


METROPOLITAN WASHINGTON AIRPORTS AUTHORITY


REPORT TO THE FINANCE COMMITTEE

Airport Economics

March 2019

Airports Are Complex Business Enterprises, Subject to Statutory and Regulatory Requirements

Airport Financial Framework and Rates & Charges

Authorizing Legislation & Governance

- ✓ State government
- ✓ City, County, or local government
- ✓ Board, commission, or authority

Federal Regulations and Policies & Sponsor Assurances

- ✓ Congress
- ✓ FAA/DOT
- ✓ TSA
- ✓ NTSB
- ✓ EPA
- ✓ OSHA
- ✓ IRS
- ✓ SEC

Bond Ordinance/ Resolution/ Trust Indenture

- ✓ Capital Markets
- ✓ Bondholders
- ✓ Rating agencies
- ✓ Credit and liquidity providers
- ✓ MSRB

Airline Use and Lease Agreement

- ✓ Signatory air carriers
- ✓ Non-signatory air carriers
- ✓ Air cargo carriers

Concession/ Operating Agreements and Permits

- ✓ Terminal concessions
- ✓ Parking operator
- ✓ Car rental
- ✓ Ground transportation
- ✓ Hotel
- ✓ FBOs

Capital Improvement Program

- ✓ Airport tenants
- ✓ Airport staff (Planning, Finance)
- ✓ FAA Airports District Office

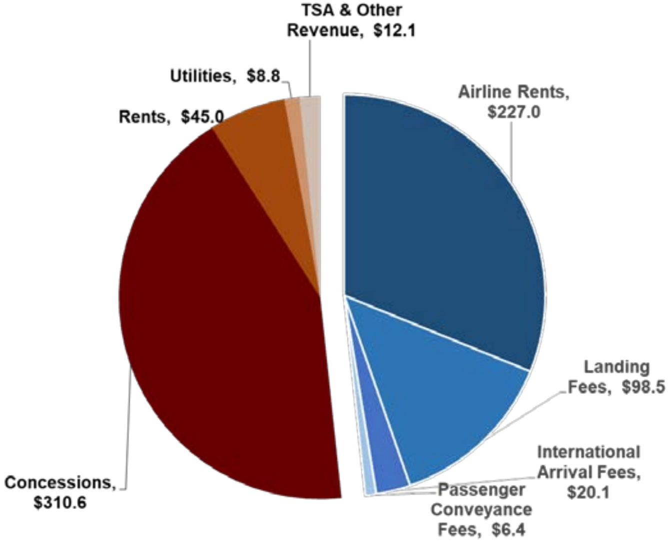
Airport Revenues

- Airports derive revenue from a variety of sources that can be characterized as Airline Revenue and Non-Airline Revenue

- In general, airline rates and charges must be based on a cost recovery methodology

- Rates and charges must be "reasonable" and "not unjustly discriminatory"

Reagan National & Dulles International 2019 Budget Operating Revenues by Source **($'s in millions)**



Non-Airline Sources: 51.7%   Airline Sources: 48.3%

Rates & Charges Methodologies

Residual Ratemaking	Compensatory Ratemaking
• Airlines assume the risk of the airport's financial performance • Airlines pay *all* airport costs and receive a credit for non-airline revenue (e.g., concessions, parking) • Airlines retain surplus non-airline revenues • Contractual provisions govern airline participation/approval of capital program	• Airport operator assumes the risk of the airport's financial performance • Airlines pay fees and rental rates *only* for the facilities and services they use • Airport operator retains surplus non-airline revenues • Airport operator determines the capital program

RESIDUAL	HYBRID	COMPENSATORY
✓ ***Less financial risk for airport operator***	***Risk***	✓ ***Greater financial risk for airport operator***
✓ ***Less financial upside for airport operator***	***Reward***	✓ ***Greater financial upside for airport operator***
✓ ***Airline approval for capital projects***	***Control***	✓ ***No airline approval for capital projects***

Airports Authority’s Hybrid Rates & Charges Structure

Airline Residual
100% Cost Recovery
Airfield Cost Center

Expenses to be Recovered
Operating, Debt Service and Hard Coverage

Less: Offsets to Costs
Grants, Airlines’ Share of Prior Year NRR, Transfer from DCA

Equals: Airline Landing Fee Revenue
Only Hard Coverage Flows into NRR

Airline Compensatory
100% Cost Recovery for Rented Space Only
Terminal Cost Center

Expenses to be Recovered
Operating, Debt Service and Hard Coverage

Less: Offsets to Costs
Airlines’ Share of Prior Year NRR

Equals: Airline Terminal Rent Revenue
Only Hard Coverage Flows into NRR

Non-Airline Cost Centers
Market Driven

Non-Airline Revenues
Concessions, Parking, Rental Cars, Ground Transportation, etc.

