MIAMIBEACH

OFFICE OF THE CITY MANAGER 198-2019

NO. LTC #

LETTER TO COMMISSION

TO: Mayor Dan Gelber and Members of the City Commission

FROM: Jimmy L. Morales, City Manager

DATE: April 5, 2019

SUBJECT: **G.O. Bond Credit Ratings**

The purpose of this LTC is to advise you of the credit ratings assigned by Standard & Poors (S&P) and Moody's to the City's 2019 general obligation bonds and outstanding prior G.O. bonds. I would like to underscore that both S&P and Moody's have recently incorporated risks from climate change and severe weather events into their credit rating analysis.

I am pleased that we have been able to maintain our strong credit ratings through our proactive efforts to reduce risk by investing in our aging infrastructure and adapting to climate change by using the best available science and knowledge. We must continue to act along these lines as climate resilience will continue to be a consideration for future ratings. It is essential that we protect our tax base and our financial standing by continuing to adapt and remain committed to our resilience policies, programs, and operations. Both credit rating reports are attached for your review and highlights are provided below.

Standard and Poors

S&P Global Ratings has assigned its "AA+" long-term rating to the City's 2019 general obligation bonds and affirmed its "AA+" long-term rating on the City's G.O. bonds outstanding.

The "AA+" rating reflects the following:

- Very strong economy
- Very strong management
- Strong budgetary performance
- Very strong budgetary flexibility
- Very strong liquidity

Please note that in the attached report, S&P mentions that "in our view, the city maintains among the most robust plans attempting to address [*climate change*] risks that we've reviewed for U.S. local governments." The report goes on to state that "while the City's efforts in this area are substantial, the economic risks to the city from climate change have the potential to be significant…however, we acknowledge the city's substantial actions to address these risks and will continue to monitor and report changes to credit quality as our opinion and understanding of climate-related and 'tail' risks such as major storms evolves."

The stable outlook reflects S&P's view of Miami Beach's very strong economy, along with its very strong flexibility and liquidity positions. The City's financial position is further supported by its proactive financial management practices and policies. S&P's rating could be raised if the City's debt and liability position moderates and if the City continues to build and maintain its reserve position given its exposure to climate-related events. S&P could lower the rating if the City experiences budgetary pressure leading to weakened reserve and liquidity positions or if exogenous risks materialize, leading to a significantly weakened economy and financial position.

Moody's
Moody's has assigned its "Aa2" long-term rating to the City's 2019 general obligation bonds and affirmed its "Aa2 long-term rating on the City's G.O. bonds outstanding.

The "Aa2" rating reflects the following:

- Large and growing tax base
- Very strong cash position
- Strong tourism reliant economy
- Conservative budgeting
- High institutional framework score

Please note that in the attached report, Moody's mentions that "management has invested substantially in raising sidewalks and streets and stormwater and water and sewer infrastructure…Management includes sea level rise assumptions in all capital planning and will continue to invest in climate change mitigation."

The stable outlook reflects Moody's view of the City's ongoing tax base growth which is expected to continue and which will yield a stable financial position in the near term. Additionally, Moody's is of the opinion that management continues to manage the above average debt and pension burden and exposure to sea level rise. Moody's rating could be raised if there is a significant improvement in reserves and reduced debt and pension burdens. Moody's could lower the rating if there are declines in cash and fund balances and increases in debt and pension burden.

Ratings Summary

Bonds	*Prior Rating*		*New Rating*	
New G.O. Bonds	S&P: N/A	Moody's: N/A	S&P: AA+	Moody's: Aa2
Existing G.O. Bonds	S&P: AA+	Moody's: Aa2	S&P: AA+	Moody's: Aa2

On the next page you will find a bond rating scale with descriptions. If you have any questions or need additional information, please contact John Woodruff, Chief Financial Officer.

