s / S&P / Fitch).

FHCF Pricing Views: 30-Year Taxable Scale					
Year	Maturity	UST (09/19/2018)	Spread (bps)	Coupon	Yield
1	2019	2.805%	35	3.155%	3.155%
2	2020	2.894%	50	3.394%	3.394%
3	2021	2.959%	60	3.559%	3.559%
4	2022	2.959%	60	3.559%	3.559%
5	2023	3.039%	70	3.739%	3.739%
6	2024	3.039%	75	3.789%	3.789%
7	2025	3.082%	85	3.932%	3.932%
8	2026	3.082%	85	3.932%	3.932%
9	2027	3.082%	90	3.982%	3.982%
10	2028	3.082%	95	4.032%	4.032%
11	2029	3.082%	100	4.082%	4.082%
12	2030	3.082%	115	4.232%	4.232%
13	2031	3.082%	120	4.282%	4.282%
14	2032	3.082%	125	4.332%	4.332%
15	2033	3.082%	130	4.382%	4.382%
16	2034				
17	2035				
18	2036				
19	2037				
20	2038	3.236%	120	4.436%	4.436%
21	2039				
22	2040				
23	2041				
24	2042				
25	2043				
26	2044				
27	2045				
28	2046				
29	2047				
30	2048	3.236%	130	4.536%	4.536%

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3. Please provide us with your firm's opinion on the potential tax-exempt and/or taxable post-event market capacity over the next 0-12 and 12-24 months at rates that are at or above the current "market" scale, as needed. In addition, please include and describe briefly in your response if there is any overlap in tax-exempt / taxable capacity.

FHCF Post-Event Market Capacity (\$ in Billions)			
Time Period	Tax-Exempt	Taxable	Total
0-12 Months	3.5-4.0	4.0-5.0	7.5-9.0
12-24 Months	3.0-4.0	4.5-5.0	7.5-9.0
Total	6.5-8	8.5-10.0	15.0-18.0

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To: Florida Hurricane Catastrophe Fund

From: Wells Fargo Securities

Date: September 20, 2018

Re: Florida Hurricane Catastrophe Fund Bonding Capacity Analysis for September/October 2018

Wells Fargo Securities ("Wells Fargo") is pleased to provide the Florida Hurricane Catastrophe Fund ("FHCF") with our estimate of FHCF bonding capacity for September/October 2018. On the following pages please find our estimate of current market tax-exempt and taxable scales and spreads along with our estimate of bonding capacity for the 0-12 and 13-24 month time periods assuming unconstrained spreads. Feel free to contact any of the Wells Fargo team if we can provide additional information or address any questions regarding these estimates.

Wells Fargo continues to believe that conditions in the municipal market are favorable for the issuance of FHCF bonds, and our current capacity estimates of \$14.0 billion to \$20.0 billion in combined tax-exempt and taxable bonds over a 24-month time horizon remain unchanged from our previous estimates provided in May 2018. As in our previous bonding capacity estimates, the market scales that we have provided for taxable and tax-exempt FHCF bonds, based on market conditions as of September 19, 2018, both assume a \$3 billion issuance amortized in discrete \$100 million amounts over 30 years. We believe this level of issuance falls within the market's current capacity for FHCF's debt.

Wells Fargo has executed more than \$1.2 billion of secondary market trades in FHCF bonds since the beginning of 2016, and our estimates for taxable spreads in this memorandum are informed by our trading activities supporting FHCF's bonds in the secondary market.

The municipal market has experienced a rise in rates since our last bond capacity estimate in May 2018 with spot rates along the 'AAA' MMD¹ yield curve increasing on average by 11 basis points as of September 19, 2018 market close. The overall increase in 'AAA' MMD came along with the Federal Reserve's increase of the benchmark interest rate in June 2018. While the Federal Reserve has left its benchmark interest rate of 1.75%-2.00% unchanged since the June 2018 meeting, statements from the Federal Reserve indicate an expectation to raise the benchmark rate again at its September 26, 2018 meeting. Overall, tax-exempt and taxable yield curve shifts have been mixed since our last bonding capacity analysis, as the 3-year and the 30-year benchmark 'AAA' MMD yields have increased by 1 basis point and 17 basis points to 2.00% and 3.23%, respectively, while the 5-year benchmark 'AAA' MMD yield has declined by 1 basis point to 2.17%, and the 5-year and 30-year US Treasuries have increased by 14 and 8 basis points to 2.94% and 3.20%, respectively. As noted in our May 2018 capacity estimate, the 2017 Tax Cut and Jobs Act eliminated tax-exempt advance refundings and, when combined with an overall increase in municipal borrowing rates, has led to a significant decline in municipal issuance in 2018 year-to-date. As of August 31, 2018, new municipal issuance volume in 2018 is down 14.8% from the same period a year ago.² However, investors are continuing to put cash to work (over \$11.0 billion of net municipal bond fund inflows year-to-date)³ – as increased absolute rates have made for a more attractive asset class. These factors (reduced supply and increased absolute rates), in conjunction with global uncertainty stemming from U.S. trade policy concerns, provide for a positive market tone for high-grade issuers like FHCF.

