# MAY 2018 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 Airports Authority's 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. Series 2018A Bond Transaction
- III. Informational Items
  - A. Expiring Bank Facilities
- IV. Monthly Update
  - A. CCP: Actuals vs. Projections
  - B. Short-term Liquidity Forecast
  - C. Variable Rate Programs
  - D. Swaps Monthly Swap Performance

### **Exhibits**

- 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**

→ Series 2018A Bond Transaction. Under a separate agenda item, the finance team will recommend that the Finance Committee and the Board approve the authorizing resolution for the issuance of an amount not to exceed \$750 million for the Series 2018A Airport System Revenue and Refunding Bonds. The Series 2018A financing is expected to include the issuance of bonds to current refund approximately \$413.8 million of outstanding Series 2008A and Series 2009C Bonds for savings and to fund up to \$200 million of project costs. The finance team is also evaluating whether to include unwinding existing interest rate swaps. Subject to market conditions, and the approval of the resolution and substantially final documents by the Finance Committee and Board, the bond sale is expected to occur on or about May 31 with a closing on July 3.

### **Informational Items**

→ Expiring Bank Facilities. The Airports Authority has two bank facilities that expire in 2018 - the \$53.8 million Wells Fargo Index Floaters in October 2018 and the \$180.0 million RBC Letter of Credit in September 2018. At the June meeting, Finance Staff will present a paper including the pre-solicitation terms and a proposed schedule to replace or renew the bank facilities. Upon obtaining concurrence of the Finance Committee on the pre-solicitation terms, the Airports Authority plans to issue a Request for Proposals (RFP) to qualified financial institutions.

### II. ACTION ITEMS

### (II.A) Series 2018A Bond Transaction

The Series 2018A financing is expected to include the issuance of bonds to current refund approximately \$413.8 million of outstanding Series 2008A and Series 2009C Bonds for savings and to fund up to \$200 million of project costs. Under a separate agenda item, the finance team requests the Finance Committee to approve and recommend to the Board of Directors the adoption of the proposed authorizing resolution for the issuance of the Bonds, approval of the substantially final documents and delegation of authority for the final terms and pricing of the bonds. The title and purpose of each document that the Board and Finance Committee will consider for approval are as follows:

Document	Purpose
Authorizing Resolution	Authorizes the issuance of up to \$750 million of Series 2018A Bonds, and delegates final approval to the Chairman or Vice Chairman of the Board and at least one of the Co-Chairmen of the Finance Committee.
Fiftieth Supplemental Indenture	Defines the terms of the Bonds.
Bond Purchase Agreement	Contractual agreement between the Airports Authority and Barclays, the senior manager and representative of the underwriting syndicate evidencing the purchase by the underwriters of the Bonds from the Airports Authority.
Preliminary Official Statement (POS)	Disclosure document.
Report of the Airport Consultant	Feasibility report used for marketing the Bonds (Appendix A of the POS).
Refunding Agreements	Agreement between the Airports Authority and the Escrow Agent to use bond proceeds to redeem bonds on their call date.

As part of the transaction process for the Series 2018A Bonds, the Airports Authority met with the rating agencies on May 7 and 9. The ratings are expected on or about May 18. Subject to market conditions and approval of the required documents by the Finance Committee and Board, the expected transaction schedule is:

Date	Task
May 7 and 9	Rating Agency Meetings
May 15	Board Bond Workshop
May 17	Post POS
May 18	Receive Ratings
May 31	Price Bonds/Sign the BPA
July 2	Pre-Close
July 3	Close

Finance Staff and the Financial Advisor continue to monitor the economics of the refunding of the Series 2008A and Series 2009C Bonds. Assuming current rates prevail at the time of the expected bond sale in June, a current refunding would produce \$52.8 million of present value savings, or 12.8 percent of refunded par.