Attachments
S&P Ratings Report
Moody's Ratings Report

JLM/JW

Bond Rating Scale

S&P	Moody's	Rating Description	
AAA	Aaa	Prime	Investment-grade
AA+	Aa1	High grade	
AA	Aa2		
AA−	Aa3		
A+	A1	Upper medium grade	
A	A2		
A−	A3		
BBB+	Baa1	Lower medium grade	
BBB	Baa2		
BBB−	Baa3		
BB+	Ba1	Non-investment grade speculative	Non-investment grade AKA high-yield bonds AKA junk bonds
BB	Ba2		
BB−	Ba3		
B+	B1	Highly speculative	
B	B2		
B−	B3		
CCC+	Caa1	Substantial risks	
CCC	Caa2	Extremely speculative	
CCC−	Caa3	Default imminent with little prospect for recovery	
CC	Ca		
C			
D	C	In default	
	/		

S&P Global
Ratings

RatingsDirect®

Summary:
Miami Beach; General Obligation

Primary Credit Analyst:
Randy T Layman, Centennial + 1 (303) 721 4109; randy.layman@spglobal.com

Secondary Contact:
Andy A Hobbs, Dallas + 1 (972) 367 3345; Andy.Hobbs@spglobal.com

Table Of Contents

Summary:

Miami Beach; General Obligation

Credit Profile		
US$132.725 mil GO bnds ser 2019 dtd 05/07/2019 due 05/01/2049		
Long Term Rating	AA+/Stable	New
US$23.3 mil rfdg bnds dtd 05/07/2019 due 05/01/2039		
Long Term Rating	AA+/Stable	New
Miami Beach GO		
Long Term Rating	AA+/Stable	Affirmed
Miami Beach GO		
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed

Many issues are enhanced by bond insurance.

Rationale

S&P Global Ratings assigned its 'AA+' long-term rating to the City of Miami Beach's 2019 general obligation (GO) bonds. At the same time, S&P Global Ratings affirmed its 'AA+' long-term rating on the city's GO bonds outstanding. The outlook is stable.

The city's GO bonds are secured by its full faith and credit, including its ability to levy ad valorem property taxes without limitations as to rate or amount.

The new money portion of the 2019 GO bonds was issued pursuant to a 2018 referenda authorizing the issuance of $439 million in GO bonds. The 2019 bonds, with a preliminary par amount of $132.7 million and proceeds of $153.0 million, represent the first tranche under this authorization. With the proceeds the city plans to finance approximately $87.7 million in parks, recreational, and cultural facility capital projects, $36.9 million for public safety capital projects, and $28.4 million for neighborhood and infrastructure projects. The refunding portion of the bonds will refinance the city's 2003 GO bonds for debt service savings.

In our view, the city's position as an internationally renowned destination supports its robust economy and real estate market, which has exhibited a high degree of historical growth and resilience despite being centered on what is traditionally a relatively volatile industry. Continued interest in the city supports this position. The city's property wealth and high incomes translate into a strong tax base that has supported a healthy reserve and liquidity position. The city does face challenges from ongoing capital needs, including capital planning to address climate-related risks, contributing to its large debt and liability position. However, in our opinion, the city's economic strength, financial flexibility, and proactive management team serve to mitigate these challenges.

The 'AA+' long-term rating reflects our view of the city's:

- Very strong economy, with access to a broad and diverse metropolitan statistical area;

- Very strong management, with strong financial policies and practices under our financial management assessment methodology;
- Strong budgetary performance, with operating surpluses in the general fund and at the total governmental fund level in fiscal 2018;
- Very strong budgetary flexibility, with an available fund balance in fiscal 2018 of 21% of operating expenditures, and the flexibility to raise additional revenue despite statewide tax caps;
- Very strong liquidity, with total government available cash at 141.3% of total governmental fund expenditures and 14x governmental debt service, and access to external liquidity we consider exceptional;
- Very weak debt and contingent liability position, with debt service carrying charges at 10.1% of expenditures and net direct debt that is 139.7% of total governmental fund revenue, and a large pension and other postemployment benefit (OPEB) obligation and the lack of a plan to sufficiently address the obligation, but low overall net debt at less than 3.0% of market value; and
- Strong institutional framework score.