Wells Fargo appreciates the opportunity to present our analysis of FHCF's current bonding capacity. As detailed in our response, should the need arise, we expect that current market conditions should allow FHCF to execute one or more transactions in an aggregate amount equal to or greater than the potential capital market funding needs for

¹ Thomson Reuters Municipal Market Data ("MMD")

² Source: Bond Buyer, Thomson Reuters SDC

³ Source: Lipper, as of September 12, 2018.





the current contract year. We will continue to monitor market conditions on FHCF's behalf and keep you informed of market developments that may affect FHCF's future bonding capacity.

1. Please provide a 30-year tax-exempt scale for the FHCF using the MMD at the close of business Wednesday, September 19th. This scale should be the one that you believe reflects a "market" scale given the FHCF's credit with no capacity constraints. Please use serial bonds and 20, 25, and/or 30-year term bonds, as needed, over a 30-year amortization period (7/1/19 - 7/1/48) with 5.0% coupons throughout when writing the scale. Base the scale on an uninsured financing given the FHCF's current underlying ratings of Aa3/AA/AA (Moody's / S&P / Fitch).

Florida Hurricane Catastrophe Fund Tax-Exempt Scale Rates as of September 19, 2018						
Maturity	MMD	Spread (bps)	Coupon	Yield	Price	Yield to Maturity
7/1/2019	1.84%	15	5.000%	1.990%	102.226	-
7/1/2020	1.92%	20	5.000%	2.120%	104.918	-
7/1/2021	2.00%	25	5.000%	2.250%	107.290	-
7/1/2022	2.08%	28	5.000%	2.360%	109.417	-
7/1/2023	2.17%	30	5.000%	2.470%	111.269	-
7/1/2024	2.27%	33	5.000%	2.600%	112.737	-
7/1/2025	2.36%	37	5.000%	2.730%	113.903	-
7/1/2026	2.45%	40	5.000%	2.850%	114.851	-
7/1/2027	2.52%	43	5.000%	2.950%	115.703	-
7/1/2028	2.59%	45	5.000%	3.040%	116.426	-
7/1/2029	2.66%	48	5.000%	3.140%	115.513	3.276%
7/1/2030	2.72%	50	5.000%	3.220%	114.788	3.457%
7/1/2031	2.77%	50	5.000%	3.270%	114.338	3.588%
7/1/2032	2.81%	50	5.000%	3.310%	113.980	3.694%
7/1/2033	2.86%	50	5.000%	3.360%	113.533	3.793%
7/1/2034	2.91%	50	5.000%	3.410%	113.089	3.881%
7/1/2035	2.96%	50	5.000%	3.460%	112.647	3.959%
7/1/2036	3.01%	50	5.000%	3.510%	112.207	4.030%
7/1/2037	3.07%	50	5.000%	3.570%	111.682	4.101%
7/1/2038	3.11%	50	5.000%	3.610%	111.333	4.153%
7/1/2039	3.13%	55	5.000%	3.730%	110.295	4.318%
7/1/2040	3.15%					
7/1/2041	3.16%					
7/1/2042	3.17%					
7/1/2043	3.18%					
7/1/2044	3.19%	55	5.000%	3.780%	109.866	4.402%
7/1/2045	3.20%					
7/1/2046	3.21%					
7/1/2047	3.22%					
7/1/2048	3.23%					

Please note that the tax-exempt scale shown above assumes that the bonds would be issued with a 10-year par call provision. Bond prices shown in the table above assume an October 1, 2018 dated date.

2. Please provide a 30-year taxable scale using the Treasury curve at the close of business Wednesday, September 19th. This scale should be the one that you believe reflects a “market” scale given the FHCF’s credit with no capacity constraints. Please use serial bonds and 20, 25, and/or 30-year term bonds, as needed, over a 30-year amortization period (7/1/19 - 7/1/48) with par-ish coupons throughout when writing the scale. Again, base the scale on an uninsured financing given again the FHCF’s current underlying ratings of Aa3/AA/AA (Moody’s / S&P / Fitch).

