Memorandum

MIAMI-DADE COUNTY

Date: September 17, 2021

To: Honorable Chairman Jose "Pepe" Diaz
and Members, Board of County Commissioners

From: Daniella Levine Cava
Mayor

Daniella Levine Cava

Subject: Miami-Dade County, Florida Capital Asset Acquisition Special Obligation and Special Obligation Refunding Bonds, Series 2021 Post-Sale Update

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I am very pleased to report the successful sale of $81,330,000 Capital Asset Acquisition Special Obligation Bonds, Series 2021A and $59,160,000 Capital Asset Acquisition Special Obligation Refunding Bonds, Series 2021B (collectively, the "Series 2021 Bonds"). The Series 2021 Bonds were sold competitively on July 8, 2021 and the transaction closed on July 28, 2021.

On June 15, 2021, the Board of County Commissioners ("Board") approved Resolution No. R-585-21 (the "Series 2021 Resolution") authorizing the issuance of not to exceed $100,000,000 of Capital Asset Acquisition Special Obligation Bonds (Series 2021 New Money Bonds) and not to exceed $90,000,000 of Capital Asset Acquisition Special Obligation Refunding Bonds (Series 2021 Refunding Bonds). The Series 2021 Refunding Bonds were issued to refund all of the outstanding Miami-Dade County Public Service Tax Revenue Refunding Bonds, Series 2011 and to prepay a portion of the loan associated with the Sunshine State Governmental Financing Commission Revenue Bonds, Series 2011A (collectively, the "Refunded Debt"). The refunding generated debt service savings of $9.27 million over the life of the bonds, representing a net present value savings of $7.93 million or 12.07 percent of the Refunded Debt, and a true interest cost of 0.35 percent.

It should be noted that since Fiscal Year 2011, the aggregate principal amount of County-wide debt refunding financings has been about $12.17 billion. The financings have generated gross debt service savings of $2.20 billion over the life of the bonds, representing a net present value savings of $1.58 billion or 12.95 percent.

The following table summarizes debt service and savings for the Series 2021 Refunding Bonds compared to the prior number runs submitted pursuant to the requirements of Resolution No. R-1313-09:

Number Run	Par Amount of Refunding Bonds to be Issued	Gross Debt Service Savings over Life of the Refunding Bonds	Net Present Value Savings	Estimated Issuance Cost of the Bonds	Estimated Final Maturity
Initial Number Run as of May 13, 2021	$74.855,000	$17,747,733	12.67 percent; estimated at $10,744,160	$760,912	April 1, 2040
Re-Run as of June 9, 2021	$74,550,000	$18,174,368	13.33 percent; estimated at $11,297,885	$759,885	April 1, 2040
Final Number Run as of July 8, 2021	$59,160,000	$9,271,025	12.07 percent; $7,938,998	$335,920	April 1, 2040

S&P Global Ratings and Moody's Investor Services have assigned ratings of "AA" (stable outlook) and "Aa3" (stable outlook), respectively. Attached for your review are the final number runs (Attachment 1) for the Bonds, as well as the rating reports (Attachment 2).

Attachments (2)

c: Geri Bonzon-Keenan, County Attorney
Gerald K. Sanchez, First Assistant County Attorney
Jess M. McCarty, Executive Assistant Attorney
Office of the Mayor Senior Staff
Jennifer Moon, Chief, Office of Policy and Budgetary Affairs
Arlesa Wood, Director of Bond Administration, Finance Department
Yinka Majekodunmi, Commission Auditor

SOURCES AND USES OF FUNDS

Miami-Dade County - Capital Asset Acquisition Bonds
Series 2021 New Money & Refunding
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Final Numbers
Pricing Date: July 8, 2021
2021A Winning Bidder: Barclays
2021B Winning Bidder: Morgan Stanley

Dated Date	07/28/2021
Delivery Date	07/28/2021

Sources:	Capital Asset Acquisition Special Obligation Bonds, Series 2021A	Capital Asset Acquisition Special Obligation Refunding Bonds, Series 2021B	Total
Bond Proceeds:			
Par Amount	81,330,000.00	59,160,000.00	140,490,000.00
Premium	19,420,781.70	7,313,954.05	26,734,735.75
	100,750,781.70	66,473,954.05	167,224,735.75
Other Sources of Funds:			
Sinking Fund Release		928,837.50	928,837.50
	100,750,781.70	67,402,791.55	168,153,573.25

Uses:	Capital Asset Acquisition Special Obligation Bonds, Series 2021A	Capital Asset Acquisition Special Obligation Refunding Bonds, Series 2021B	Total
Project Fund Deposits:			
Project Fund	100,000,000.00		100,000,000.00
Refunding Escrow Deposits:			
Cash Deposit		67,066,871.25	67,066,871.25
Delivery Date Expenses:			
Cost of Issuance	408,382.40	298,278.56	706,660.96
Underwriter's Discount	342,399.30	37,641.74	380,041.04
	750,781.70	335,920.30	1,086,702.00
	100,750,781.70	67,402,791.55	168,153,573.25

BOND SUMMARY STATISTICS

Miami-Dade County - Capital Asset Acquisition Bonds
Series 2021 New Money & Refunding

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Final Numbers
Pricing Date: July 8, 2021
2021A Winning Bidder: Barclays
2021B Winning Bidder: Morgan Stanley

	Capital Asset Acquisition Special Obligation Bonds, Series 2021A	Capital Asset Acquisition Special Obligation Refunding Bonds, Series 2021B	Aggregate
Dated Date	07/28/2021	07/28/2021	07/28/2021
Delivery Date	07/28/2021	07/28/2021	07/28/2021
Last Maturity	04/01/2046	04/01/2027	04/01/2046
Arbitrage Yield	1.172027%	1.172027%	1.172027%
True Interest Cost (TIC)	2.230154%	0.355743%	1.994998%
Net Interest Cost (NIC)	2.561907%	0.388990%	2.308458%
All-In TIC	2.266266%	0.530451%	2.047976%
Average Coupon	4.158280%	5.000000%	4.256458%
Average Life (years)	14.695	2.667	9.630
Duration of Issue (years)	11.422	2.583	8.106
Par Amount	81,330,000.00	59,160,000.00	140,490,000.00
Bond Proceeds	100,750,781.70	66,473,954.05	167,224,735.75
Total Interest	49,695,926.25	7,890,150.00	57,586,076.25
Net Interest	30,617,543.85	613,837.69	31,231,381.54
Total Debt Service	131,025,926.25	67,050,150.00	198,076,076.25
Maximum Annual Debt Service	5,243,400.00	15,061,650.00	20,303,276.25
Average Annual Debt Service	5,310,067.93	11,815,004.41	8,027,399.24
Underwriter's Fees (per $1000)			
Average Takedown			
Other Fee	4.210000	0.636270	2.705111
Total Underwriter's Discount	4.210000	0.636270	2.705111
Bid Price	123.457989	112.299378	118.759125

Bond Component	Par Value	Price	Average Coupon	Average Life	PV of 1 bp change
Bond Component	105,205,000.00	117.953	4.580%	5.689	56,251.65