Less Expenses
Operating, Debt Service

Equals: Net Non-Airline Revenue
All Revenue in Excess of Costs

Net Remaining Revenues (NRR)

Airports Authority Share* | **Airline Share***

** 50% airline/50% Airports Authority split up to the plateau amount, then 75% airline / 25% Airports Authority split*

Value of Airports Authority’s Hybrid Structure

- Cost recovery
- Hard coverage
- Sharing of revenue between Airports
- Airports Authority’s share of NRR to enhance liquidity and fund projects
- Supports very strong bond ratings
- Weather downturns in activity and share in benefits of economic upturns
- Provides a solid framework for the future

Questions?

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MARCH 2019
FINANCIAL ADVISOR REPORT – THE AVIATION ENTERPRISE

INTRODUCTION

The Finance Committee has requested that the Financial Advisor provide a monthly report on the status of the financing of the Capital Construction Program (CCP) and any related issues concerning the Metropolitan Washington Airports Authority's (Airports Authority) Aviation Enterprise capital financing activities. The Financial Advisor presents this Monthly Report, focusing on the specific debt management projects underway, the debt policy framework guiding these projects and the financing of the CCP in general.

DISCUSSION SUMMARY

This paper is organized as follows:

I. Executive Summary

II. Action Items
   - A. None

III. Informational Items
   - A. Series 2019 Aviation Bond Transaction
   - B. Airport Economics

IV. Monthly Update
   - A. CCP: Actuals vs. Projections
   - B. Short-term Liquidity Forecast
   - C. Variable Rate Programs
   - D. Swaps – Monthly Swap Performance

<u>Exhibits</u>

- A. Airports Authority's Capital Construction Program
- B. Airport System Revenue Bonds
  - Summary of Bonds Outstanding
  - Refunding Monitor
- C. Variable Rate Programs
  - Overview
  - Historical Performance
- D. Swap Program
  - Airports Authority Swap Profile
  - Historic Performance of Swaps

I. EXECUTIVE SUMMARY

Action Items

- None to report.

Informational Items

- ***Series 2019 Aviation Bond Transaction.*** On February 27, the Board of Directors approved the selection of Jefferies as Book-Running Senior Manager, Siebert as Co-Senior Manager and Barclays, Citigroup, Goldman Sachs, J.P. Morgan, Morgan Stanley and UBS as Co-Managers for the Series 2019 Aviation Bonds financing. The financing is expected to include the issuance of bonds to current refund approximately $183 million of outstanding Series 2009B Bonds. The financing team is also evaluating the size of the new money issue to fund project costs and whether to refund other outstanding bonds including unwinding interest rate swaps. The transaction schedule anticipates an expected bond sale in June.

- ***Airport Economics.*** For the Committee's information only, separate slides are provided on the airport economic model at the Airports Authority. The presentation was originally scheduled for the February 20 Board Meeting,

II. ACTION ITEMS

No Action Items to report this month.

III. INFORMATIONAL ITEMS

(III.A) Series 2019 Aviation Bond Transaction

On February 27, the Board of Directors approved the selection of Jefferies as Book-Running Senior Manager, Siebert as Co-Senior Manager and Barclays, Citigroup, Goldman Sachs, J.P. Morgan, Morgan Stanley and UBS as Co-Managers for the Series 2019 Aviation Bonds financing. The transaction schedule anticipates a bond sale in June.

The financing is expected to include the issuance of bonds to current refund approximately $183 million of outstanding Series 2009B Bonds.

Series	*Callable Par/ Maturities*	*Range of Interest Rates*	*Call Date*	*Call Premium*	*Net PV Savings*
2009B PAB*	$183,295,000 ('20-'29)	4.125%-5.25%	10/01/19	0% (at par)	$25.7 mm 14.0%

* Refunding bonds are assumed to be 35%/65% AMT/Non-AMT

For the Series 2019 Bond transaction, Finance Staff and the Financial Advisor are also evaluating:

- the amount of the new money issue to fund project costs
- whether to include a taxable advance refunding of a portion of bonds with call dates in 2020, which may not be advance refunded on a tax exempt basis
- whether to include a refunding of other outstanding debt
- whether to unwind portions of the Airports Authority's swap portfolio to reduce risk

(III.B) Airport Economics

For the Committee's information only, separate slides are provided on the airport economic model at the Airports Authority. The presentation was originally scheduled for the February 20 Board Meeting.

IV. MONTHLY UPDATES

(IV.A) CCP: Actuals vs. Projections

Exhibit A sets forth the major CCP projects underway at the Airports Authority, as well as historical CCP actual versus projected expenditures. The CCP expenditures for 2019 are budgeted at $466.5 million including construction and capitalized interest costs. Expenditures in February 2019 totaled $12.7 million.