Very strong economy

We consider Miami Beach's economy very strong. The city, with an estimated population of 93,323, is located in Miami-Dade County in the Miami-Fort Lauderdale-West Palm Beach metropolitan statistical area, which we consider broad and diverse. The city has a projected per capita effective buying income of 157% of the national level and per capita market value of $550,321. Overall, the city's market value grew by 1.9% to $51.4 billion in 2018. The county unemployment rate was 3.9%.

Miami Beach, located along the Atlantic Ocean on a barrier island immediately to the east of the City of Miami, is a globally recognized tourism and cultural destination and is home to some of the nation's most expensive real estate. While the city's permanent population is slightly over 90,000, the city estimates it attracts over 10 million visitors annually. The city's economy is centered on the hospitality and tourism industries, which provide significant revenue for the city through its resort tax. The hotel industry continues to record gains in key metrics such as revenue per available room (11.8% in 2018) and annual occupancy levels around 80%, near historic highs. A significant portion of the city's visitors originate in the greater Miami area, providing some measure of stability to the variability of destination travelers. While the city's economy depends heavily on the tourism industry, it has experienced recent growth in professional service sectors, attracting employment in several tech firms and finance and insurance.

For a city of its size, Miami Beach annually hosts a large number of major conferences prestigious events. Its relative attractiveness in this space is strengthened by the recently complete renovation of its convention center and ongoing plans to expand the convention center hotel.

Property values in the city declined 17.4% during the latest recession, a fraction of the state average, reflecting the attractiveness of its real estate market. After a low of $24.1 billion in 2010, market values rose over 110% to $51.4 billion in 2018. Out-of-state and international investors partly support the real estate market. Building permit activity in the city remains strong, with permit values in 2018 near the 10-year average of $627 million. Coming out of the latest recession, the city experienced only a modest decline in overnight visitor numbers while maintaining an upward trajectory. While the city's revenue would likely stall during another economic downturn, we would anticipate that the effects would be relatively muted compared with those for other local economies centered on tourism given the city's international renown.

Furthermore, development activity and commercial interest in the city remain strong despite headline risks from issues such as climate change. The city has instituted a number of policy changes--including stricter land use codes for items such as building ground and seawall elevation, government infrastructure projects, and long-term planning priorities--in an attempt to mitigate the risks associated with climate change. Management reports that the development community has embraced these changes, and this is reflected in continued real estate development throughout the city. It is our understanding that the insurance premium increases to compensate for climate and weather risks have started to take hold throughout the area and Florida in general. This may deter future development and net migration, but, to date, these risks have not had a significant impact on activity in Miami Beach or the state as a whole. We will continue to monitor headline risks, including climate-related risks, affecting the state and the local economy. However, we anticipate that our view of the city's economy will remain very strong over at least the medium term.

Very strong management

We view the city's management as very strong, with strong financial policies and practices under our financial management assessment methodology, indicating our view that financial practices are strong, well embedded, and likely sustainable.

The city maintains a robust budgetary process, with revenue determined using historical trend analysis and forecasting techniques and expenditures based on contractual obligations and conformity with the city's capital plans. A formal financial report detailing year-to-date information and year-end projections are provided to the city commission quarterly. The city maintains a formalized general fund financial plan, which details assumptions and provides revenue and expenditure forecasts over a five-year period under a variety of scenarios. The city annually adopts a detailed, five-year capital improvement plan listing projects, funding sources, and departmental responsibility. The city maintains a formalized investment and cash management policy, placing restrictions on items such as security types, investment credit quality and maturity, the use of alternative investments, and reporting. Formalized investment reports are provided at least quarterly. The city carries a reserve policy requiring it to maintain an emergency reserve of at least 11% of the ensuing year's budget and a contingency reserve of at least 6%. The city's debt issuance policy limits GO debt to 15% of assessed value, but does not include other significant limitations beyond state statutes. Additionally, the city maintains a formalized reserve policy for its resort tax fund requiring the fund maintain reserves equal to six months of resort tax revenue (recently increased from two months) for contingency purposes. The city is working toward meeting this goal, with reserves equal to approximately three months as of fiscal year-end 2018.