BOND SUMMARY STATISTICS

Miami-Dade County - Capital Asset Acquisition Bonds
Series 2021 New Money & Refunding
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Final Numbers
Pricing Date: July 8, 2021
2021A Winning Bidder: Barclays
2021B Winning Bidder: Morgan Stanley

Bond Component	Par Value	Price	Average Coupon	Average Life	PV of 1 bp change
Term 2040	7,815,000.00	123.190	4.000%	18.185	8,283.90
Term 2042	8,445,000.00	122.556	4.000%	20.185	8,867.25
Term 2044	9,140,000.00	121.926	4.000%	22.185	9,505.60
Term 2046	9,885,000.00	121.509	4.000%	24.185	10,280.40
	140,490,000.00			9.630	93,188.80

	TIC	All-In TIC	Arbitrage Yield
Par Value	140,490,000.00	140,490,000.00	140,490,000.00
+ Accrued Interest			
+ Premium (Discount)	26,734,735.75	26,734,735.75	26,734,735.75
- Underwriter's Discount	-380,041.04	-380,041.04	
- Cost of Issuance Expense		-706,660.96	
- Other Amounts			
Target Value	166,844,694.71	166,138,033.75	167,224,735.75
Target Date	07/28/2021	07/28/2021	07/28/2021
Yield	1.994998%	2.047976%	1.172027%

SUMMARY OF REFUNDING RESULTS

Miami-Dade County - Capital Asset Acquisition Bonds
Series 2021 New Money & Refunding
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Final Numbers
Pricing Date: July 8, 2021
2021A Winning Bidder: Barclays
2021B Winning Bidder: Morgan Stanley

	Capital Asset Acquisition Special Obligation Refunding Bonds, Series 2021B	Total
Dated Date	07/28/2021	07/28/2021
Delivery Date	07/28/2021	07/28/2021
Arbitrage Yield	1.172027%	1.172027%
Escrow Yield		
Value of Negative Arbitrage		
Bond Par Amount	59,160,000.00	59,160,000.00
True Interest Cost	0.355743%	0.355743%
Net Interest Cost	0.388990%	0.388990%
Average Coupon	5.000000%	5.000000%
Average Life	2.667	2.667
Par amount of refunded bonds	65,745,000.00	65,745,000.00
Average coupon of refunded bonds	4.996736%	4.996736%
Average life of refunded bonds	2.865	2.865
PV of prior debt	73,928,136.55	73,928,136.55
Net PV Savings	7,938,998.16	7,938,998.16
Percentage savings of refunded bonds	12.075440%	12.075440%
Percentage savings of refunding bonds	13.419537%	13.419537%

SUMMARY OF BONDS REFUNDED

Miami-Dade County - Capital Asset Acquisition Bonds
Refunding of Series 2011 Public Service Tax (UMSA)

Tax-Exempt Current Refunding

Prior Debt

Bond	Maturity Date	Interest Rate	Par Amount	Call Date	Call Price
Series 2011 Public Service Tax (UMSA) (in here for ref purposes), BOND:					
	10/01/2021	4.000%	4,270,000.00	07/28/2021	100.000
	04/01/2022	4.000%	2,825,000.00	07/28/2021	100.000
	10/01/2022	4.000%	4,440,000.00	07/28/2021	100.000
	04/01/2023	4.000%	2,945,000.00	07/28/2021	100.000
	10/01/2023	4.000%	4,625,000.00	07/28/2021	100.000
	04/01/2024	5.000%	3,065,000.00	07/28/2021	100.000
	04/01/2025	5.000%	3,230,000.00	07/28/2021	100.000
	04/01/2026	5.000%	3,400,000.00	07/28/2021	100.000
	04/01/2027	5.000%	3,575,000.00	07/28/2021	100.000
			32,375,000.00		

SUMMARY OF BONDS REFUNDED

Miami-Dade County - Capital Asset Acquisition Bonds
Refunding of Series 2011A Sunshine State

Tax-Exempt Current Refunding

Prior Debt

Bond	Maturity Date	Interest Rate	Par Amount	Call Date	Call Price
Sunshine State Revenue Bonds, Series 2011A (here for refunding purposes), BOND:					
	09/01/2022	5.000%	6,315,000.00	09/01/2021	100.000
	09/01/2023	5.000%	5,985,000.00	09/01/2021	100.000
	09/01/2024	5.125%	6,260,000.00	09/01/2021	100.000
	09/01/2026	5.375%	6,845,000.00	09/01/2021	100.000
			25,405,000.00		
Sunshine State Revenue Bonds, Series 2011A (here for refunding purposes), INS:					
	09/01/2025	5.125%	6,450,000.00	09/01/2021	100.000
	09/01/2027	5.375%	1,515,000.00	09/01/2021	100.000
			7,965,000.00		
			33,370,000.00		

SAVINGS

Miami-Dade County - Capital Asset Acquisition Bonds
Series 2021 New Money & Refunding
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Final Numbers
Pricing Date: July 8, 2021
2021A Winning Bidder: Barclays
2021B Winning Bidder: Morgan Stanley

Date	Prior Debt Service	Refunding Debt Service	Savings	Present Value to 07/28/2021 @ 1.1720275%
09/30/2021	857,868.75		857,868.75	856,950.27
09/30/2022	16,468,037.50	15,061,650.00	1,406,387.50	1,387,566.14
09/30/2023	15,825,087.50	14,419,750.00	1,405,337.50	1,369,102.69
09/30/2024	15,806,737.50	14,409,000.00	1,397,737.50	1,347,030.87
09/30/2025	10,970,162.50	9,568,500.00	1,401,662.50	1,309,724.15
09/30/2026	11,043,100.00	9,643,250.00	1,399,850.00	1,292,314.32
09/30/2027	5,350,181.26	3,948,000.00	1,402,181.26	1,305,147.22
	76,321,175.01	67,050,150.00	9,271,025.01	8,867,835.67

Savings Summary

PV of savings from cash flow	8,867,835.67
Less: Prior funds on hand	-928,837.50
Net PV Savings	7,938,998.17

BOND DEBT SERVICE

Miami-Dade County - Capital Asset Acquisition Bonds
Series 2021 New Money & Refunding
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Final Numbers
Pricing Date: July 8, 2021
2021A Winning Bidder: Barclays
2021B Winning Bidder: Morgan Stanley