Series	Callable Par/	Range of	Call Date	Call	Net PV
	Maturities	Interest Rates		Premium	Savings
2008A	\$159,630,000	5.00%-5.75%	10/01/18	0%	\$18.1 mm
AMT	('19-'29)			(at par)	11.4%
2009C	\$254,245,000	4.50%-5.625%	10/01/18	0%	\$34.7 mm
PAB	('20-'39)			(at par)	13.7%

### III. INFORMATIONAL ITEMS

### (III.A) Expiring Bank Facilities

The \$53.8 million Wells Fargo Index Floaters expire in October 2018 and the \$180.0 million RBC Letter of Credit expires in September 2018.

Bank Provider	Facility	Series	Amount (\$MM)	Rate	Expiration Date
Wells Fargo	Index Floater	2003 D1	\$53.825	38.0*	October 1, 2018
RBC	LOC	2011A VRDO	\$180.020	27.0	September 28, 2018

<sup>\*</sup> Fixed spread to 80 percent of LIBOR Index

At the June meeting, Finance Staff will present a paper including the pre-solicitation terms and a proposed schedule to replace or renew the bank facility. Upon obtaining concurrence of the Finance Committee on the pre-solicitation terms, the Airports Authority plans to issue a Request for Proposals (RFP) to qualified financial institutions.

### 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 2018 are budgeted at \$342.7 million including construction and capitalized interest costs. Expenditures in April 2018 totaled \$10.6 million.

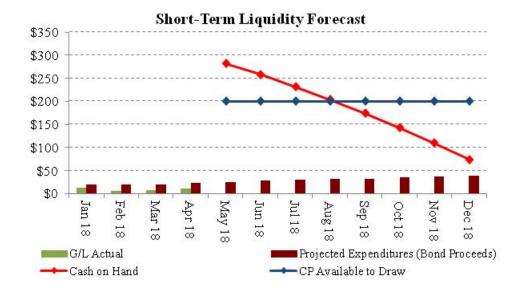
2018 CCP Projections vs. Actuals (\$ millions)					
	General Ledger Actual	Original Projection	Variance	Variance (%)	
18-Jan	\$13.30	\$19.39	(\$6.09)	(31.4%)	
18-Feb	5.30	19.25	(13.95)	(72.5%)	
18-Mar	8.50	20.56	(12.06)	(58.7%)	
18-Apr	10.60	23.50	(12.90)	(54.9%)	
18-May		25.63			
18-Jun		28.54			
18-Jul		30.28			
18-Aug		31.48			
18-Sep		32.57			
18-Oct		35.90			
18-Nov		37.13			
18-Dec		38.43			
2018 Totals (Thru April)	\$37.70	\$82.70	(\$45.00)	(54.4%)	

## (IV.B) Short-Term Liquidity Forecast

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

At the beginning of May 2018, the Airports Authority had \$282.1 million of cash-on-hand 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	
May-18	282.06	200.00	0.00	1.93	25.63	
Jun-18	258.36	200.00	0.00	1.93	28.54	
Jul-18	231.76	200.00	0.00	1.93	30.28	
Aug-18	203.41	200.00	0.00	1.93	31.48	
Sep-18	173.87	200.00	0.00	1.93	32.57	
Oct-18	143.23	200.00	0.00	1.93	35.90	
Nov-18	109.27	200.00	0.00	1.93	37.13	
Dec-18	74.07	200.00	0.00	1.93	38.43	



<sup>&</sup>lt;sup>1</sup> Cash-on-hand includes proceeds of the Series 2014A, 2015 and 2017A Bonds and Funds 63 and 64.

### (IV.C) Variable Rate Programs

In addition to approximately \$778.7 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 \$241.4 million represents approximately 5.4 percent of the Airports Authority's \$4.5 billion of outstanding indebtedness.