To address immediate and long-term climate and weather-related risks, to which the city maintains significant exposure given its location on a barrier island in the southeast of the state, the city has undertaken a substantial strategic and capital initiative. The city has already implemented a number of policies and commenced infrastructure projects directly related to climate adaption and mitigation--with an effort to reduce risk relating to sea level rise, general flooding, storm surges, and the potential for an increased frequency of major storms--widely predicted to occur as the ocean's average temperature warms. In our view, the city maintains among the most robust plans attempting to address these risks that we've reviewed for U.S. local governments. The city's robust strategic planning began in 2005 and has evolved to include a focus on robust stormwater planning in 2012-2013 and broader resilience planning in 2015. Some significant actions the city has taken thus far to address these risks include:

- Raising the elevation of roads in the city's lowest elevation areas, particularly in the western part of the city along Biscayne Bay
- Improving the pipe and pumping capacity of the city's stormwater system, partly financed with the city's 2017 stormwater bonds, including 27 pumps installed or retrofitted thus far (with plans to address 80)
- Working with other regional governments and the state to surveil and enhance coastal dunes, beaches, and dune vegetation, which provide natural defenses against storm surges and high-tide flooding
- Changing land use codes to require new homes to be built several feet higher than Federal Emergency Management Agency requirements, increase ground elevation requirements, and increase seawall elevation requirements, among other changes
- Selected by Rockefeller Foundation's 100 Resilient Cities initiative to stay on the forefront of new information and policies designed to address climate risk
- Incorporating a significant amount of resilience-related projects into its capital plan, including projects to be financed with the city's GO bond authorization, enterprise bonds, and pay-as-you-go spending

While the city's efforts in this area are substantial, the economic risks to the city from climate change have the potential to be significant, as highlighted by a number of peer-reviewed scientific analyses and independent organizations. However, we acknowledge the city's substantial actions to address these risks and will continue to monitor and report changes to credit quality as our opinion and understanding of climate-related and "tail" risks such as major storms evolves.

Strong budgetary performance

Miami Beach's budgetary performance is strong, in our opinion. The city had operating surpluses of 4.9% of expenditures in the general fund and of 5.9% across all governmental funds in fiscal 2018.

Our analysis of the city's operational performance is adjusted to include regularly occurring transfers (primarily transfers into the general fund from the resort tax fund and transfers out for debt service and pay-as-you-go capital) and to remove expenditures financed from one-time resources such as debt proceeds. The city has realized positive results in its general fund in all but two years since fiscal 2010, reflecting the city's strong revenue base and conservative budgeting practices. Fiscal 2018 resulted in an increase to fund balance of $17.3 million, relative to a budgeted use of $6.5 million in reserves, and despite incurring expenditures related to Hurricane Irma (approximately $3.8 million accounted for in the general fund, most of which is anticipated to be reimbursed by FEMA).

The 2019 budget represents a 4.5% increase over the 2018 budget, primarily representing increases to personnel costs. The budget includes the use of approximately $1.0 million in unrestricted fund balance, though first-quarter projections from the city point to a general fund surplus of $1.6 million. We find the projection reasonable given the city's history of outperforming budgets. We note that the city's utility funds remain healthy while we factor in recent debt issuances, proceeds from which partly went to financing projects to mitigate climate-related risks. Operating challenges for the general fund include keeping up with personnel cost pressures associated with the city's collective bargaining agreements, with negotiations ongoing with four of the city's five bargaining units, and continuing to fund required pension and OPEB contributions. However, with positive results anticipated for 2019 and the city's track record of realizing balanced-to-surplus results, we anticipate that our view of the city's budgetary performance will remain strong-to-adequate.