Period Ending	Principal	Coupon	Interest	Debt Service
09/30/2022	15,915,000	5.000%	4,388,276.25	20,303,276.25
09/30/2023	13,955,000	5.000%	5,705,400.00	19,660,400.00
09/30/2024	14,640,000	5.000%	5,007,650.00	19,647,650.00
09/30/2025	10,535,000	5.000%	4,275,650.00	14,810,650.00
09/30/2026	11,135,000	5.000%	3,748,900.00	14,883,900.00
09/30/2027	5,995,000	5.000%	3,192,150.00	9,187,150.00
09/30/2028	2,350,000	5.000%	2,892,400.00	5,242,400.00
09/30/2029	2,465,000	5.000%	2,774,900.00	5,239,900.00
09/30/2030	2,590,000	5.000%	2,651,650.00	5,241,650.00
09/30/2031	2,720,000	5.000%	2,522,150.00	5,242,150.00
09/30/2032	2,855,000	5.000%	2,386,150.00	5,241,150.00
09/30/2033	3,000,000	5.000%	2,243,400.00	5,243,400.00
09/30/2034	3,150,000	4.000%	2,093,400.00	5,243,400.00
09/30/2035	3,275,000	4.000%	1,967,400.00	5,242,400.00
09/30/2036	3,405,000	4.000%	1,836,400.00	5,241,400.00
09/30/2037	3,540,000	4.000%	1,700,200.00	5,240,200.00
09/30/2038	3,680,000	4.000%	1,558,600.00	5,238,600.00
09/30/2039	3,830,000	4.000%	1,411,400.00	5,241,400.00
09/30/2040	3,985,000	4.000%	1,258,200.00	5,243,200.00
09/30/2041	4,140,000	4.000%	1,098,800.00	5,238,800.00
09/30/2042	4,305,000	4.000%	933,200.00	5,238,200.00
09/30/2043	4,480,000	4.000%	761,000.00	5,241,000.00
09/30/2044	4,660,000	4.000%	581,800.00	5,241,800.00
09/30/2045	4,845,000	4.000%	395,400.00	5,240,400.00
09/30/2046	5,040,000	4.000%	201,600.00	5,241,600.00
	140,490,000		57,586,076.25	198,076,076.25

BOND DEBT SERVICE

Miami-Dade County - Capital Asset Acquisition Bonds
Capital Asset Acquisition Special Obligation Bonds, Series 2021A
New Money

Period Ending	Principal	Coupon	Interest	Debt Service
09/30/2022	2,850,000	5.000%	2,391,626.25	5,241,626.25
09/30/2023	1,840,000	5.000%	3,400,650.00	5,240,650.00
09/30/2024	1,930,000	5.000%	3,308,650.00	5,238,650.00
09/30/2025	2,030,000	5.000%	3,212,150.00	5,242,150.00
09/30/2026	2,130,000	5.000%	3,110,650.00	5,240,650.00
09/30/2027	2,235,000	5.000%	3,004,150.00	5,239,150.00
09/30/2028	2,350,000	5.000%	2,892,400.00	5,242,400.00
09/30/2029	2,465,000	5.000%	2,774,900.00	5,239,900.00
09/30/2030	2,590,000	5.000%	2,651,650.00	5,241,650.00
09/30/2031	2,720,000	5.000%	2,522,150.00	5,242,150.00
09/30/2032	2,855,000	5.000%	2,386,150.00	5,241,150.00
09/30/2033	3,000,000	5.000%	2,243,400.00	5,243,400.00
09/30/2034	3,150,000	4.000%	2,093,400.00	5,243,400.00
09/30/2035	3,275,000	4.000%	1,967,400.00	5,242,400.00
09/30/2036	3,405,000	4.000%	1,836,400.00	5,241,400.00
09/30/2037	3,540,000	4.000%	1,700,200.00	5,240,200.00
09/30/2038	3,680,000	4.000%	1,558,600.00	5,238,600.00
09/30/2039	3,830,000	4.000%	1,411,400.00	5,241,400.00
09/30/2040	3,985,000	4.000%	1,258,200.00	5,243,200.00
09/30/2041	4,140,000	4.000%	1,098,800.00	5,238,800.00
09/30/2042	4,305,000	4.000%	933,200.00	5,238,200.00
09/30/2043	4,480,000	4.000%	761,000.00	5,241,000.00
09/30/2044	4,660,000	4.000%	581,800.00	5,241,800.00
09/30/2045	4,845,000	4.000%	395,400.00	5,240,400.00
09/30/2046	5,040,000	4.000%	201,600.00	5,241,600.00
	81,330,000		49,695,926.25	131,025,926.25

BOND DEBT SERVICE

Miami-Dade County - Capital Asset Acquisition Bonds
Capital Asset Acquisition Special Obligation Refunding Bonds, Series 2021B

Period Ending	Principal	Coupon	Interest	Debt Service
09/30/2022	13,065,000	5.000%	1,996,650	15,061,650
09/30/2023	12,115,000	5.000%	2,304,750	14,419,750
09/30/2024	12,710,000	5.000%	1,699,000	14,409,000
09/30/2025	8,505,000	5.000%	1,063,500	9,568,500
09/30/2026	9,005,000	5.000%	638,250	9,643,250
09/30/2027	3,760,000	5.000%	188,000	3,948,000
	59,160,000		7,890,150	67,050,150

Attachment 2

S&P Global
Ratings

RatingsDirect®

Summary:

Miami Dade County, Florida; Appropriations; General Obligation; Joint Criteria; Miscellaneous Tax; Moral Obligation

Primary Credit Analyst:
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Summary:

Miami Dade County, Florida; Appropriations; General Obligation; Joint Criteria; Miscellaneous Tax; Moral Obligation

Credit Profile		
US$86.83 mil cap asset acquis spl oblig bnds ser 2021A dtd 07/28/2021 due 04/01/2046		
Long Term Rating	AA/Stable	New
US$74.855 mil cap asset acquis spl oblig rfdg bnds ser 2021B dtd 07/28/2021 due 04/01/2040		
Long Term Rating	AA/Stable	New
Miami Dade Cnty GO rfdg bnds		
Long Term Rating	AA/Stable	Affirmed

Rating Action

S&P Global Ratings assigned its 'AA' rating to Miami Dade County, Fla.'s $86.8 million series 2021A capital asset acquisition special obligation bonds and $74.8 million series 2021B capital asset acquisition special obligation refunding bonds. The outlook on all ratings is stable.

The series 2021A and 2021B bonds are secured by the county's covenant to budget and appropriate from legally available funds. We rate the bonds on par with Miami Dade County's general creditworthiness. Proceeds from the sale of the series 2021A new money bonds will be used to finance various capital needs throughout the county whereas proceeds from the series 2021B bonds will be used to refinance all or portions of existing series 2010D, 2011, and 2011A bonds purely for present-value savings with no extension of maturities.

At the same time, we affirmed the following ratings:

- Our 'AA' rating on the parity debt secured by Miami Dade County's covenant to budget and appropriate from legally available funds and unlimited-tax general obligation (GO) debt;
- Our 'A+' rating on the moral obligation debt, which is two notches off of the county's general creditworthiness to reflect Miami Dade County's moral obligation to appropriate funds toward debt service in the event there is a deficiency in the debt service fund from legally available non-ad valorem revenues;
- Our 'AA+/A-1' joint support rating on the series 2009E professional sports franchise facilities tax variable-rate bonds with PNC Bank; and
- Our 'AAA/A-1+' joint support rating on the series 2003B GO special obligation bonds (juvenile courthouse project) with TD Bank N.A.

In addition, we affirmed our 'AA' rating on the county's double-barreled bonds (series 2011C seaport GO refunding bonds, series 2015 special obligation court facilities refunding bonds, and series 2020 aviation GO refunding bonds).

We view Miami Dade County's pledge to backstop the bonds with the county's unlimited taxing authority as the stronger pledge compared with the net seaport revenue pledge for the series 2011C bonds and the county's net available airport revenue pledge for the series 2020 bonds. Lastly, we view Miami Dade County's legally available funds pledge as the stronger pledge compared to the county's pledged traffic surcharge revenues for the series 2015 special obligation court facilities refunding bonds.