Florida Hurricane Catastrophe Fund Taxable Scale Rates as of September 19, 2018						
Maturity	UST	Spread (bps)	Coupon	Yield	Price	Yield to Maturity
7/1/2019	2.580%	50	3.080%	3.080%	100.000	-
7/1/2020	2.810%	50	3.310%	3.310%	100.000	-
7/1/2021	2.880%	55	3.430%	3.430%	100.000	-
7/1/2022	2.940%	65	3.590%	3.590%	100.000	-
7/1/2023	2.940%	75	3.690%	3.690%	100.000	-
7/1/2024	3.010%	80	3.810%	3.810%	100.000	-
7/1/2025	3.010%	90	3.910%	3.910%	100.000	-
7/1/2026	3.050%	95	4.000%	4.000%	100.000	-
7/1/2027	3.050%	105	4.100%	4.100%	100.000	-
7/1/2028	3.050%	110	4.150%	4.150%	100.000	-
7/1/2029	3.050%	115	4.200%	4.200%	100.000	-
7/1/2030	3.050%	120	4.250%	4.250%	100.000	-
7/1/2031	3.050%	125	4.300%	4.300%	100.000	-
7/1/2032	3.050%	130	4.350%	4.350%	100.000	-
7/1/2033	3.050%	135	4.400%	4.400%	100.000	-
7/1/2034						
7/1/2035						
7/1/2036						
7/1/2037						
7/1/2038	3.200%	125	4.450%	4.450%	100.000	-
7/1/2039						
7/1/2040						
7/1/2041						
7/1/2042						
7/1/2043						
7/1/2044						
7/1/2045						
7/1/2046						
7/1/2047						
7/1/2048	3.200%	135	4.550%	4.550%	100.000	-

Please note that the taxable scale shown above assumes the bonds would be issued with a make-whole call provision.



3. Please provide us with your firm's opinion on the potential tax-exempt and/or taxable post-event market capacity over the next 0-12 and 12-24 months at rates that are at or above the current "market" scale, as needed. In addition, please include and describe briefly in your response if there is any overlap in tax-exempt / taxable capacity.

FHCF Post-Event Market Capacity			
Time Period	Tax-Exempt	Taxable	Total
0- 12 Months	\$6.0 - \$8.0 billion	\$3.0 - \$4.0 billion	\$9.0 - \$12.0 billion
13- 24 Months	\$3.0 - \$5.0 billion	\$2.0 - \$3.0 billion	\$5.0 - \$8.0 billion
0- 24 Months Total	\$9.0 - \$13.0 billion	\$5.0 - \$7.0 billion	\$14.0 - \$20.0 billion

The capacity estimates shown in the table above assume FHCF would issue debt at higher interest rates than the current "market" tax-exempt and taxable scales that we have provided in our response to questions 1 and 2. Also, please note that there is an overlap between the buyers of taxable and tax-exempt FHCF bonds and the capacity estimates provided in the table above take that overlap into consideration.



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This document and any other materials accompanying this document (collectively, the "Materials") are provided for general informational purposes only. By accepting any Materials, the recipient acknowledges and agrees to the matters set forth below.

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Any municipal underwriting, commercial paper and remarketing rankings referenced herein represent combined totals for WFBNA MPG and WFSLLC. Non-municipal underwriting, commercial paper and remarketing rankings referenced herein represent totals for WFSLLC only. Source information for any ranking information not otherwise provided herein is available on request. Any rankings referencing competitive municipal new issues for time periods prior to 2011 include issues underwritten by WFCS. Underwriting activities of WFCS are not managed or otherwise controlled by WFBNA MPG or WFSLLC.

If the Materials are being provided to you under any of the following events, the information contained in the Materials and any subsequent discussions between us, including any and all information, advice, recommendations, opinions, indicative pricing, quotations and analysis with respect to any municipal financial product or issuance of municipal securities, are provided to you in reliance upon the Swap Dealer, Bank, RFP, IRMA exemptions and underwriter exclusion, as applicable, provided under the Muni Advisor Rules. In the event the Swap Dealer, Bank, RFP, IRMA exemptions, or underwriter exclusion do not apply, the information included in the Materials are provided in reliance on the general information exclusion to advice under the Muni Advisor Rules.