2019 CCP Projections vs. Actuals ($ millions)				
	General Ledger Actual	***Original Projection***	***Variance***	***Variance (%)***
18-Jan	$16.00	$22.66	($6.66)	(29.4%)
18-Feb	12.70	22.66	(9.96)	(43.9%)
2019 Totals (Thru February)	$28.70	$45.31	($16.61)	(36.7%)

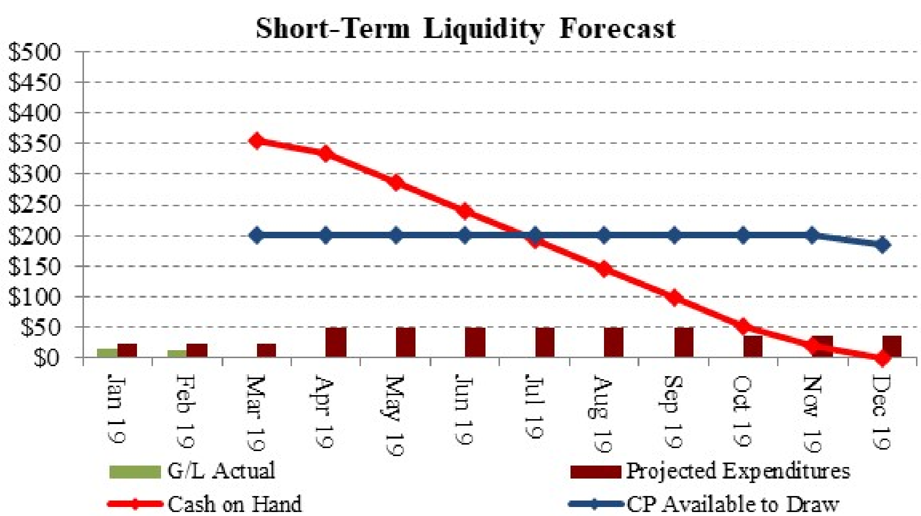
(IV.B) Short-Term Liquidity Forecast

The following (including the table and chart) is based on information provided to the Financial Advisor by Finance Staff.

At the beginning of March 2019, the Airports Authority had $355.7 million of cash-on-hand[1] and $200 million of additional available liquidity in the form of undrawn CP Series Two capacity.

Short-term Liquidity Forecast ($ millions)					
Beginning of Month	**Cash Available**	**CP Available to Draw (End Bal)**	**PFCs**	**Grants**	**Projected Expenditures**
Mar-19	355.74	200.00	0.00	1.73	22.66
Apr-19	334.81	200.00	0.00	1.73	48.80
May-19	287.74	200.00	0.00	1.73	48.80
Jun-19	240.66	200.00	0.00	1.73	48.80
Jul-19	193.59	200.00	0.00	1.73	48.67
Aug-19	146.65	200.00	0.00	1.73	48.67
Sep-19	99.71	200.00	0.00	1.73	48.67
Oct-19	52.77	200.00	0.00	1.73	35.35
Nov-19	19.14	200.00	0.00	1.73	35.35
Dec-19	0.00	176.31	0.00	1.73	35.35

The liquidity forecast does not include the proceeds of the planned 2019 new money bond transaction.



[1] Cash-on-hand includes proceeds of the Series 2018A Bonds and Funds 63 and 64.

(IV.C) Variable Rate Programs
In addition to approximately $740.4 million of outstanding variable rate debt, the Airports Authority can issue up to $200 million of CP Two Notes which are currently "on-the-shelf."

Outstanding unhedged variable rate debt of $222.6 million represents approximately 5.1 percent of the Airports Authority's $4.4 billion of outstanding indebtedness.

Gross Variable Rate Exposure

Fixed Rate Debt Percentage:		
Fixed Rate Debt	$3,653,630,000	
2009D VRDOs (Hedged)	113,700,000	
2010C2 VRDOs (Hedged)	89,830,000	
2010D Index Floater (Hedged)	145,200,000	
2011A VRDOs (Hedged)	169,065,000	
Fixed Rate	**$4,171,425,000**	**94.9%**
Variable Rate Debt Percentage:		
2003D VRDOs	51,625,000	
2010C1 VRDOs	51,675,000	
2011B Index Floater	119,315,000	
CP Notes	0	
Variable Rate	**$222,615,000**	**5.1%**
Combined Total	**$4,394,040,000**	**100.0%**

The Airports Authority's current unrestricted cash balances of $971.4 million in short-term investments can be netted against variable rate debt exposure to produce a net variable rate exposure. Currently, unrestricted cash balances exceed the amount of unhedged short-term debt.

Exhibit C-2 illustrates the current year rolling three-month average spreads to SIFMA of the Airports Authority's variable rate programs, as well as historic spreads to SIFMA by quarter.

(IV.D) Swaps – Monthly Swap Performance
2002 Swap: Under the terms of the swap agreement, the Airports Authority pays to the counterparty a fixed rate of 4.445 percent on the outstanding notional amount of the swap. In return, the Airports Authority receives from the counterparty 72 percent of one-month LIBOR based upon the outstanding notional amount of the swap. The 2002 Swap originally hedged the Series 2002C Bonds and now hedges the 2011A-2 which refunded the Series 2002C Bonds in full. On October 1, 2015, the Series 2011A-2 was converted from Index Floaters to VRDOs. **Exhibit D-2** provides the historical monthly cash flow of the 2002 swaps associated with the hedged VRDOs.