Credit overview

Our rating on Miami Dade County is supported by the county's deep and diverse economic profile that is showing signs of recovery in the tourism sector. For more on our national economic outlook see S&P Global Economics' outlook and forecast, "Economic Outlook U.S. Q2 2021: Let The Good Times Roll," published March 24, 2021, on RatingsDirect. The county's general fund distribution is predominantly property tax revenues at 55%, which we view as a stable revenue source. Miami Dade County's more economically sensitive operating fund revenues include gas tax, building permit, and sales tax revenues that amount to a combined 17% of the operating revenue as of fiscal year-end 2020. Overall, federal stimulus funds have provided the county financial flexibility, similar to many other local governments across the nation, to contend with softness in revenues and added expenditures related to the COVID-19 pandemic and allowed Miami Dade County to maintain a strong reserve position and balanced performance in the near term. While the county has near-term debt plans, we believe the debt profile will remain stable and manageable, which is also supported by the county government's comprehensive planning and good Financial Management Assessment (FMA). The stable outlook reflects our view of Miami Dade County's consistent financial performance, which is supported by strong management.

The rating reflects our view of Miami Dade County's:

- Strong economy, with access to a broad and diverse metropolitan statistical area (MSA);
- Strong management, with good financial policies and practices under our Financial Management Assessment (FMA) methodology;
- Adequate budgetary performance, with a slight operating deficit in the general fund but an operating surplus at the total governmental fund level in fiscal 2020;
- Strong budgetary flexibility, with an available fund balance in fiscal 2020 of 13.5% of operating expenditures;
- Very strong liquidity, with total government available cash at 30.4% of total governmental fund expenditures and 4.4x governmental debt service, and access to external liquidity we consider exceptional;
- Adequate debt and contingent liability profile, with debt service carrying charges at 6.9% of expenditures and net direct debt that is 100.4% of total governmental fund revenue, as well as low overall net debt at less than 3.0% of market value; and
- Strong institutional framework score.

Environmental, social, and governance (ESG) factors

We analyzed Miami Dade County's environmental risks relative to the county's economy, budgetary and flexibility, management, and debt and liability profiles and view them as elevated compared with those of peers due to Miami Dade County's coastal location in southern Florida, which exposes the economic base to acute physical risks stemming from severe weather-related events and chronic risks related to climate change. Despite the exposure, we view positively management's robust mitigation efforts including incorporating projects into its capital program by annually allocating funds or bond proceeds to beach renourishment, sea wall, and drainage improvements. The county also maintains an Office of Resilience that oversees efforts to upgrade infrastructure to protect and support communities against sea-level rise and climate change. In addition, Miami Dade County maintains a long-term financial forecast and aims to build reserves to $100 million to mitigate contingencies that arise and currently is estimated at about $56 million for fiscal 2020. In addition, we view the county's steady population growth as social opportunity stemming from domestic and international migration trends that have historically fueled investment, development, trade, and economic growth. We view the county's governance risks as consistent with those of the sector. Notably, in May 2021, a task force was established to investigate the feasibility of accepting cryptocurrency for payment of taxes and fees. Although this task force is in the exploration phase, we will monitor plans for risk management and oversight regarding this initiative as it could introduce liquidity and strategic execution risks.

Stable Outlook

Downside scenario

We could lower the rating if the county exhibits structural imbalances over several fiscal years or experiences material deterioration in its reserve and liquidity position, combined with reduced capacity to raise revenues and cut expenditures.

Upside scenario

We could raise the rating if there are subsequent improvements in budgetary flexibility and economic indicators comparable with those of higher-rated peers.

Credit Opinion

Strong economy

We consider the county's economy strong. Miami Dade County, with an estimated population of 2.8 million, is located in the Miami-Fort Lauderdale-West Palm Beach MSA, which we consider to be broad and diverse. The county has a projected per capita effective buying income of 81.4% of the national level and per capita market value of $153,424. Overall, the county's market value grew by 4.0% in 2019 to $434.6 billion in 2020. The county unemployment rate was 2.4% in 2019 and increased to 8.0% for 2020. Miami Dade County serves as a tourism destination and hub for south Florida, and county-level employment data indicate that leisure and hospitality employment is 12% of the employment base, which is above the state and national average for the sector at 9%. The monthly unemployment rate rose to a peak of 15.2% in July 2020 before moderating to 8.0% at calendar year-end and has stabilized at that level through March 2021. Historically, the county's annual unemployment rate has trended in line with the state's rate and just below the national level. We project the county unemployment rate might not recover to pre-pandemic levels until after 2023.

Miami Dade County is the seventh-largest county in the nation by population. The county benefits from its proximity to Latin America and the Caribbean, with the Port of Miami serving as the world's largest multiday cruise port and Miami International Airport recording the second-highest international passenger traffic in the country. Changes in international demand and economic health in some Latin American countries, the state's largest trade partner, could slow down growth and development in the county. Currently, tourism and retail-related activity in Miami Dade County is muted, as for many other large local governments, with an estimated 40% decline in domestic visitors and a more than 50% decline in international visitors during 2020. However, hotel occupancy rates have rebounded in recent months and hotel, food, and beverage taxes are beginning to show signs of recovery.

The county's property tax base had risen 6% per year the previous two years and the preliminary June 2021 assessed value reflects 3.6% year-over-year growth. The five-year forecast, adopted with the 2021 budget, assumes 2%-3% annual growth in the property tax base during the next two years before increasing to 4% annual growth from 2024 through 2026. The projections in the forecast are conservative and assuming materially less growth than previous years. The office vacancy rate increased 9% in 2020 whereas the retail and industrial market vacancy rate was unchanged.

Strong management

We view the county's management as strong, with good financial policies and practices under our FMA methodology, indicating financial practices exist in most areas, but that governance officials might not formalize or monitor all of them on a regular basis.

The finance department monitors budget performance monthly at the department level, quarterly budget-to-actual performance is presented to the governing body, and the county is able to amend the budget throughout the year with approval from the governing body.

Supporting our view are the county's conservative budgeting practices that incorporate contingencies, monthly reporting of revenues and expenditures, and robust capital and long-term financial planning documents. Miami Dade County updates a formal five-year capital improvement plan annually in conjunction with the annual budget and identifies funding sources for all projects. It provides elected officials with annual investment reports, maintains a formal debt policy, and is actively working to comply with its reserve policy of $100 million. The five-year forecast published in the 2020 adopted budget projects the county will meet its $100 million emergency contingency reserve target in fiscal 2025; however, management has indicated an intent to update the forecast in the coming months that might result in softer projections based on the current economic environment.

Adequate budgetary performance

Miami Dade County's budgetary performance is adequate in our opinion. The county had slight deficit operating results in the general fund of 1.0% of expenditures, but a surplus result across all governmental funds 7.2% in fiscal 2020. The county posted general fund surpluses in fiscal years 2015-2019, reversing a three-year trend of incremental deficits. Data adjustments account for recurring transfers and the spending of bond proceeds. General property taxes are the primary revenue source, accounting for 58% of the total, followed by state sales tax receipts (6%).