In the event that you have provided us with your written representation in form and substance acceptable to WFBNA that you are represented by a "qualified independent representative" as defined in the Commodity Exchange Act ("CEA") with respect to any municipal derivative or trading strategy involving municipal derivatives described in the Materials, we have provided you with our written disclosure that we are not acting as an advisor to you with respect to the municipal derivative or trading strategy pursuant to Section 4s(h)(4) of the CEA and the rules and regulations thereunder, and have taken certain other steps to establish the "Swap Dealer exemption" under the Muni Advisor Rules.



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In the event the Materials are being provided in connection with a RFP, the SEC exempts from the definition of municipal advisor "any person providing a response in writing or orally to a request for proposals or qualifications from a municipal entity or obligated person for services in connection with a municipal financial product or the issuance of municipal securities; provided however, that such person does not receive separate direct or indirect compensation for advice provided as part of such response" ("RFP exemption"). In such event, we have relied upon the RFP exemption, and on your distribution and execution of this RFP through a competitive process. In the event WFBNA MPG is the party providing the Materials responses to all questions, certifications, attestations, information requests, and similar in the RFP or RFQ to which this response relates are specifically limited to, in context of, and as applied to, WFBNA MPG in its capacity as a separately identifiable department of a national bank that is registered as a municipal securities dealer with the Securities and Exchange Commission, Office of the Comptroller of the Currency, and Municipal Securities Rulemaking Board; and not on behalf of Wells Fargo Bank, N.A., unless specified otherwise in our response.

In the event that you have provided us with your written representation that you are represented by an independent registered municipal advisor (an "IRMA") within the meaning of the Muni Advisor Rules, with respect to the transaction(s) described in the Materials we have provided you with our written disclosure that we are not a municipal advisor to you and are not subject to the fiduciary duty under the Muni Advisor Rules, if applicable, and have taken certain other steps to establish the "IRMA exemption" under the Muni Advisor Rules.

In the event that you have engaged us to serve as an underwriter with respect to the municipal securities issuance described in the Materials we have provided you with our written disclosure regarding our role as an underwriter, that we are not a municipal advisor to you and are not subject to the fiduciary duty under the Muni Advisor Rules, if applicable.

If savings threshold level information is contained herein, please be advised that WFS is not recommending nor providing advice regarding which maturities should be refunded by you.

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Disclosures (Continued):

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While certain transactions described in the Materials may be used for hedging purposes to reduce or eliminate certain risks associated with your assets or liabilities, the effectiveness of hedging may depend upon holding these transactions to maturity and not reducing or disposing of all or any portion of the asset or liability during the term of the hedge. If a swap transaction is terminated early, or if you reduce or dispose of all or a portion of the underlying asset or liability before the transaction matures (such as prepaying a floating rate loan you hedge with a swap), then depending on the nature of the transaction, its characteristics and your position in it (e.g., buyer, seller, counterparty, etc.), you may incur a substantial loss or you may receive little or no hedging benefit from any upfront or periodic payments or exchanges or any other costs incurred in purchasing, selling, acquiring, maintaining or disposing of the transaction. You may also incur a substantial loss if you enter into a swap transaction in anticipation of hedging an asset or liability that does not materialize. You should understand that significant potential amounts could become payable by you for modifying a swap transaction, terminating it early or transferring your position in the transaction to another person or entity, or in connection with the exercise of any option or other rights under the transaction or governing documents, depending upon then existing market conditions. You should also consider that prepaying your loan or disposing of an asset or other liability does not relieve you of your obligations under a swap transaction, which may be terminated early only in accordance with the terms of the swap trading relationship documentation (such as an ISDA Master Agreement) or other transaction documents, or otherwise by mutual agreement. Such termination may require payment by you of an early termination amount, which amount may be substantial. Whether you use a swap transaction for hedging or another purpose, you should satisfy yourself that you understand these and other risks relative to the benefits you are seeking to achieve and that the transaction and risks are suitable for you. These risks are discussed in greater detail in disclosures provided to you through the following website: www.wellsfargo.com/swapdisclosures

Independent Obligation

To the extent any swap transaction described in the Materials may be used to hedge against increases in the interest expense of a loan or other financing, the swap transaction would be a separate and independent obligation and would not be contingent on whether or not any loan or other financing closes, is outstanding, or is repaid, in whole or in part, at any time, subject to any contractual requirement to terminate and settle the transaction early upon prepayment of the loan or financing or for other financing-related events. In addition, if you provide any existing or future collateral or other credit support to secure the transaction and any loan or other financing, then you would be entitled to the release of such collateral or credit support only if certain conditions contained in the related collateral agreement or credit support document are completely satisfied for both the transaction and any such loan or financing, or we otherwise reach agreement with you on alternative collateral, credit support or other arrangements.