2009 Swaps: Under the terms of the swap agreements, the Airports Authority pays to the counterparties an average fixed rate of 4.099 percent on the outstanding notional amount of the swap. In return, the Airports Authority receives from the counterparties 72 percent of one-month LIBOR based upon the outstanding notional amount of its respective swaps. The 2009 Swap originally hedged the Series 2009A Bonds and 2009D Bonds. The Series 2009A Bonds were partially refunded by the Series 2010C2 Bonds and the remaining portion was fully refunded by the Series 2011A-3 Bonds. The 2009 swaps now hedge the 2011A-3, 2009D and 2010C2 VRDOs. On October 1, 2015, the Series 2011A-3 Bonds were converted from Index Floaters to VRDOs. **Exhibit D-2** provides the historical monthly cash flow of the 2009 swaps associated with the hedged VRDOs.

2010 Swap: Under the terms of the swap agreement, the Airports Authority pays to the counterparty a fixed rate of 4.112 percent on the outstanding notional amount of the swap. In return, the Airports Authority receives from the counterparty 72 percent of one-month LIBOR based upon the outstanding notional amount of the swap. The 2010 Swap hedges the Series 2010D Index Floaters. **Exhibit D-2** provides the historical monthly cash flow of the 2010 swaps associated with the hedged Index Floaters.

2011 Swap: Under the terms of the swap agreement, the Airports Authority pays to the counterparty a fixed rate of 3.862 percent on the outstanding notional amount of the swap. In return, the Airports Authority receives from the counterparty 72 percent of one-month LIBOR based upon the outstanding notional amount of the swap. The 2011 Swap hedges the Series 2011A-1 Bonds. On October 1, 2015, the Series 2011A-1 Bonds were converted from Index Floaters to VRDOs. **Exhibit D-2** provides the historical monthly cash flow of the 2011 swaps associated with the hedged VRDOs.

Exhibit A
Airports Authority's CCP

Major projects under construction at Reagan National include:

- New Concourse Enabling Projects
- New Concourse
- Sanitary Sewer Main Reconstruction – Terminal C to North Pump Station
- Terminal C Bag Room Renovations
- Secure National Hall
- Secure National Hall Enabling Projects
- Hold Bay 4 Reconstruction and Reconfiguration

Major projects under construction at Dulles International include:

- Reconstruction of Taxiway J
- IAD Taxilane B Reconstruction and Widening, West Section
- Parking Access and Revenue Control System (PARCS)

Historical CCP Projections vs. Actuals ($millions)

	General Ledger Actual	*Projection*[2]	*Variance*	*Variance (%)*
2003 Totals	$282.7	$321.9	($39.2)	(12.2%)
2004 Totals	$349.3	$349.9	($0.6)	(0.2%)
2005 Totals[3]	$555.8	$574.4	($18.6)	(3.2%)
2006 Totals	$672.2	$713.2	($41.0)	(5.7%)
2007 Totals	$719.4	$689.7	$29.7	4.3%
2008 Totals	$537.7	$672.8	($135.1)	(20.1%)
2009 Totals	$349.8	$474.2	($124.3)	(26.2%)
2010 Totals	$220.2	$327.3	($107.1)	(32.7%)
2011 Totals	$167.4	$299.4	($131.9)	(44.1%)
2012 Totals	$118.8	$274.6	($155.8)	(56.7%)
2013 Totals	$152.3	$235.9	($83.6)	(35.4%)
2014 Totals	$113.0	$209.5	($96.5)	(46.1%)
2015 Totals	$83.3	$248.8	($165.5)	(66.5%)
2016 Totals	$66.3	$193.6	($127.3)	(65.8%)
2017 Totals	$104.8	$356.7	($251.9)	(70.6%)
2018 Totals	$157.8	$342.7	($184.9)	(53.9%)

[2] Historical projections for 2003 do not reflect periodic revisions. 2003: the last revision for 2003 projected a total of $287.5 million.
[3] Projection reflects December 2005 budget amendment.

Exhibit B-1
Airport System Revenue Bonds
Summary of Bonds Outstanding

Security: General Airport Revenue Bonds ("GARBs") are secured by the pledge of Net Airport Revenues
Lien: Senior
Ratings: Moody's Aa3 (Stable)
S&P AA- (Stable)
Fitch AA- (Stable)