The 2020 budget was balanced with maintenance of the previous years' service levels and actual audited results reflect relatively break-even results. Miami Dade County held back on discretionary spending and replacing vacant positions to mitigate potential declines in revenues. Actual revenues were below budget by $36 million and expenditures trended $111 million below budget assumptions. The pandemic had a materially negative effect on the county's economically sensitive revenue streams with sales tax, gasoline, and motor fuel tax trending nearly $26 million below budget whereas charges for services trended a little more than $24 million below budget. Miami Dade County experienced positive variance in the local tax items (driven largely by property and utility tax trends), which helped soften the overall negative variance in the aforementioned revenue streams.

The county is a recipient of $474.1 million as part of the Coronavirus Aid Relief and Economic Security Act that, along with Federal Emergency Management Agency funding, which helped offset pandemic-related expenditures. In addition, the county's American Rescue Plan (ARP) Act funds are estimated at $527 million, of which $263 million was received this year, and receipt of the remainder of the allocation is anticipated next year. Miami Dade County intends to use approximately $320 million of the ARP funds to offset current and future revenue losses and the remainder will be allocated for one-time expenditures.

The 2021 adopted budget is balanced, with a stable tax rate and is trending in line with budget assumptions year to date. The budget grew just 0.7%, with all essential services funded and some additions to the public safety budget, with 45 additional police officers and a rescue unit. As per Miami Dade County's five-year long-term financial forecast, the county's forecast is not balanced starting in fiscal 2022 in part due to necessary support for the people's transportation plan program and the economic impacts from the pandemic. Overall, we believe the county has sufficient capacity in the budget to maintain at least adequate net performance during the next two years.

Strong budgetary flexibility

Miami Dade County's budgetary flexibility is strong, in our view, with an available fund balance in fiscal 2020 of 13.5% of operating expenditures, or $362.4 million. Over the past three years, the total available fund balance has remained at a consistent level overall, totaling 14.0% of expenditures in 2019 and 13.7% in 2018. We believe, based on current forecasts and identified resources to date, that it has sufficient resources and flexibility to maintain strong available reserves during the next two years. Miami Dade County's 2021 total 7.37 millage rate for the three taxing jurisdictions is under the 10-mill cap and should allow for some revenue-raising flexibility if necessary. As per Miami Dade County's long-term financial forecast, the county projects to reach its target balance of about $100 million in the emergency contingency reserve by 2024-2025.

Very strong liquidity

In our opinion, Miami Dade County's liquidity is very strong, with total government available cash at 30.4% of total governmental fund expenditures and 4.4x governmental debt service in 2020. In our view, the county has exceptional access to external liquidity if necessary. The majority of its primary government investments are in securities of federal agencies and in treasuries, which we do not consider aggressive.

The county government has direct placement notes, some of which include permissive events of default, including failure to observe and perform any covenant; however, the remedies explicitly exclude acceleration. Therefore, we do not view these agreements as potential contingent liabilities that could weaken liquidity in the near term.

All of Miami Dade County's variable-rate debt obligations are backed with letters of credit to hedge against the potential for remarketing risk. The county terminated its two remaining basis swaps as of January 2021.

Adequate debt and contingent liability profile

In our view, Miami Dade County's debt and contingent liability profile is adequate. Total governmental fund debt service is 6.9% of total governmental fund expenditures, and net direct debt is 100.4% of total governmental fund revenue. Overall net debt is low at 2.0% of market value, which is in our view a positive credit factor. Debt plans include $350 million in additional debt issued under the GO Building Better Communities drawdown bond program and additional capital asset bonds secured by the county's covenant to budget and appropriate from non-ad valorem revenues will likely be issued to fund regular capital improvement and maintenance expenditures, though the amount needed has not yet been determined.

The county has variable-rate debt supported by liquidity facilities. The reimbursement agreements associated with the liquidity facilities and bank loans allow for an increase in the interest rate following an event of default that, if triggered, we estimate would increase annual debt service payments by more than 20%. As of Jan. 27, 2021, the county government terminated its two remaining governmental basis swaps with respect to the series 2012A and 2012B community development tax loans and, as a result, the total net payments to the county amounted to $60.3 million of which $53 million was collected in the nonmajor governmental fund during fiscal 2020.

Pension and other postemployment benefit liabilities (OPEB):

Miami Dade County's combined required pension and actual OPEB contributions totaled 6.7% of total governmental fund expenditures in 2020. The county made its full required pension contribution in 2020.

Our opinion of the county's pension and OPEB is as follows:

- Pension and OPEB liabilities are not an immediate source of credit pressure for Miami Dade County, given what we consider current strong plan funding status and limited escalating cost trajectory risk.
- Although OPEB liabilities are funded on a pay-as-you-go basis that, given claims volatility as well as medical cost and demographic trends, is likely to lead to escalating costs, the county has legal flexibility to alter OPEB benefits, which we view as a potential means to mitigate escalating costs.

The county participates in the following plans as of Sept. 30, 2020:

- Florida Retirement System (FRS), 78.9% funded, with a proportional share of the net pension liability equal to $3.4 billion. The FRS is a defined benefit, cost-sharing, multiple-employer pension plan administered by the State of Florida.
- Retiree Health Insurance Subsidy (HIS), 3.0% funded, with the proportionate share of the HIS net liability at $771.9 million. The HIS is a defined benefit, cost-sharing, multiple-employer plan that provides a monthly payment to retirees to assist with health insurance costs. The HIS plan benefits are not guaranteed and are subject to annual legislative appropriation. In the event the legislative appropriation or available funds fail to provide full subsidy benefits to all participants, benefits might be reduced or canceled.
- Public Health Trust (PHT) defined benefit retirement plan, 79.0% funded, with a proportionate share of the net liability at $93.7 million.
- Postemployment Health Care Benefits Plan (OPEB plan): funded on a pay-as-you-go basis, with a total liability of $692.3 million. The OPEB plan is a single-employer, defined-benefit plan administered by the county.

Miami Dade County's contribution requirements to the FRS, the largest pension liability, are contractually determined and the state legislature did increase rates for all of the employee classes. Although the county paid 100% of its actuarially determined contribution to the FRS, funding progress was not made in the most recent year because contributions fell short of static funding. The plan uses a closed, layered amortization method, with a payroll growth assumption of 3.25%. Given that the plan defers costs to future years and has an amortization period of 30 years, we expect funding progress, if any, to be very slow. Considering a discount rate of 6.8%, we see some risk of market volatility adding to the scheduled increases in pension contributions. Miami Dade County's combined required pension and actual OPEB contributions totaled 6.7% of total governmental fund expenditures in 2020. The county made its full annual required pension contributions in 2020 and we anticipate that the fixed cost burden of its pension and OPEB will remain manageable due to Miami Dade County's capacity to make adjustments to the budget as necessary to continue to fund, and not defer, annual contributions.

Strong institutional framework

The institutional framework score for Florida counties is strong.