Unmatched Terms & Conventions



If the principal amount or duration of a loan or financing differs from that of a transaction used to hedge such loan or financing, you may be exposed to risk of loss from such over-hedging or under-hedging. If any other economic terms or characteristics of a loan or financing differ from those of the related hedge, then in addition to any losses that you could incur from such differences, the hedge may create unanticipated accounting exposure or tax liability for you. To the extent fair value accounting applies to the hedge, you may have to reflect unrealized gains and losses (i.e., the so-called "mark-to-market" value of the hedge) over the life of the hedge on your balance sheet and/or income statement. If hedge accounting applies, any ineffectiveness in the hedge resulting from such differences may likewise need to be taken into account and reflected in your financial results. These swap valuation considerations may also be important to you for tax purposes, including any tax laws that may require unrealized gains or losses on swaps to be taken into account in determining your income tax liability.

Conventions used in the loan or other financing and swap markets may differ, and we are under no obligation to ensure that any swap we offer is a perfect hedge for your financing even if we provide you with both products. For example, if the method for determining a loan's floating rate differs from that for a swap's floating rate, the loan floating rate payments could diverge from those of the swap. Such divergence may occur by convention or as the result of contractual differences, such as in the definition of or the reset timing (e.g., 1-month or 3-month) for the London Interbank Offered Rate (LIBOR), the dates or times at which LIBOR is set, the number of days in the payment periods, any applicable fallback floating rate, or the floating rate rounding convention.

Negative Interest Rates

Express wording in swap transactions is required to place a 0% floor on LIBOR or other floating benchmark rate of the swap transaction, and no such 0% floor is included in an interest rate swap or other swap transaction unless mutually agreed between the parties as reflected in the swap confirmation. Absent such floor, if a Floating Amount is negative under an interest rate swap, the Floating Rate Payer does not make such payment. Instead, the Fixed Rate Payer pays the absolute value of the negative Floating Amount in addition to the Fixed Amount. See §6.4 of the 2006 ISDA Definitions, as amended. If you wish to acquire a swap with a 0% floor, this may increase the price of your swap as reflected in a higher Fixed Rate. For further information on negative interest rates, including their effect on swaps and the loans they are hedging, see Negative Interest Rates at: www.wellsfargo.com/swapdisclosures.

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https://www.wellsfargo.com/invest_relations/investor_relations

Additional Information

Government & Institutional Banking

Public Finance

28059 US Hwy 19 N, Suite 205

Clearwater, Florida 33761

(727) 953-1124



In addition to the information furnished above, you should not enter into any swap transaction described in the Materials without reviewing and understanding our "Disclosure of Material Information for Swaps" and accompanying documents available to you at: www.wellsfargo.com/swapdisclosures

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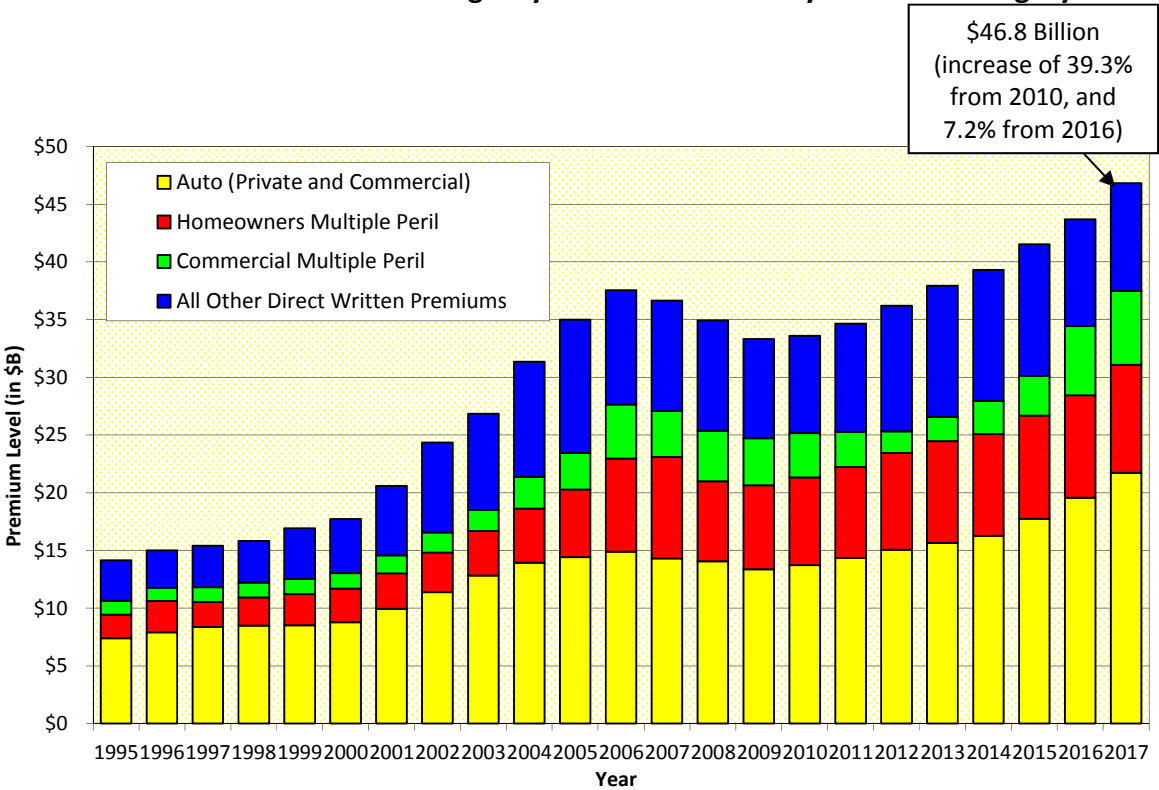