Series	Date	Original Par Amount	Current Par Amount	Tax Status	Coupon	Credit Enhancement*	Purpose
2003D	10/01/03	150,000,000	51,625,000	AMT	Variable	TD LOC	New Money
2009B	04/01/09	236,825,000	194,835,000	Non-AMT	Fixed	BHAC (partial)	New Money
2009C	07/02/09	314,435,000	7,305,000	Non-AMT	Fixed	None	Refund PFC Notes
2009D**	07/02/09	136,825,000	113,700,000	Non-AMT	Variable	TD LOC	Refund PFC Notes
2010A	07/28/10	348,400,000	299,405,000	Non-AMT	Fixed	None	New Money/OMP
2010B	07/28/10	229,005,000	115,380,000	AMT	Fixed	None	Current Refunding
2010C***	09/22/10	170,000,000	141,505,000	C1 (AMT), C2 (Non-AMT)	Variable	Sumitomo LOC	Current Refunding
2010D**	09/22/10	170,000,000	145,200,000	Non AMT	Variable	Wells Fargo Index Floaters	New Money/Current Refunding
2010F-1	11/17/10	61,820,000	61,820,000	Non-AMT	Fixed	None	OMP
2011A**	09/21/11	233,635,000	169,065,000	AMT	Variable	Sumitomo LOC	New Money/Current Refunding
2011B	09/21/11	207,640,000	119,315,000	AMT	Variable	U.S. Bank Index Floaters	New Money/Current Refunding
2011C	09/29/11	185,390,000	130,575,000	AMT	Fixed	None	Current Refunding
2011D	09/29/11	10,385,000	7,585,000	Non-AMT	Fixed	None	Current Refunding
2012A	07/03/12	291,035,000	267,130,000	AMT	Fixed	None	Current Refunding
2012B	07/03/12	20,790,000	3,745,000	Non-AMT	Fixed	None	Advance Refunding
2013A	07/11/13	207,205,000	203,095,000	AMT	Fixed	None	New Money/Current Refunding
2013B	07/11/13	27,405,000	17,360,000	Taxable	Fixed	None	Current Refunding
2013C	07/11/13	11,005,000	11,005,000	Non-AMT	Fixed	None	Advance Refunding
2014A	07/03/14	539,250,000	456,705,000	AMT	Fixed	None	Current Refunding
2015A	01/29/15	163,780,000	163,780,000	AMT	Fixed	None	Refunding/Call Extension
2015B	07/15/15	279,235,000	258,145,000	AMT	Fixed	None	New Money/Current Refunding
2015C	07/15/15	35,975,000	27,975,000	Non-AMT	Fixed	None	Current Refunding/CP Takeout
2016A	07/07/16	362,655,000	362,655,000	AMT	Fixed	None	Current Refunding
2016B	07/07/16	23,370,000	23,370,000	Non-AMT	Fixed	None	Current Refunding
2017A	07/07/17	522,135,000	483,330,000	AMT	Fixed	None	New Money/Current Refunding
2018A	07/03/18	558,430,000	558,430,000	AMT	Fixed	None	New Money/Current Refunding
Total		**5,496,630,000**	**4,394,040,000**				

* Approximately 2% of the GARB portfolio is additionally secured through bond insurance.
** All of the Series 2009D, 2010D and 2011A are subject to a floating-to-fixed rate swap.
*** $89.8 million of the Series 2010C is subject to a floating-to-fixed rate swap.

As % of Total Portfolio	
Insurer	**Percentage**
BHAC	2.2%
Uninsured	97.8%

As % of Insured Portfolio	
Insurer	**Percentage**
BHAC	100.0%

Average Fixed Rate Debt
3.93%

Exhibit B-2
Airport System Revenue Bonds
Refunding Monitor

Refunding Candidates – Governmental Purpose
There are no Governmental Purpose refunding candidates at this time.

Refunding Candidates – Private Activity
There are no current refunding opportunities at this time.

The Series 2009B Bonds may not be advance refunded with tax exempt bonds. As a benchmark for evaluating refunding strategies, the table below shows the results of a hypothetical tax exempt advance refunding.

Series	*Callable Par/ Maturities*	*Range of Interest Rates*	*Call Date*	*Call Premium*	*Net PV Savings*
2009B PAB*	$183,295,000 ('20-'29)	4.125%-5.25%	10/01/19	0% (at par)	$25.7 mm 14.0%

* Refunding bonds are assumed to be 35%/65% AMT/Non-AMT

Refunding Candidates – Taxable
There are no taxable refunding candidates at this time.[4]

Below are the refunding guidelines previously accepted by the Board:

Time Between Call Date and Issuance of Refunding Bonds	**Traditional Financing Products Minimum PV % Savings**	**Non-Traditional Financing Products Minimum PV % Savings**
0 to 90-days (Current)	Greater of Call Premium or 1%	Call Premium + 1% - 2%
90-days to 1-year	Call Premium + 1%	Call Premium + 2% - 3%
1-year to 2-years	Call Premium + 2%	Call Premium + 3% - 4%
> 2-years	Call Premium + 3%	Call Premium + 4% - 5%

[4] The Series 2013B Bonds are Taxable and advance refundable. However, the Series 2013B Bonds can only be called prior to maturity with a make whole call provision.

Exhibit C-1
Variable Rate Programs
Overview

Summary of Dealers, Credit Enhancement and Bank Facilities

Details of Dealers

Dealer	*Program/ Series*	*Amount ($MM)*	*Remarketing Fees*
BofA Merrill Lynch	CP: Series Two*	Up to $200	0.05%
TD	VRDO: 2003D1 Bonds	$51.625	0.05%
BofA Merrill Lynch	VRDO: 2009D Bonds**	$113.700	0.06–0.08%
Barclays	VRDO: 2010C Bonds	$141.505	0.06%
Wells Fargo	Index Floater: 2010D Bonds	$145.200	None
RBC	VRDO: 2011A Bonds	$169.065	0.05%
U.S. Bank	Index Floater: 2011B Bonds	$119.315	None

** The CP Series One has been suspended and the CP Series Two is authorized to be issued up to $200 million effective March 6, 2014.*
*** The Series 2009D Bonds in a daily mode have a 0.08 percent remarketing fee and those bonds in a weekly mode have a 0.06 percent remarketing fee.*