Related Research

- Through The ESG Lens 2.0: A Deeper Dive Into U.S. Public Finance Credit Factors, April 28, 2020
- S&P Public Finance Local GO Criteria: How We Adjust Data For Analytic Consistency, Sept. 12, 2013
- Alternative Financing: Disclosure Is Critical To Credit Analysis In Public Finance, Feb. 18, 2014
- Criteria Guidance: Assessing U.S. Public Finance Pension And Other Postemployment Obligations For GO Debt, Local Government GO Ratings, And State Ratings, Oct. 7, 2019
- 2020 Update Of Institutional Framework For U.S. Local Governments

Ratings Detail (As Of June 15, 2021)		
Miami Dade Cnty cap asset acquis special oblig bnds ser 2020B dtd 09/09/2020 due 04/01/2045		
Long Term Rating	AA/Stable	Affirmed
Miami Dade Cnty cap asset acquis special oblig bnds ser 2020C dtd 09/09/2020 due 04/01/2045		
Long Term Rating	AA/Stable	Affirmed
Miami Dade Cnty cap asset acquis special oblig rfdg bnds ser 2020D dtd 09/09/2020 due 04/01/2040		
Long Term Rating	AA/Stable	Affirmed
Miami Dade Cnty cap asset acquis taxable special oblig rfdg bnds ser 2020E dtd 09/09/2020 due 04/01/2038		
Long Term Rating	AA/Stable	Affirmed
Miami Dade Cnty go bnds (pub health trust program)		
Long Term Rating	AA/Stable	Affirmed
Miami Dade Cnty misc tax		
Long Term Rating	AA/Stable	Affirmed
Miami Dade Cnty misc tax (Pro Sport) (ASSURED GTY)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed

Ratings Detail (As Of June 15, 2021) (cont.)		
Miami Dade Cnty professional sports franchise fac tax rev rfdg bnds		
Long Term Rating	AA/Stable	Affirmed
Miami Dade Cnty APPROP		
Long Term Rating	AA/Stable	Affirmed
Miami Dade Cnty GO		
Long Term Rating	AA/Stable	Affirmed
Miami Dade Cnty GO		
Long Term Rating	AA/Stable	Affirmed
Miami Dade Cnty GO		
Long Term Rating	AA/Stable	Affirmed
Miami Dade Cnty GO		
Long Term Rating	AA/Stable	Affirmed
Miami Dade Cnty GO bnds		
Long Term Rating	AA/Stable	Affirmed
Miami Dade Cnty GO rfdg bnds		
Long Term Rating	AA/Stable	Affirmed
Miami Dade Cnty APPROP		
Long Term Rating	AA/Stable	Affirmed
Miami Dade Cnty APPROP		
Long Term Rating	AA/Stable	Affirmed
Miami Dade Cnty APPROP		
Long Term Rating	AA/Stable	Affirmed
Miami Dade Cnty APPROP		
Long Term Rating	AA/Stable	Affirmed
Miami Dade Cnty APPROP (AGM)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Miami Dade Cnty APPROP (AGM)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Miami Dade Cnty GO		
Long Term Rating	AA/Stable	Affirmed
Miami Dade Cnty (Jackson Hlth Sys)		
Long Term Rating	A+/Stable	Affirmed
Miami Dade Cnty (Jackson Hlth Sys)		
Long Term Rating	A+/Stable	Affirmed
Miami Dade Cnty (Jackson Hlth Sys) (BAM) (SECMKT)		
Unenhanced Rating	A+(SPUR)/Stable	Affirmed
Miami Dade Cnty (Juvenile Courthouse Proj) (AMBAC)		
Long Term Rating	AAA/A-1+	Affirmed
Unenhanced Rating	AA(SPUR)/Stable	Affirmed

Ratings Detail (As Of June 15, 2021) (cont.)		
Miami Dade Cnty (Pro Sport) misc tax VRDBs		
Long Term Rating	AA+/A-1	Affirmed
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Sunshine St Govt Fing Comm, Florida		
Miami Dade Cnty, Florida		
Sunshine St Govt Fing Comm (Miami Dade Cnty) APPROP		
Long Term Rating	AA/Stable	Affirmed
Sunshine St Govt Fing Comm (Miami Dade Cnty) APPROP		
Long Term Rating	AA/Stable	Affirmed
Sunshine St Govt Fing Comm (Miami Dade Cnty) APPROP		
Long Term Rating	AA/Stable	Affirmed
Sunshine St Govt Fing Comm (Miami Dade Cnty) APPROP		
Long Term Rating	AA/Stable	Affirmed
Sunshine St Govt Fing Comm (Miami Dade Cnty) APPROP		
Long Term Rating	AA/Stable	Affirmed
Sunshine St Govt Fing Comm (Miami Dade Cnty) APPROP (AGM)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Miami Dade Cnty, Florida		
Miami Dade Cnty, Florida		
Miami Intl Arpt, Florida		
Miami Dade Cnty double barrelled aviation rfdg GO bnds ser 2020 dtd 10/01/2020 due 07/01/2041		
Long Term Rating	AA/Stable	Affirmed

Many issues are enhanced by bond insurance.

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings' public website at www.standardandpoors.com. Use the Ratings search box located in the left column.

MOODY'S
INVESTORS SERVICE

CREDIT OPINION
23 June 2021

Rate this Research

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Miami-Dade (County of) FL

Update to credit analysis

Summary

Miami-Dade County (Aa2 stable) will continue to benefit from a very large and diverse tax base which continues to recover from the impacts of the coronavirus pandemic. The county's cash position remains strong and with federal stimulus funding the county will run a surplus in the current fiscal year. Fixed costs are low. The rating also incorporates the county's exposure to multiple enterprises which have been impacted by the coronavirus crisis including Miami-Dade County Port Facility (A3 negative), Miami-Dade County Airport Enterprise (A2 stable), Public Health Trust (Jackson Hospital), and the Miami-Dade County Transit Enterprise (A1 stable). The county supports operations of the Public Health Trust and the public transit enterprise with a voter approved half-cent sales tax for each enterprise and general fund transfer calculated by a set formula. The county has not supported any enterprises during the pandemic and does not anticipate having to do so as the recovery continues.

The Aa3 non-ad valorem rating is one notch off the general obligation rating, reflecting the narrower amount of pledged revenues available for debt service on the bonds, in addition to the county's covenant to budget and appropriate non-ad valorem revenues and the underlying credit strength of the county.

On June 9, we assigned a Aa3 rating to Miami-Dade County's (FL) $86.8 million Capital Asset Acquisition Special Obligation Bonds, Series 2021A and $74.9 million Capital Asset Acquisition Special Obligation Refunding Bonds, Series 2021B.

Credit strengths

» Very large and diverse base

» Modest fixed cost burden

» Strong cash position

Credit challenges

» Exposure to multiple enterprises recovering from coronavirus including transit, Public Health Trust, seaport and airport

» Below average wealth levels

Rating outlook

The stable outlook on the general obligation and non-ad valorem bonds reflects the county's strong finances and ability to manage enterprise pressures with limited impact to the general fund.