Appendix B – The FHCF’s Emergency Assessment Base

According to Section 215.555(6)(b)1., Florida Statutes, “(i)f the board determines that the amount of revenue produced under subsection (5) is insufficient to fund the obligations, costs, and expenses of the fund and the corporation, including repayment of revenue bonds and that portion of the debt service coverage not met by reimbursement premiums, the board shall direct the Office of Insurance Regulation to levy, by order, an **emergency assessment on direct premiums for all property and casualty lines of business in this state, including property and casualty business of surplus lines insurers regulated under part VIII of chapter 626, but not including any workers' compensation premiums or medical malpractice premiums. As used in this subsection, the term "property and casualty business" includes all lines of business identified on Form 2, Exhibit of Premiums and Losses, in the annual statement required of authorized insurers by s. 624.424 and any rule adopted under this section, except for those lines identified as accident and health insurance and except for policies written under the National Flood Insurance Program.**”

In numerical terms, this gives the FHCF an ability to assess against a base which, as of the end of 2017 (the last official measurement date), totaled approximately \$46.8 billion. The chart below and table on the following page show the evolution of the FHCF’s assessment base over time, both by type of coverage and admitted market and surplus lines.

Historical FHCF Emergency Assessment Base by Premium Category





Historical FHCF Emergency Assessment Base (\$MM)

Admitted Market, Surplus Lines, and the dollar value of a 6% emergency assessment

Calendar Year	Admitted Lines DWP*	Surplus Lines and NIMA Clearinghouse DWP	Total Aggregate Premium	6% Emergency Assessment	% Premium Change from Prior Year
1995	\$13,783	-	\$13,783	-	
1996	\$14,994	-	\$14,994	-	8.79%
1997	\$15,402	-	\$15,402	-	2.72%
1998	\$15,817	-	\$15,817	-	2.70%
1999	\$16,036	-	\$16,036	-	1.38%
2000	\$16,780	-	\$16,780	-	4.64%
2001	\$19,195	-	\$19,195	-	14.39%
2002	\$22,150	-	\$22,150	-	15.39%
2003	\$24,411	\$2,435	\$26,845	\$1,611	21.20%
2004	\$28,649	\$2,695	\$31,344	\$1,881	16.76%
2005	\$31,714	\$3,275	\$34,989	\$2,099	11.63%
2006	\$33,346	\$4,208	\$37,554	\$2,253	7.33%
2007	\$32,545	\$4,101	\$36,646	\$2,199	-2.42%
2008	\$30,830	\$4,095	\$34,926	\$2,096	-4.69%
2009	\$29,454	\$3,859	\$33,313	\$1,999	-4.62%
2010	\$29,888	\$3,715	\$33,603	\$2,016	0.87%
2011	\$30,943	\$3,696	\$34,640	\$2,078	3.09%
2012	\$32,323	\$3,862	\$36,185	\$2,171	4.46%
2013	\$33,726	\$4,206	\$37,933	\$2,276	4.83%
2014	\$35,085	\$4,216	\$39,302	\$2,358	3.61%
2015	\$36,957	\$4,550	\$41,507	\$2,490	5.61%
2016	\$39,069	\$4,623	\$43,693	\$2,622	5.26%
2017	\$41,844	\$4,973	\$46,817	\$2,809	7.15%

Source: Office of Insurance Regulation ("OIR") and Florida Surplus Lines Service Office ("FSLSO")

DWP is as of 12/31 and is based on companies reporting to the OIR on behalf of the FHCF and is subject to change as company/agent adjustments are reported. In 2004, the Florida legislature excluded medical malpractice for 3 years and included surplus lines and has continued to exclude medical malpractice, which has been extended until June 2019.