Gross Variable R	ate Exposure	
Fixed Rate Debt Percentage:		
Fixed Rate Debt	\$3,693,350,000	
2009D VRDOs (Hedged)	116,785,000	
2010C2 VRDOs (Hedged)	91,665,000	
2010D Index Floater (Hedged)	148,840,000	
2011A VRDOs (Hedged)	180,020,000	
Fixed Rate	\$4,230,660,000	94.6%
Variable Rate Debt Percentage:		
2003D Index Floater	53,825,000	
2010C1 VRDOs	53,875,000	
2011B Index Floater	133,715,000	
CP Notes	0	
Variable Rate	\$241,415,000	5.4%
Combined Total	\$4,472,075,000	100.0%

The Airports Authority's current unrestricted cash balances of \$924.4 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 for 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. Starting in February 2018, the Index Floaters were amended to 80% of LIBOR plus 37 basis points. **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 North Concourse Enabling Projects
- New North Concourse
- Campus Utility and Central Plant Improvements
- 4-22 Runway Overlay and Taxiway K, P & B Resurfacing
- Terminal C Bag Room Renovations
- Secure National Hall
- Secure National Hall Enabling Projects

# 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)
- Hydrant Fueling Cathodic Protection

**Historical CCP Projections vs. Actuals (2001-2017) (\$millions)** 

			/ (1	
	General Ledger	Projection <sup>2</sup>	Variance	Variance (%)
	Actual			
2001 Totals	\$370.8	\$429.8	(\$58.9)	(13.7%)
2002 Totals	\$295.6	\$346.5	(\$50.9)	(14.7%)
2003 Totals	\$282.7	\$321.9	(\$39.2)	(12.2%)
2004 Totals	\$349.3	\$349.9	(\$0.6)	(0.2%)
2005 Totals <sup>3</sup>	\$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%)
·		· · · · · · · · · · · · · · · · · · ·		

<sup>&</sup>lt;sup>2</sup> Historical projections for 2001-2003 do not reflect periodic revisions. 2002: the last revision for 2002 projected \$271 million of capital spending for the year. 2003: the last revision for 2003 projected a total of \$287.5 million.

<sup>&</sup>lt;sup>3</sup> Projection reflects December 2005 budget amendment.

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

General Airport Revenue Bonds ("GARBs") are secured by the pledge of Net Airport Revenues Senior

Security: Lien: Ratings: Moody's Aa3 (Stable)

S&P AA- (Stable) Fitch AA- (Stable)

		Original	Current			Credit	
Series	Date	Par Amount	Par Amount	Tax Status	Coupon	Enhance ment*	Purpose
2003D	10/01/03	150,000,000	53,825,000	AMT	Variable	Wells Fargo Index Floaters	New Money
2008A	06/24/08	250,000,000	167,770,000	AMT	Fixed	None	New Money/CP Refunding
2009B	04/01/09	236,825,000	204,605,000	Non-AMT	Fixed	BHAC (partial)	New Money
2009C	07/02/09	314,435,000	268,510,000	Non-AMT	Fixed	None	Refund PFC Notes
2009D**	07/02/09	136,825,000	116,785,000	Non-AMT	Variable	TD LOC	Refund PFC Notes
2010A	07/28/10	348,400,000	309,345,000	Non-AMT	Fixed	None	New Money/OMP
2010B	07/28/10	229,005,000	132,130,000	AMT	Fixed	None	Current Refunding
2010C***	09/22/10	170,000,000	145,540,000	Cl (AMT), C2 (Non-AMT)	Variable	Sumitomo LOC	Current Refunding
2010D**	09/22/10	170,000,000	148,840,000	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	180,020,000	AMT	Variable	RBC LOC	New Money/Current Refunding
2011B	09/21/11	207,640,000	133,715,000	AMT	Variable	U.S. Bank Index Floaters	New Money/Current Refunding
2011C	09/29/11	185,390,000	139,320,000	AMT	Fixed	None	Current Refunding
2011D	09/29/11	10,385,000	8,020,000	Non-AMT	Fixed	None	Current Refunding
2012A	07/03/12	291,035,000	277,780,000	AMT	Fixed	None	Current Refunding
2012B	07/03/12	20,790,000	7,315,000	Non-AMT	Fixed	None	Advance Refunding
2013A	07/11/13	207,205,000	207,205,000	AMT	Fixed	None	New Money/Current Refunding
2013B	07/11/13	27,405,000	21,145,000	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	482,435,000	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	266,050,000	AMT	Fixed	None	New Money/Current Refunding
2015C	07/15/15	35,975,000	30,625,000	Non-AMT	Fixed	None	Current Refunding/CP Takeout
2015D	07/15/15	30,490,000	30,490,000	Taxable	Fixed	None	Current Refunding
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	517,975,000	AMT	Fixed	None	New Money/Current Refunding
Total		5,218,690,000	4,472,075,000				

<sup>\*</sup> 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.