Details of Facilities

Bank Provider	*Facility*	*Program/ Series*	*Amount ($MM)*	*Fee/ Spread (bps)*	*Expiration Date*
ICBC	LOC	CP: Series Two	$200.000	17.0	February 25, 2022
TD Bank	LOC	2003D1	$51.625	26.0	October 4, 2022
TD Bank	LOC	2009D	$113.700	35.0	February 28, 2021
Sumitomo	LOC	2010C	$141.505	34.0	September 21, 2020
Wells Fargo	Index Floater	2010D	$145.200	37.0*	September 22, 2020
Sumitomo	LOC	2011A	$169.065	30.0	October 4, 2022
U.S. Bank	Index Floater	2011B	$119.315	36.0*	April 1, 2020

** Fixed spread to 80 percent of LIBOR Index*

Exhibit C-2
Variable Rate Programs
Historical Performance

The following tables illustrate (i) rolling three-month average spreads to SIFMA and (ii) rolling 12-month average spreads to SIFMA including credit and remarketing fees.

2019 Interest Rates *(quarterly)*

Quarter	2003D1 TD Weekly[5]	2009D1 BofA Weekly	2009D2 BofA Daily	2010C1 Barclays Weekly[6]	2010C2 Barclays Weekly	2010D Wells Index	2011A RBC Weekly[7]	2011B US Bank Index	CP 2 BofA[8]	SIFMA
12-month Rolling Average	0.469%	0.402%	0.354%	0.419%	0.378%	0.648%	0.366%	0.620%	--	1.467%
Dec 18 – Feb 19	0.330%	0.437%	0.315%	0.422%	0.371%	0.785%	0.386%	0.755%	--	1.567%

Historical Interest Rates *(annually)*

Year	2003D1	2009D1	2009D2	2010C1	2010C2	2010D	2011A	2011B	CP 2	SIFMA
2018	0.495%	0.396%	0.359%	0.418%	0.383%	0.580%	0.363%	0.566%	--	1.41%
2017	0.245%	0.401%	0.379%	0.415%	0.404%	0.270%	0.357%	0.270%	--	0.84%
2016	0.245%	0.431%	0.401%	0.408%	0.401%	0.264%	0.343%	0.258%	--	0.41%
2015	0.708%	0.685%	0.700%	0.688%	0.680%	0.434%	0.773%	0.429%	--	0.03%
2014	0.761%	0.684%	0.703%	0.783%	0.780%	0.621%	0.881%	0.666%	0.597%	0.05%
2013	0.724%	0.662%	0.676%	0.707%	0.709%	0.696%	0.866%	0.749%	1.347%	0.09%
2012	0.415%	0.671%	0.682%	0.624%	0.629%	0.754%	0.828%	--	1.339%	0.16%
2011	0.405%	0.648%	0.668%	0.599%	0.606%	0.745%	--	--	1.468%	0.17%
2010	0.413%	1.243%	1.307%	--	--	--	--	--	0.323%	0.26%
2009	0.390%	--	--	--	--	--	--	--	0.791%	0.40%
2008	2.079%	--	--	--	--	--	--	--	0.116%	2.21%
2007	0.649%	--	--	--	--	--	--	--	0.281%	3.62%
2006	0.474%	--	--	--	--	--	--	--	0.381%	3.45%
2005	0.364%	--	--	--	--	--	--	--	0.306%	2.47%
2004	0.438%	--	--	--	--	--	--	--	0.258%	1.24%

[5] On October 1, 2018, the 2003D-1 Bonds were converted from Wells Fargo Index Floaters to weekly VRDOs remarketed by TD. On October 1, 2015, Wells Fargo purchased the 2003D-1 Bonds as Index Floaters. On December 18, 2012, Bank of America purchased the 2003D-1 Bonds as Index Floaters. On April 16, 2009, Wells Fargo took over the remarketing of the 2003D-1 Bonds from Goldman Sachs.

[6] On September 22, 2015, the 2010C1 was converted from 2-day to weekly VRDOs.

[7] On October 1, 2015, the 2011A was converted from Wells Fargo Index Floaters to weekly VRDOs remarketed by RBC.

[8] On July 15, 2015, the Commercial Paper Series Two was refunded in its entirety.

The following tables illustrate (i) rolling three-month average spreads to SIFMA, and (ii) rolling 12-month average spreads to SIFMA excluding credit and remarketing fees.