Very strong budgetary flexibility

Miami Beach's budgetary flexibility is very strong, in our view, with an available fund balance in fiscal 2018 of 21% of operating expenditures, or $67.8 million. In addition, the city has the flexibility to raise additional revenue despite statewide tax caps, which we view as a positive credit factor.

The city's general fund reserves include its unassigned balance and reserves committed for emergency purposes per its formalized reserve policies. The city also maintains contingency reserves of $14.2 million in its resort tax fund, in accordance with that fund's reserve policy. The city's operating tax rate of 5.88 mills is below the state maximum of 10 mills, and we believe that this provides substantial flexibility and revenue-raising capacity given that property is assessed at market values in Florida. We view the revenue-raising capacity as having the potential to offset salary and fixed cost increases. The city recently dedicated 0.0755 mills from its operating rate toward pay-as-you-go capital projects. With the city's GO debt program, the city estimates it will raise the debt service rate by approximately 0.8 to 0.9 mills over the life of the program. Given positive results anticipated for fiscal 2019, we anticipate that the city's budgetary flexibility will remain very strong.

Very strong liquidity

In our opinion, Miami Beach's liquidity is very strong, with total government available cash at 141.3% of total governmental fund expenditures and 14x governmental debt service in 2018.

Based on the city's frequent access to the capital markets and history of debt issuances across a variety of security pledges, we believe it has exceptional access to external liquidity. In our view, the city's operating investment portfolio does not constitute an aggressive use of investments that could lead to significant variability in the city's liquidity position. The majority of the city's operating investments are held in the state's short-term investment pool, followed by U.S. agency and Treasury securities. The city maintains a line of credit (though no outstanding draws) and a loan that contain events of default we deem permissive and acceleration as a remedy, though we do not view these obligations as posing significant contingent liquidity risks to the city primarily given their small size relative to the city's overall liquidity position. We anticipate that our view of the city's liquidity position will remain very strong.

Very weak debt and contingent liability profile

In our view, Miami Beach's debt and contingent liability profile is very weak. Total governmental fund debt service is 10.1% of total governmental fund expenditures, and net direct debt is 139.7% of total governmental fund revenue. Overall net debt is low at 2.7% of market value, which is, in our view, a positive credit factor.

Following the 2019 GO issuance, the city will have approximately $286 million in remaining GO debt authorization. The city plans to issue the second tranche, equal to $100 million, in 2022. The city has plans to issue approximately $50 million in water/sewer-backed debt in 2021 and $100 million in stormwater-backed debt in 2022 per its 2017 financial feasibility studies, though no legal authorization is yet in place for these amounts.

In our opinion, a credit weakness is Miami Beach's large pension and OPEB obligation. Miami Beach's pension and actual OPEB contributions totaled 17.3% of total governmental fund expenditures in 2018, with 14.6% representing required contributions to pension obligations and 2.7% representing OPEB payments. The city made its full annual required pension contribution. The funded ratio of the largest pension plan is 74.4%.

The city maintains two single-employer defined benefit plans: the Miami Beach Employees' Retirement Plan (MBERP) and the Retirement System for Firefighters and Police Officers Plan (MBF&P). Although the funded status of the plans has improved in recent years, we view the carrying charges as outsized relative to the budget and similarly rated credits, and we view a number of assumptions associated with the plans as aggressive. In particular, we view the plans' discount rates as comparatively high at 7.85% and 7.65%, though they have come down from around 8%. Poor performance relative to the discount rate has the potential to lead to a lower funded status and higher annual contributions. Additionally, the MBF&P maintains level percent contributions with a 30-year amortization schedule, which we understand pushes contributions into future years. MBF&P maintains an unfunded liability of $301 million and a funded ratio of 74.4% based on the latest measurement date. The MBERP maintains an unfunded liability of $217 million and a funded ratio of 73.9%.