\*\*\* \$93.4 million of the Series 2010C is subject to a floating-to-fixed rate swap.

As % of Total Portfolio			
Insurer	Percentage		
BHAC	2.4%		
Uninsured	97.6%		

As % of	Insured Portfolio
Insurer	Percentage
BHAC	100.0%

TIC of Fixed Rate Debt
4.15%

# Exhibit B-2 Airport System Revenue Bonds Refunding Monitor

# **Refunding Candidates – Governmental Purpose**

There are no Governmental Purpose refunding candidates at this time. 4

## **Refunding Candidates – Private Activity**

The Series 2008A and 2009C Bonds are callable on October 1, 2018 at par. The table below shows the results of a tax exempt current refunding.

Series	Callable Par/ Maturities	Range of Interest Rates	Call Date	Call Premium	Net PV
	Matarilles	Interest Kates		r remium	Savings
2008A	\$159,630,000	5.00%-5.75%	10/01/18	0%	\$18.1 mm
AMT	('19-'29)			(at par)	11.4%
2009C	\$254,245,000	4.50%-5.625%	10/01/18	0%	\$34.7 mm
PAB	('20-'39)			(at par)	13.7%

### **Refunding Candidates – Taxable**

There are no taxable refunding candidates at this time.<sup>5</sup>

Below are the refunding guidelines previously accepted by the Board:

Time Between Call Date and	Traditional Financing Products	Non-Traditional Financing Products
Issuance of Refunding Bonds	Minimum PV % Savings	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%

<sup>&</sup>lt;sup>4</sup> The Series 2012B and Series 2013C Bonds are Non-AMT. However, they may not be advance refunded since the proceeds were used to advance refund other Airports Authority Bonds. The Series 2009B, Series 2009C, Series 2010A and Series 2010F1 Bonds were issued as private activity Non-AMT Bonds and cannot be advance refunded. The Series 2011D Bonds are advance refundable, but given the length of time to the call date, they are not a viable refunding candidate at this time.

<sup>&</sup>lt;sup>5</sup> The Series 2013B and Series 2015D Bonds are Taxable and advance refundable. However, the Series 2013B Bonds can only be called prior to maturity with a make whole call provision, and the Series 2015D Bonds, given the length of time to the call date, are not a viable refunding candidate at this time.

# 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%
Wells Fargo	Index Floater: 2003 D1 Bonds	\$53.825	None
BofA Merrill Lynch	VRDO: 2009D Bonds**	\$116.785	0.06 – 0.08%
Barclays	VRDO: 2010C Bonds	\$145.540	0.06%
Wells Fargo	Index Floater: 2010D Bonds	\$148.840	None
RBC	VRDO: 2011A Bonds	\$180.020	0.06%
U.S. Bank	Index Floater: 2011B Bonds	\$133.715	None

<sup>\*</sup> 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.

**Details of Facilities** 

zerans of race					
Bank Provider	Facility	Program/ Series	Amount (\$MM)	Fee/ Spread (bps)	Expiration Date
ICBC	LOC	CP: Series Two	\$200.000	17.0	February 25, 2022
Wells Fargo	Index Floater	2003 D1	\$53.825	38.0*	October 1, 2018
TD Bank	LOC	2009 D VRDO	\$116.785	35.0	February 28, 2021
Sumitomo	LOC	2010 C VRDO	\$145.540	34.0	September 21, 2020
Wells Fargo	Index Floater	2010 D	\$148.840	37.0*	September 22, 2020
RBC	LOC	2011A VRDO	\$180.020	27.0	September 28, 2018
U.S. Bank	Index Floater	2011B	\$133.715	36.0**	April 1, 2020

<sup>\*</sup> Fixed spread to 80 percent of LIBOR Index

<sup>\*\*</sup> 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.