Factors that could lead to an upgrade

» Improved reserve position

» Materially reduced pension burden

Factors that could lead to a downgrade

» Fund balance declines in the general and operating funds

» Increased support for enterprises above historical amounts

» Protracted declines in the tax base

» Increased fixed cost burden

Key indicators

Exhibit 1

Miami-Dade (County of) FL	2016	2017	2018	2019	2020
Economy/Tax Base					
Total Full Value ($000)	$338,491,478	$373,772,777	$398,734,078	$417,929,448	$434,617,793
Population	2,664,418	2,702,602	2,715,516	2,699,428	N/A
Full Value Per Capita	$127,041	$138,301	$146,835	$154,821	N/A
Median Family Income (% of US Median)	74.2%	73.7%	74.5%	74.9%	74.9%
Finances					
Operating Revenue ($000)	$3,410,751	$3,614,177	$3,931,706	$4,974,696	$5,095,247
Fund Balance ($000)	$528,465	$522,797	$520,567	$568,260	$371,875
Cash Balance ($000)	$719,055	$798,529	$877,804	$1,228,788	$1,482,831
Fund Balance as a % of Revenues	15.5%	14.5%	13.2%	11.4%	7.3%
Cash Balance as a % of Revenues	21.1%	22.1%	22.3%	24.7%	29.1%
Debt/Pensions					
Net Direct Debt ($000)	$4,617,541	$4,686,633	$4,802,531	$5,022,809	$5,340,798
3-Year Average of Moody's ANPL ($000)	$6,515,288	$7,466,887	$8,119,151	$8,469,561	$10,973,197
Net Direct Debt / Full Value (%)	1.4%	1.3%	1.2%	1.2%	1.2%
Net Direct Debt / Operating Revenues (x)	1.4x	1.3x	1.2x	1.0x	1.0x
Moody's - adjusted Net Pension Liability (3-yr average) to Full Value (%)	1.9%	2.0%	2.0%	2.0%	2.5%
Moody's - adjusted Net Pension Liability (3-yr average) to Revenues (x)	1.9x	2.1x	2.1x	1.7x	2.2x

Source: US Census Bureau, Audited Financial Statements, Moody's Investors Service

Profile

Miami-Dade County is located in south Florida (Aaa stable) and includes the City of Miami (Aa2 stable). The county had a population of 2.7 million people in 2019. Component units include a water and sewer system, transit enterprise, Port of Miami, Miami International Airport and Public Health Trust (Jackson Hospital).

Detailed credit considerations

Very large and diverse tax base

The county's very sizable economic base is well-diversified despite its tourism component and ongoing recovery from the impacts of coronavirus. The base has experienced significant growth within sectors including trade, banking, health care, construction, business services and manufacturing industries. The county is slightly more dependent on at-risk sectors such as leisure and hospitality (12.0% of employment in the MSA, compared to 11% of the US) and retail trade (12.5% compared to 10.6% in the US) than the US. The airport is a primary entry point for Latin American and Caribbean visitors and the seaport is the largest multi-day cruise port in the world. With international travel just restarting and likely to remain below historic levels for the next few years, the county is likely to see decreased tourism and increased unemployment in related sectors. Unemployment in April 2021 was 6.9%, above rates for the state (5.1%) and nation (5.7%), but significantly improved from April 2020 (11.9%).

The county's recent tax base growth has been strong despite the pandemic. Estimated taxable values for fiscal 2022 increased 3.6%, largely reflecting gains in the residential portion of the base. This increase is below the annual average growth in assessed values over the last five years of 7.5%. The residential market has been strong with median sales prices for single family homes increasing 5.8% in 2020; however, permits for new residential construction fell 28% in 2020 which could drive values up more. Office vacancies were up slightly in fiscal 2020 but rental rates increased. Final taxable values will be released on July 1.

Full value growth has also improved including an increase of 4.2% in 2021 to $452 billion, well in excess of the county median of $8.7 million for similarly-rated issuers. Full values have increased an annual average of 6.0% over the last five years.

The county's below average MFI of 74.9% is a credit weakness, although it may not be a complete reflection of the dynamism and wealth levels of the underlying economy. The county's full value per capita is a healthy $160,984, almost 70% higher than the median of $92,948 for similarly rated counties.

Strong financial position as recovery from coronavirus impacts continues

County management has produced six consecutive years of general fund surpluses, growing fund balance in excess of budgetary growth. Available (unassigned plus assigned plus committed) fund balance increased $14 million in fiscal 2020 to $384 million or 14.2% of revenue. While general fund balance lags peers on a percentage basis, it is more than ten times larger nominally. The increase was due to positive variances in property tax collections and savings across multiple expenditure lines which offset declines in sales taxes which came in $20 million under budget due to the pandemic. Positively, the county's general fund is heavily reliant on property taxes, which accounted for 53% of all governmental revenues.

Available operating funds (general, debt service and special revenue funds) balance decreased $196 million in fiscal 2020, to $371 million or 7.3% of revenues. The decline is due entirely to the pandemic as the county recorded an operating deficit of $434 million and a negative fund balance of $316 million at fiscal 2020 year end in its Emergency and Disaster Relief fund for pandemic expenses. It is likely that most, if not all, of this deficit will be cured with stimulus funding, although exact timing is unknown. Management currently projects fiscal 2021 ending with balanced operations.

The county has exposure to multiple enterprises which are particularly vulnerable to coronavirus. Business activities accounted for $4.8 billion in county expenses compared to $4.6 billion in governmental activities. The airport and seaport continue to be significantly impacted by the slow recovery of cruise and air travel but management has not supported any enterprises and does not anticipate financially supporting them with general government funds at this time.

The transit enterprise (annual revenues of $562 million in fiscal 2020) saw a revenue decline of $140 million in fiscal 2020 due to the stay-at-home order in March and April 2020. The county's general fund subsidizes the transit enterprise with a formula-driven amount ($208 million in fiscal 2020) which increases 3.5% annually. The enterprise also receives a half cent sales tax approved specifically for transit ($251 million in 2020). To date, the transit system has received $ million in federal stimulus funding.

The county's hospital system has historically had weak liquidity (56 days cash on hand at the end of 2020) and fiscal 2020 was no worse than historical trends. The Public Health Trust's (PHT) 2020 expenses totaled $2.0 billion. Revenues include a half cent sales tax levied specifically for indigent care ($251 million in 2020) and a formula-driven subsidy from the general fund, pursuant to maintenance of effort (MOE) agreement ($213 million in 2020). The hospital maintains a line of credit for $150 million, although management does not plan to draw on it at this time. The PHT has received a total of $ million in federal stimulus funding. Management does not expect the general government to support the transit or hospital enterprise.

Liquidity

The county had $1.5 billion in unrestricted cash at fiscal year end 2020 in the operating funds, which equates to a strong 29.1% of operating revenues. Given strong liquidity, the county has no plans for cash flow borrowing for the general government at this time.

Manageable debt and pensions

The county's debt burden will likely remain manageable given moderate non-enterprise borrowing expectations. The county has an overall debt burden of 1.9% (1.2% direct net), which is manageable given the size of the tax base and population. Debt service costs of about 6.2% of fiscal 2020 operating revenues are manageable.