The city's OPEB plan provides a monthly premium subsidy for eligible retirees and allows retirees to participate in the city's group health care plan. We understand the city has made modest progress toward funding a trust for the plan, which is 18.7% funded, but the plan remains substantially funded on a pay-as-you-go basis, exposing the city to ongoing health care cost pressures. Although the presence of the trust is positive relative to the majority of the peers we rate, we believe the unfunded liability with the plan remains substantial at $149.7 million.

Strong institutional framework

The institutional framework score for Florida municipalities with revenue or expenditures greater than $250,000 is strong.

Outlook

The stable outlook reflects our view of Miami Beach's very strong economy, along with its very strong flexibility and liquidity positions. The city's financial position is further supported by its proactive financial management practices and policies. Thus, we do not anticipate changing the rating over the two-year outlook horizon.

Upside scenario

All else equal, we could raise the rating if the city's debt and liability position moderates, and if the city continues to build and maintain its reserve position given its exposure to climate-related events.

Downside scenario

All else equal, we could lower the rating if the city experiences budgetary pressure leading to weakened reserve and liquidity positions or if exogenous risks materialize, leading to a significantly weakened economy and financial position.

Related Research

- Alternative Financing: Disclosure Is Critical To Credit Analysis In Public Finance, Feb. 18, 2014
- S&P Public Finance Local GO Criteria: How We Adjust Data For Analytic Consistency, Sept. 12, 2013
- Incorporating GASB 67 And 68: Evaluating Pension/OPEB Obligations Under Standard & Poor's U.S. Local Government GO Criteria, Sept. 2, 2015
- 2018 Update Of Institutional Framework For U.S. Local Governments

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
4 April 2019

Rate this Research

Miami Beach (City of) FL

Update to credit analysis

Contacts

Valentina Gomez +1.212.553.4861
AVP-Analyst
valentina.gomez@moodys.com

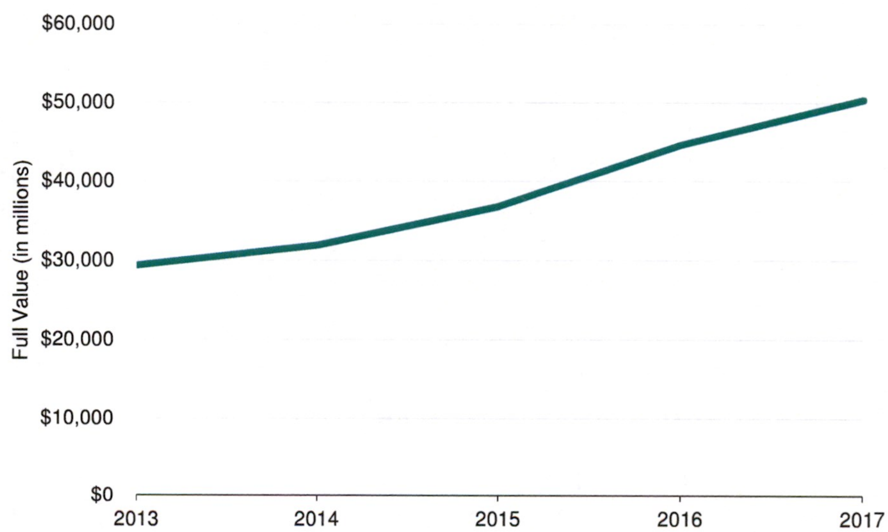
Tiphany Lee-Allen +1.212.553.4772
AVP-Analyst
tiphany.lee-allen@moodys.com

Summary

Miami Beach, FL (Aa2 stable) will continue to benefit from tourism and development in its large and growing tax base with above average wealth levels. However, the city, located on a barrier island across Biscayne Bay from Miami, FL, (Aa2 stable) is very susceptible to sea level rise and flooding. The city will continue to benefit from a strong financial position although this is partially offset by the city's high fixed cost burden.