2011-2016 DWP numbers have been adjusted to reflect unassessable premiums written in assessable lines of business. However, beginning in 2017, this allowed adjustment figure is unavailable. The average reduction to DWP related to these adjustments was approximately 0.90%.

Average direct written premium increase (geometric mean) from 2000-2017 is 6.13%.



2017 Admitted Market Lines Premiums (\$MM)

Line of Business	2017 Total Assessable Premium
Fire	\$704.5
Allied Lines	\$1,417.0
Multiple Peril Crop	\$91.2
Private crop	\$0.4
Farmowners Multiple Peril	\$21.8
Homeowners Multiple Peril	\$8,845.9
Commercial Multiple Peril (Non-Liability)	\$1,138.8
Commercial Multiple Peril (Liability)	\$575.1
Mortgage Guaranty	\$309.0
Ocean Marine	\$315.3
Inland Marine	\$1,288.7
Financial Guaranty	\$8.4
Earthquake	\$4.6
Other liability - occurrence	\$3,302.4
Other liability - claims	\$615.7
Products Liability	\$123.4
Private Flood	\$60.1
Private Passenger Auto No-Fault (PIP)	\$3,983.1
Other Private Passenger Auto Liability	\$9,703.8
Commercial Auto No-Fault (PIP)	\$96.0
Other Commercial Auto Liability	\$2,012.2
Private Passenger Auto Physical Damage	\$5,455.9
Commercial Auto Physical Damage	\$383.0
Aircraft (All Perils)	\$102.0
Fidelity	\$61.6
Surety	\$364.7
Burglary and Theft	\$18.2
Boiler and Machinery	\$55.4
Credit	\$66.1
Warranty	\$556.8
Aggregate Write-ins	\$163.1
Totals	\$41,844.2

Source: Florida Office of Insurance Regulation, Market Research Unit



2017 Surplus Lines and Non-Admitted Insurance Multi-State Agreement ("NIMA")

Clearinghouse Premiums (\$MM)