***2019 Interest Rates** (quarterly)*

Quarter	2003D1 TD Week[9]	2009D1 BofA Weekly	2009D2 BofA Daily	2010C1 Barclays Week[10]	2010C2 Barclays Weekly	2010D Wells Index	2011A RBC Week[11]	2011B US Bank Index	CP 2 BofA[12]	SIFMA
12-month Rolling Average	0.117%	-0.008%	-0.076%	0.019%	-0.022%	0.278%	0.028%	0.260%	--	1.467%
Dec 18 – Feb 19	0.020%	0.027%	-0.115%	0.022%	-0.029%	0.415%	0.036%	0.395%	--	1.567%

***Historical Interest Rates** (annually)*

Year	2003D1	2009D1	2009D2	2010C1	2010C2	2010D	2011A	2011B	CP 2	SIFMA
2018	0.132%	-0.014%	-0.071%	0.018%	-0.017%	0.210%	0.028%	0.206%	--	1.41%
2017	-0.070%	-0.009%	-0.051%	0.015%	0.004%	-0.048%	0.027%	-0.046%	--	0.84%
2016	-0.069%	-0.002%	-0.032%	0.009%	0.002%	-0.060%	0.014%	-0.061%	--	0.41%
2015	0.102%	-0.005%	-0.010%	0.012%	0.005%	0.109%	0.072%	0.109%	--	0.03%
2014	0.061%	-0.006%	-0.007%	0.003%	0.000%	0.060%	0.061%	0.019%	0.040%	0.05%
2013	0.047%	-0.004%	-0.010%	-0.003%	-0.001%	0.046%	0.046%	-0.001%	0.144%	0.09%
2012	0.054%	0.021%	-0.017%	-0.007%	-0.001%	0.007%	0.008%	--	0.189%	0.16%
2011	0.055%	0.004%	-0.033%	-0.033%	-0.024%	-0.013%	--	--	0.315%	0.17%
2010	0.063%	-0.014%	-0.000%	--	--	--	--	--	0.113%	0.26%
2009	0.040%	--	--	--	--	--	--	--	0.581%	0.40%
2008	1.673%	--	--	--	--	--	--	--	-0.094%	2.21%
2007	0.239%	--	--	--	--	--	--	--	0.032%	3.62%
2006	-0.026%	--	--	--	--	--	--	--	-0.099%	3.54%
2005	-0.046%	--	--	--	--	--	--	--	-0.084%	2.47%
2004	0.028%	--	--	--	--	--	--	--	-0.012%	1.24%

[9] On October 1, 2018, the 2003D-1 Bonds were converted from Wells Fargo Index Floaters to weekly VRDOs remarketed by TD. On October 1, 2015, Wells Fargo purchased the 2003D-1 Bonds as Index Floaters. On December 18, 2012, Bank of America purchased the 2003D-1 Bonds as Index Floaters. On April 16, 2009, Wells Fargo took over the remarketing of the 2003D-1 Bonds from Goldman Sachs.
[10] On September 22, 2015, the 2010C1 was converted from 2-day to weekly VRDOs.
[11] On October 1, 2015, the 2011A was converted from Wells Fargo Index Floaters to weekly VRDOs remarketed by RBC.
[12] On July 15, 2015, the Commercial Paper Series Two was refunded in its entirety.

Exhibit D-1
Swap Program
Airports Authority Swap Profile

The table below summarizes the Airports Authority's current swap portfolio. All of the Airports Authority's swaps require payment of a fixed rate by the Airports Authority to the counterparty and the receipt of a variable rate by the Airports Authority based upon 72 percent of LIBOR.

Trade Date	Effective Date	Termination Date ("final maturity")	Swap Providers	Ratings Moody's/S&P/ Fitch	Outstanding Notional Amount ($millions)	Hedged Series	Current Termination Value ($millions) [13]	Fixed Rate
07/31/01	08/29/02	10/01/21	Bank of America	Aa3/A+/A+	$18.3	2011A-2	($0.8)	4.445%
06/15/06	10/01/09	10/01/39	JPMorgan Chase	Aa3/A+/AA-	$157.9	2011A-3	($35.5)	4.099%
			Bank of America	Aa3/A+/A+	$91.4	2009D	($20.5)	
					$249.3	2010C2	($56.0)	
06/15/06	10/01/10	10/01/40	Wells Fargo	Aa2/A+/AA-	$145.2	2010D	($34.2)	4.112%
09/12/07	10/01/11	10/01/39	Wells Fargo	Aa2/A+/AA-	$105.0	2011A-1	($19.2)	3.862%
				Aggregate Swaps	$517.8		($110.2)	

[13] Amounts as of February 28, 2019; A negative value represents a payment by the Airports Authority to the counterparty if the swap is terminated in the current market; a positive value represents a receipt by the Airports Authority if the swap is unwound in the current market.

Exhibit D-2
Swap Program
Swap Effective Interest Rate to-date and Monthly Performance

2002 Swap: The Airports Authority's 2002 Swap is a fixed-payor interest rate swap. Under the 2002 Swap, (a) the Airports Authority pays a fixed rate of interest, 4.445 percent, to the swap counterparty; and (b) the swap counterparty pays the Airports Authority a variable rate of interest equal to 72 percent of one-month LIBOR. The variable rate received from the counterparty is designed to closely correlate to the interest rate the Airports Authority pays on the underlying variable rate bonds, thereby creating essentially fixed rate debt ("synthetic" fixed rate debt). The Swap Agreement was dated July 31, 2001, and became effective August 29, 2002. The 2002 Swap counterparty is Bank of America. The 2002 Swap hedges the 2011A-2. The swap previously hedged the Series 2002C Bonds until these bonds were refunded by the 2011A-2 Bonds. On October 1, 2015, the Series 2011A-2 was converted from Index Floaters to VRDOs.