On March 29, we assigned a Aa2 and stable outlook to the city's 2019 General Obligation bonds.

Exhibit 1
Tax base growth remains strong



Source: Audited Financial Statements

Credit strengths

» Large and growing tax base

» Very strong cash position

Credit challenges

» City is a barrier island susceptible to rising sea levels

» Above average fixed cost burden

Rating outlook

The stable outlook reflects the city's ongoing tax base growth which we expect to continue and which will yield a stable financial position in the near term. Additionally, management continues to manage the above average debt and pension burden and exposure to sea level rise.

Factors that could lead to an upgrade

» Reduced debt and pension burdens

» Significant improvement in reserves

Factors that could lead to a downgrade

» Declines in cash and fund balances

» Increases in debt and pension burden

Key indicators

Exhibit 2

Miami Beach (City of) FL	2013	2014	2015	2016	2017
Economy/Tax Base					
Total Full Value ($000)	$29,333,335	$31,944,197	$36,866,082	$44,648,127	$50,376,994
Population	89,412	90,669	91,564	91,784	92,187
Full Value Per Capita	$328,069	$352,317	$402,626	$486,448	$546,465
Median Family Income (% of US Median)	82.4%	83.3%	88.6%	91.3%	92.7%
Finances					
Operating Revenue ($000)	$326,616	$339,974	$377,116	$403,716	$433,765
Fund Balance ($000)	$70,270	$70,377	$74,930	$93,119	$78,891
Cash Balance ($000)	$156,497	$150,727	$185,010	$225,393	$240,864
Fund Balance as a % of Revenues	21.5%	20.7%	19.9%	23.1%	18.2%
Cash Balance as a % of Revenues	47.9%	44.3%	49.1%	55.8%	55.5%
Debt/Pensions					
Net Direct Debt ($000)	$197,066	$182,530	$164,283	$607,384	$590,214
3-Year Average of Moody's ANPL ($000)	$1,270,339	$1,322,307	$1,313,505	$1,292,835	$1,433,425
Net Direct Debt / Full Value (%)	0.7%	0.6%	0.4%	1.4%	1.2%
Net Direct Debt / Operating Revenues (x)	0.6x	0.5x	0.4x	1.5x	1.4x
Moody's - adjusted Net Pension Liability (3-yr average) to Full Value (%)	4.3%	4.1%	3.6%	2.9%	2.8%
Moody's - adjusted Net Pension Liability (3-yr average) to Revenues (x)	3.9x	3.9x	3.5x	3.2x	3.3x

Source: Audited Financial Statements, Moody's Investors Service

Profile

Miami Beach, FL is located on barrier islands across the Biscayne Bay from the City of Miami, FL. The 2018 estimated population is 93,323.

Detailed credit considerations

Economy and tax base: Strong, tourism reliant economy with significant exposure to sea level rise

The city of Miami Beach is located on a barrier island across the bay from Miami and is a tourism and retail hub in south Florida (Aaa stable). Full value of $51.4 billion greatly exceeds the median of $2.9 billion for similarly-rated issuers. Assessed value increased 7.8% in 2018 to $37.4 billion and values have increased an average of 10.1% each of the last five years. Full value per capita is a very strong $557,103, reflecting the large commercial and hotel presence as well as the significant amount of very high-end real estate. However, median family income is below the median of similarly-rated issuers at 92.7% of the US median, reflecting the significant retiree population.

The city is heavily reliant on tourism and is the most popular destination in the county. The city reports more than 23,000 hotel rooms with revenue per available room up 11.8% in fiscal 2018, the average daily rate up 9.0%, and occupancy up 2.6%. The convention center renovation was substantially completed in September 2018 which should spur more tourism and convention visitors in 2019 and beyond. Additionally, in November 2018 voters approved the construction of a hotel connected to the convention center. The city will lease land to the hotel operator and will not contribute financially to construction. Management believes that having a hotel at the convention center will make the convention center more competitive compared to peers.