Coverage Code		2017 Surplus Lines and NIMA Clearinghouse	Coverage Code		2017 Surplus Lines and NIMA Clearinghouse
1000	Commercial Property	\$1,646.8	3006	Personal & Pleasure Boats & Yachts	\$23.6
1001	Builders Risk	\$60.6	3007	Ocean Marine Builder's Risk	\$1.1
1002	Business Income	\$2.8	3008	Longshoremen (Jones Act)	\$0.8
1003	Apartments (Commercial)	\$2.3	3010	Marine Operators Legal Liability - Non Taxable	\$0.0
1004	Boiler and Machinery	\$0.0	3011	Marine Liabilities Package - Non Taxable	\$0.0
1005	Commercial Package (Property & Casualty)	\$321.6	4000	Inland Marine (Commercial)	\$23.6
1006	Condominium Package (Commercial)	\$38.2	4001	Inland Marine (Personal)	\$10.4
1007	Crop Hail	\$0.0	4002	Motor Truck Cargo	\$19.1
1008	Difference In Conditions	\$6.2	4003	Jewelers Block	\$6.2
1009	Earthquake	\$0.1	4004	Furriers Block	\$0.0
1010	Flood	\$34.1	4005	Contractors Equipment	\$0.6
1011	Glass (Commercial)	\$0.0	4006	Electronic Data Processing	\$3.8
1012	Mortgagee Impairment	\$0.2	5000	Commercial General Liability	\$848.8
1013	Windstorm &/or Hail	\$75.0	5001	Commercial Umbrella Liability	\$62.0
1014	Mold Coverage - Commercial	\$1.9	5002	Directors & Officers Liability (Profit)	\$22.5
1015	Sinkhole Coverage - Commercial	\$0.1	5003	Directors & Officers Liability (Non-Profit)	\$4.5
1016	Excess Flood - Commercial	\$11.8	5004	Educator Legal Liability	\$1.3
1017	Collateral Protection	\$49.8	5005	Employment Practices Liability	\$10.3
1018	Fire	\$0.0	5006	Excess Commercial General Liability (Not Umbrella)	\$193.0
1100	Bankers Blanket Bond	\$2.9	5007	Excess Personal Liability (Not Umbrella)	\$4.2
1101	Blanket Crime Policy	\$0.4	5008	Liquor Liability	\$4.0
1102	Employee Dishonesty	\$0.0	5009	Owners & Contractors Protective	\$4.7
1103	Identity Theft	\$0.0	5010	Personal Umbrella	\$7.8
1104	Deposit Forgery	\$0.0	5011	Personal Liability	\$19.7
1105	Miscellaneous Crime	\$1.2	5012	Pollution & Environment Liability	\$58.5
1200	Accident & Health	\$20.4	5013	Product & Completed Operations Liability	\$17.3
1201	Credit Insurance	\$5.1	5014	Public Officials Liability	\$3.0
1202	Animal Mortality	\$0.2	5015	Police Professional Liability	\$1.6
1203	Mortgage Guaranty	\$0.6	5016	Media Liability	\$2.6
1204	Worker's Compensation-Excess Only	\$9.1	5017	Railroad Protective Liability	\$3.7
1205	Product Recall	\$7.3	5018	Asbestos Removal & Abatement	\$0.0
1206	Kidnap/Ransom	\$0.2	5019	Guard Service Liability	\$0.4
1207	Surety	\$3.4	5020	Special Events Liability	\$4.3
1208	Weather Insurance	\$0.8	5021	Miscellaneous Liability	\$62.1
1209	Prize Indemnification	\$0.1	5022	Cyber Liability	\$41.6
1210	Travel Accident	\$0.0	6000	Hospital Professional Liability	\$17.6
1211	Terrorism	\$12.3	6001	Miscellaneous Medical Professionals	\$64.9
1212	Fidelity	\$1.4	6002	Nursing Home Professional Liability	-\$2.0
2000	Homeowners-HO-1	\$0.6	6003	Physician/Surgeon	\$23.2
2001	Homeowners-HO-2	\$0.3	7000	Architects & Engineers Liability	\$18.8
2002	Homeowners-HO-3	\$360.1	7001	Insurance Agents & Brokers E&O	\$11.0
2003	Tenant Homeowners-HO-4	\$1.2	7002	Lawyers Professional Liability	\$42.3
2004	Homeowners-HO-5	\$40.2	7003	Miscellaneous E&O Liability	\$140.3
2005	Condo Unit-Owners HO-6	\$65.5	7004	Real Estate Agents E&O	\$2.5
2006	Homeowners-HO-8	\$24.9	7005	Software Design Computer E & S	\$5.0
2007	Dwelling Builders Risk	\$2.7	8000	Commercial Auto Liability	\$42.2
2008	Dwelling Flood	\$18.2	8001	Commercial Auto Excess Liability	\$7.9
2009	Dwelling Property	\$97.8	8002	Commercial Auto Physical Damage	\$35.6
2010	Farmowners Multi-Peril	\$1.9	8003	Dealers Open Lot	\$14.7
2011	Mobile Homeowners	\$13.9	8004	Garage Liability	\$28.6
2012	Windstorm	\$20.5	8005	Garage Keepers Legal	\$2.4
2013	Mold Coverage - Residential	\$0.0	8006	Private Passengers Auto-Physical Damage Only	\$0.1
2014	Sinkhole Coverage - Residential	\$0.0	8007	Personal Excess Auto Liability	\$0.2
2015	Excess Flood - Residential	\$21.5	9000	Commercial Aircraft Hull &/or Liability	\$12.0
3000	Marine Operators Legal Liability - Taxable	\$3.0	9001	Airport Liability	\$1.1
3001	Marine Liabilities Package - Taxable	\$9.0	9002	Aviation Cargo	\$0.2
3002	Ocean Marine-Hull &/or Protection & Indemnity	\$7.3	9003	Aviation Product Liability	\$5.1
3003	Ocean Cargo Policy	\$26.1	9004	Hanger Keepers Legal Liability	\$0.0
3004	Ship Repairers Legal Liability	\$0.0	9005	Personal & Pleasure Aircraft	\$0.0
3005	Stevedores Legal Liability	\$0.0			
			Totals		\$4,973

Source: FLSO and NIMA Clearinghouse

Based on policies with a submitted/filed/written date from 1/1/17 to 12/31/17.



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