2009 Swap: The Airports Authority's 2009 Swap is a fixed-payor interest rate swap. Under the 2009 Swap: (a) the Airports Authority pays a fixed rate of interest, 4.099 percent, to the swap counterparty; and (b) the swap counterparty pays the Airports Authority a variable rate of interest equal to 72 percent of one-month LIBOR, thereby creating synthetic fixed rate debt. The Swap Agreement was dated June 15, 2006, and became effective on October 1, 2009. The 2009 Swap counterparties were Bear Stearns and Bank of America. However, Bear Stearns was bought by JP Morgan in March 2008. The 2009 Swap hedges the Series 2011A-3 Bonds, Series 2009D Bonds and the Series 2010C2 Bonds. The swap previously hedged the Series 2009A Bonds until these bonds were refunded by the 2011A-3 Bonds. On October 1, 2015, the Series 2011A-3 was converted from Index Floaters to VRDOs.

2010 Swap: The Airports Authority's 2010 Swap is a fixed-payor interest rate swap. Under the 2009 Swap: (a) the Airports Authority pays a fixed rate of interest, 4.112 percent, to the swap counterparty; and (b) the swap counterparty pays the Airports Authority a variable rate of interest equal to 72 percent of one-month LIBOR, thereby creating synthetic fixed rate debt. The Swap Agreement was dated June 15, 2006, and became effective on October 1, 2010. The 2010 Swap counterparty is Wells Fargo. The 2010 Swap hedges the Series 2010D Index Floaters.

2011 Swap: The Airports Authority's 2011 Swap is a fixed-payor interest rate swap. Under the 2011 Swap, (a) the Airports Authority pays a fixed rate of interest, 3.862 percent, to the swap counterparty; and (b) in return, the swap counterparty pays the Airports Authority a variable rate of interest equal to 72 percent of one-month LIBOR, thereby creating synthetic fixed rate debt. The Swap Agreement was dated September 12, 2007, and became effective October 1, 2011. The 2011 Swap counterparty is Wells Fargo. The 2011 Swap hedges the 2011A-1. On October 1, 2015, the Series 2011A-1 was converted from Index Floaters to VRDOs.

The following table presents the 72 percent of one-month LIBOR rate received from the counterparties, the average monthly interest rate on the hedged variable rate bonds paid by the Airports Authority, and the resulting effective all-in interest rate on the swap.

Hedged Variable Rate Debt and Swaps

			2002 Swap (Rate 4.445%)			2009 Swap (Rate 4.099%)		
Month	1-M LIBOR	72% 1-M LIBOR	Average All-In Interest Rate	Effective Interest Rate	All-In Effective Rate to Date	Average All-In Interest Rate	Effective Interest Rate	All-In Effective Rate to Date
Jan 2019	2.51%	1.81%	1.80%	4.44%	4.80%	1.73%	4.02%	4.76%
Feb 2019	2.50%	1.80%	2.00%	4.65%	4.80%	2.02%	4.33%	4.76%
Historical Data:								
2018	2.01%	1.45%	1.78%	4.78%	4.82%	1.79%	4.44%	4.78%
2017	1.10%	0.79%	1.20%	4.85%	4.81%	1.23%	4.54%	4.82%
2016	0.49%	0.35%	0.75%	4.82%	4.67%	0.81%	4.54%	4.84%
2015	0.20%	0.14%	--	--	--	0.71%	4.66%	4.91%
2014	0.16%	0.11%	--	--	--	0.78%	4.77%	4.95%
2013	0.19%	0.14%	--	--	--	0.78%	4.74%	4.99%
2012	0.24%	0.17%	--	--	--	0.82%	4.75%	5.06%
2011	0.23%	0.17%	--	--	--	0.87%	4.80%	5.21%
2010	0.27%	0.20%	--	--	--	1.41%	5.31%	5.35%
2009	0.24%	0.17%	--	--	--	1.59%	5.52%	5.52%

Hedged Variable Rate Debt and Swaps

Month	1-M LIBOR	72% 1-M LIBOR	2010 Swap (Rate 4.112%) Average All-In Interest Rate	2010 Swap (Rate 4.112%) Effective Interest Rate	2010 Swap (Rate 4.112%) All-In Effective Rate to Date	2011 Swap (Rate 3.862%) Average All-In Interest Rate	2011 Swap (Rate 3.862%) Effective Interest Rate	2011 Swap (Rate 3.862%) All-In Effective Rate to Date
Jan 2019	2.51%	1.81%	2.38%	4.68%	4.65%	1.80%	3.86%	4.22%
Feb 2019	2.50%	1.80%	2.37%	4.68%	4.66%	2.00%	4.07%	4.22%
Historical Data:								
2018	2.01%	1.45%	1.99%	4.65%	4.66%	1.78%	4.19%	4.24%
2017	1.10%	0.79%	--	--	--	1.20%	4.27%	4.24%
2016	0.49%	0.35%	--	--	--	0.76%	4.26%	4.09%