The city's location on a barrier island makes it particularly susceptible to flood and storm surge risk. Management has invested substantially in raising sidewalks and streets and stormwater and water and sewer infrastructure. City management participates in the 100 Resilient Cities network and is a Steering Committee member of the South Florida Climate Compact. According to management the city's infrastructure performed well during and after Hurricane Irma. Management includes sea level rise assumptions in all capital planning and will continue to invest in climate change mitigation.

Financial operations and reserves: Conservative budgeting drives recent surpluses and strong liquidity

Management is conservative and has run operating surpluses in each of the last five years, largely due to its strong economy and assessed value appreciation. In fiscal 2017, available operating fund balance was $78.9 million or 18.2% of operating revenues, below the median for similarly-rated issuers. Recent surplus have been driven by strong revenue growth and cost containment. Unaudited 2018 results include a $11 million surplus in the General fund and a $5.5 million surplus in the Resort Tax fund.

The 2019 budget included a $1.7 million General fund appropriation including $1.1 million for one-time expenditures. Through the first quarter of fiscal 2019, management projects a $1.6 million surplus.

LIQUIDITY

The city ended fiscal 2017 with $240.9 million in cash or a very strong 55.5% of operating revenue, well above the median of 36.7% for similarly-rated issuers.

Debt and pensions: Above average fixed cost burden

The city's debt burden is expected to remain somewhat elevated given ongoing investment related to climate mitigation. The city's net direct debt burden of 1.4% is above average compared to the median of 1.1% for similarly-rated issuers. After this issuance, the city will have $167.4 million in general obligation debt outstanding with another $286 million authorized by voters and expected to be issued in three tranches (2022, 2025, and 2028). The remaining general government debt includes $184.6 million in resort tax supported debt and $308.9 million in tax increment supported debt. The city had $25 and $66.3 million in cash in the resort tax and tax increment funds, respectively.

DEBT STRUCTURE

The city's debt is all fixed rate.

DEBT-RELATED DERIVATIVES

The city does not have any exposure to derivatives.

PENSIONS AND OPEB

The city maintains two single-employer, defined benefit pension plans: Miami Beach Employees Retirement Plan (MBERP) and Retirement System for Firefighters and Police Officers (MBF&P). In fiscal 2017, the three-year (2015-2017) average annual net pension liability was $1.4 billion or an above average 2.9 times full value. Moody's uses the adjusted net pension liability to improve comparability of reported pension liabilities. The adjustments are not intended to replace the city's reported liability information, but to improve comparability with other rated entities. We determined the city's share of liability for the state-run plans in proportion to its contributions to the plans.

The city maintains an OPEB trust which had a balance of $34.4 million at the end of fiscal 2018, compared to the city's unfunded OPEB liability of $149.7 million. Total fixed costs (debt service, pension and OPEB) in fiscal 2017 totaled an above average 28.4% of operating revenues.

Management and governance: Management maintains strong policies

Management is relatively conservative as evidenced by recent surpluses. Management also maintains many financial policies including an emergency reserve of 11% fund balance in the General fund plus an additional 6% for contingencies. Management also recently increased the fund balance policy for the resort tax fund from three months to six months of reserves.

Florida cities have an Institutional Framework score of Aa, which is high compared to the nation. Institutional Framework scores measure a sector's legal ability to increase revenues and decrease expenditures. The sector's major revenue source, property taxes, are subject to a cap of 10 mills, which cannot be overriden. However, most cities are well below the cap which allows for significant revenue-raising ability. Unpredictable revenue fluctuations tend to be moderate, or between 5-10% annually.

REPORT NUMBER 1167868

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

MOODY'S
INVESTORS SERVICE