The county's $24.8 billion multi-year capital program (including $3.3 billion for fiscal 2021), is heavily weighted towards enterprise systems (especially water & sewer) and transportation, and includes projects that may not be funded. Within the next year, governmental new-money borrowing plans include ongoing funding for the G.O. drawdown bond program (discussed later). The county is also in the midst of a multi-billion water and sewer funding program.

The county has approximately $238 million in outstanding variable rate obligations (4% of total debt). These variable rate obligations are represented by two special tax issues: 1) $45.9 million backed by a TD Bank, N.A. (long term counterparty risk rating A1) letter of credit facility, expiring October 1, 2023, 2) $100 million in a weekly floater mode directly placed with Wells Fargo Bank, N.A. (senior unsecured Aa2 stable) backed by a PNC Bank (senior unsecured A2 negative) letter of credit facility expiring July 12, 2024; and non-ad valorem bonds issued through the Sunshine State ($92.4 million) through a recently replaced letter of credit with MUFG Union Bank N.A. (senior unsecured A3 stable), expiring December 10, 2021 which are related to and paid by the Seaport.

Finally, the county entered into a second and third flexible drawdown bond program (first program expired in 2016). With the second program, the county has $400 million of $675 million available under the Building Better Communities (BBC) drawdown program. The third program has a $735 million commitment with Wells Fargo, which requires maximum outstanding at any one time of $200 million in a variable rate mode. The county has authorized $200 million of drawdown bonds, of which $200 million is outstanding. The third program is for remainder of Public Health Trust G.O. program.

Legal security

The non-ad valorem bonds are backed by a covenant to budget and appropriate available non-ad valorem funds.

Debt structure

About half of the county's net direct debt is special tax debt, with the remainder being general obligation bonds (including remarketed bonds). The county has approximately $238 million in outstanding variable rate obligations currently (4% of total debt).

Debt-related derivatives

There are two non-enterprise basis swaps on special tax debt, $53.8 million notional amount, all requiring collateral posting (below the Baa1 rating level). Both swaps are with Deutsche Bank AG (senior unsecured A3, rating under review for possible upgrade). Under the swaps, the county pays SIFMA divided by 0.604 and receives LIBOR plus a rate anywhere from 1.43% to 1.57%. Mark-to-market values on the swaps (at September 30, 2020) are a positive $8.2 million to the county.

Pensions and OPEB

County employees participate in the Florida Retirements System (FRS), a multi-employer, cost-sharing retirement plan sponsored by the State of Florida. The county contributed its annual required contribution (ARC) for the plan, $250 million, in fiscal 2020. The three-year adjusted net pension liability for fiscal 2020 under Moody's methodology for adjusting reported pension data is $9.8 billion, or approximately 1.9 times operating revenues (2.3% of full value). Fixed costs totaled a low 12% of operating expenses, if the county paid the full tread water payment, fixed costs would total a still low 13.3% of operating expenses.

ESG considerations

Miami-Dade (County of) FL's ESG Credit Impact Score is moderately negative CIS-3.

Exhibit 2
ESG Credit Impact Score

CIS-3
Moderately Negative

For an issuer scored CIS-3 (Moderately Negative), its ESG attributes are overall considered as having a limited impact on the current rating, with greater potential for future negative impact over time. The negative influence of the overall ESG attributes on the rating is more pronounced compared to an issuer scored CIS-2.

Source: Moody's Investors Service

Miami-Dade County's ESG Credit Impact Score is a moderately negative (**CIS-3**) reflecting negative exposure to environmental risks that is mitigated in part by the area's extensive infrastructure development and planning, neutral to low exposure to social and positive governance considerations. The county also benefits from external financial and capital investment from other levels of government and other organizations to combat environmental challenges. These initiatives support the county's resilience and capacity to respond to external shocks.

Exhibit 3
ESG Issuer Profile Scores

ENVIRONMENTAL
E-4
Highly Negative

SOCIAL
S-2
Neutral-to-Low

GOVERNANCE
G-1
Positive

Source: Moody's Investors Service

Environmental

Miami-Dade Co's overall E issuer profile score is negative (**E-4**) reflecting significant exposure to physical climate risks, particularly hurricanes, heat stress and water stress. Risks across all other categories including water management, waste and pollution and natural capital is neutral to low. The county benefits from a regional approach through the Southeast Florida Regional Climate Change Compact and capital planning that guides ongoing infrastructure development. Additionally, the county has implemented policies that govern building codes and development, all targeted at increasing its resiliency. Absent these mitigating initiatives or if the county fails to continue pursuing similar initiatives, the E IPS score will weaken.

According to data compiled by Moody's affiliate Four Twenty Seven, the county is exposed to a very high risk of heat stress and hurricanes, which can damage infrastructure and affect property values. This exposure is mitigated by federal and state support and a regional hazard mitigation plan, of which the county is the lead.

Social

The county's S issuer profile score is neutral to low (**S-2**) reflecting moderately negative exposure to demographics and labor and income. Education, housing health and safety and access to basic services are neutral to low.

Governance

Miami-Dade County's very strong governance profile supports its rating, as captured by a positive G issuer profile score (**G-1**), and reflects the strong institutional structure needed for a local government of this size and complexity. The county's demonstrated policy effectiveness, solid transparency and disclosure as well as prudent budget management are also incorporated into the **G-1** issuer profile score.

Rating methodology and scorecard factors

The US Local Government General Obligation Debt methodology includes a scorecard, a tool providing a composite score of a local government's credit profile based on the weighted factors we consider most important, universal and measurable, as well as possible notching factors dependent on individual credit strengths and weaknesses. Its purpose is not to determine the final rating, but rather to provide a standard platform from which to analyze and compare local government credits.

Exhibit 4

Scorecard Factors and Subfactors	Measure	Score
Economy/Tax Base (30%) [1]		
Tax Base Size: Full Value (in 000s)	$434,617,793	Aaa
Full Value Per Capita	$161,004	Aaa
Median Family Income (% of US Median)	74.9%	Baa
Notching Adjustments:[2]		
Regional Economic Center		Up
Finances (30%)		
Fund Balance as a % of Revenues	7.3%	A
5-Year Dollar Change in Fund Balance as % of Revenues	-9.3%	Baa
Cash Balance as a % of Revenues	29.1%	Aaa
5-Year Dollar Change in Cash Balance as % of Revenues	15.7%	Aa
Notching Adjustments:[2]		
Outsized Contingent Liability Risk		Down
Management (20%)		
Institutional Framework	Aa	Aa
Operating History: 5-Year Average of Operating Revenues / Operating Expenditures (x)	1.0x	A
Debt and Pensions (20%)		
Net Direct Debt / Full Value (%)	1.2%	Aa
Net Direct Debt / Operating Revenues (x)	1.0x	A
3-Year Average of Moody's Adjusted Net Pension Liability / Full Value (%)	2.5%	A
3-Year Average of Moody's Adjusted Net Pension Liability / Operating Revenues (x)	2.2x	A
	Scorecard-Indicated Outcome	Aa2
	Assigned Rating	Aa2

[1] Economy measures are based on data from the most recent year available. [2] Notching Factors are specifically defined in the US Local Government General Obligation Debt methodology. [3] Standardized adjustments are outlined in the GO Methodology Scorecard Inputs publication.
Source: US Census Bureau, Moody's Investors Service

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