<sup>\*\*</sup> Fixed spread to 83 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.

**2018 Interest Rates** (quarterly)

Quarter	2003D1 Wells Index <sup>6</sup>	2009D1 BoA Weekly	2009D2 BoA Daily	2010C1 Barclays Weekly <sup>7</sup>	2010C2 Barclays Weekly	2010D Wells Index	2011A RBC Weekly <sup>8</sup>	2011B US Bank Index	CP 2 ML <sup>9</sup>	SIFMA
12-month Rolling Average	0.323%	0.405%	0.377%	0.419%	0.404%	0.301%	0.359%	0.342%		1.038%
Jan 18 – Mar 18	0.493%	0.409%	0.355%	0.424%	0.400%	0.509%	0.365%	0.504%		1.206%
Feb 18 – Apr 18	0.410%	0.413%	0.408%	0.431%	0.405%	0.377%	0.357%	0.437%		1.338%

**2004 – 2017 Historical Interest Rates** (annually)

2004	2017 1168			,						
Year	2003D1	2009D1	2009D2	2010C1	2010C2	2010D	2011A	2011B	CP 2	SIFMA
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%

<sup>&</sup>lt;sup>6</sup> 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.

<sup>&</sup>lt;sup>7</sup> On September 22, 2015, the 2010C1 was converted from 2-day to weekly VRDOs.

<sup>&</sup>lt;sup>8</sup> On October 1, 2015, the 2011A was converted from Wells Fargo Index Floaters to weekly VRDOs remarketed by RBC.

<sup>&</sup>lt;sup>9</sup> 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 <u>excluding</u> credit and remarketing fees.

### **2018 Interest Rates** (quarterly)

Quarter	2003D1 Wells Index <sup>10</sup>	2009D1 BofA Weekly	2009D2 BofA Daily	2010C1 Barclays Week <sup>11</sup>	2010C2 Barclays Weekly	2010D Wells Index	2011A RBC Week <sup>12</sup>	2011B US Bank Index	CP 2 ML <sup>13</sup>	SIFMA
12-month	-0.013%	-0.005%	-0.053%	0.019%	0.004%	-0.032%	0.029%	0.014%		1.038%
Rolling Average										
Jan 18 – Mar 18	0.113%	-0.001%	-0.075%	0.024%	0.000%	0.141%	0.035%	0.143%		1.206%
Feb 18 – Apr 18	0.030%	0.003%	-0.022%	0.031%	0.005%	0.007%	0.027%	0.077%		1.338%

**2004 – 2017 Historical Interest Rates** (annually)

20		witcut II	iici csi 1tt	accs (ann	ucii y j					
Yea	r 2003D1	2009D1	2009D2	2010C1	2010C2	2010D	2011A	2011B	CP 2	SIFMA
201	7 -0.070%	-0.009%	-0.051%	0.015%	0.004%	-0.048%	0.027%	-0.046%		0.84%
201	6 -0.069%	-0.002%	-0.032%	0.009%	0.002%	-0.060%	0.014%	-0.061%		0.41%
201	5 0.102%	-0.005%	-0.010%	0.012%	0.005%	0.109%	0.072%	0.109%		0.03%
201	4 0.061%	-0.006%	-0.007%	0.003%	0.000%	0.060%	0.061%	0.019%	0.040%	0.05%
201	3 0.047%	-0.004%	-0.010%	-0.003%	-0.001%	0.046%	0.046%	-0.001%	0.144%	0.09%
201	2 0.054%	0.021%	-0.017%	-0.007%	-0.001%	0.007%	0.008%		0.189%	0.16%
201	1 0.055%	0.004%	-0.033%	-0.033%	-0.024%	-0.013%			0.315%	0.17%
201	0.063%	-0.014%	-0.000%						0.113%	0.26%
200	9 0.040%								0.581%	0.40%
200	8 1.673%								-0.094%	2.21%
200	7 0.239%								0.032%	3.62%
200	6 -0.026%								-0.099%	3.54%
200	5 -0.046%								-0.084%	2.47%
200	4 0.028%								-0.012%	1.24%

<sup>&</sup>lt;sup>10</sup> 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.

<sup>&</sup>lt;sup>11</sup> On September 22, 2015, the 2010C1 was converted from 2-day to weekly VRDOs.

<sup>&</sup>lt;sup>12</sup> On October 1, 2015, the 2011A was converted from Wells Fargo Index Floaters to weekly VRDOs remarketed by RBC.

<sup>&</sup>lt;sup>13</sup> 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) <sup>14</sup>	Fixed Rate
07/31/01	08/29/02	10/01/21	Bank of America	Aa3/A+/A+	\$23.8	2011A-2	(\$1.2)	4.445%
06/15/06	10/01/09	10/01/39	JPMorgan Chase Bank of America	Aa3/A+/AA- Aa3/A+/A+	\$162.2 \$93.9 \$256.1	2011A-3 2009D 2010C2	(\$34.9) (\$19.7) (\$54.6)	4.099%
06/15/06	10/01/10	10/01/40	Wells Fargo	Aa2/A+/AA-	\$148.8	2010D	(\$33.7)	4.112%
09/12/07	10/01/11	10/01/39	Wells Fargo	Aa2/A+/AA-	<u>\$108.6</u>	2011A-1	(\$18.9)	3.862%
				Aggregate Swaps	\$537.3		(\$108.4)	

The table below presents the all-in effective rate of the swaps. Exhibit D-2 represents the monthly performance and all-in effective rate of the 2002, 2009, 2010 and 2011 Swaps in relation to the hedged variable rate debt.

Effective Date	Notional Amount (\$millions)	Hedged Series	Fixed Rate	All-In Effective Rate*
8/29/02	\$29.0	2011A-2 (VRDOs)	4.445%	4.826%
10/1/09	\$262.5	2011A-3,2009D,2010C2 (VRDOs)	4.099%	4.796%
10/1/10	\$152.3	2010D (Index Floaters)	4.112%	4.646%
10/1/11	\$112.1	2011A-1 (VRDOs)	3.862%	4.254%

<sup>\*</sup>The Effective Rate takes into account the agreed upon spread on index floaters and remarketing and bank facility costs on the VRDOs.

<sup>&</sup>lt;sup>14</sup> Amounts as of April 30, 2018; 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.

1.59%

5.52%

5.52%

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** 

		iicug	u vuiluk	ne mate L	cot and	maps		
			2002 S	wap (Rate 4	.445%)	2009 S	wap (Rate 4	.099%)
Month	1-M LIBOR 15	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 2018	1.56%	1.12%	1.68%	5.01%	4.82%	1.66%	4.63%	4.80%
Feb 2018	1.58%	1.14%	1.40%	4.70%	4.82%	1.43%	4.38%	4.80%
Mar 2018	1.77%	1.27%	1.61%	4.78%	4.82%	1.67%	4.49%	4.80%
Apr 2018	1.89%	1.36%	2.07%	5.16%	4.83%	2.11%	4.85%	4.80%
Historical Data:	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%

0.17%

0.24%

2009

 $<sup>^{15}</sup>$  One-month LIBOR is weighted average of weekly one-month LIBOR as reset each Tuesday for a Thursday effective date.

1.20%

0.76%

4.27%

4.26%

4.24%

4.09%

**Hedged Variable Rate Debt and Swaps** 

		neuge	u variai	ne Kate L	ebt and s	swaps			
			2010 S	wap (Rate 4	.112%)	<u>2011 Swap (Rate 3.862%)</u>			
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 2018	1.56%	1.12%	1.73%	4.72%	4.72%	1.68%	4.42%	4.25%	
Feb 2018	1.58%	1.14%	1.64%	4.61%	4.67%	1.40%	4.12%	4.24%	
Mar 2018	1.77%	1.27%	1.78%	4.62%	4.65%	1.61%	4.20%	4.24%	
Apr 2018	1.89%	1.36%	1.88%	4.63%	4.65%	2.07%	4.57%	4.25%	
Historical Data:									

2017

2016

0.79%

0.35%

1.10%

0.49%