

CREDIT OPINION

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New Issue

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Greater Orlando Aviation Authority, FL

New Issue - Moody's assigns Aa3 to Greater Orlando Aviation Authority's (FL) Series 2016 A, B, and C

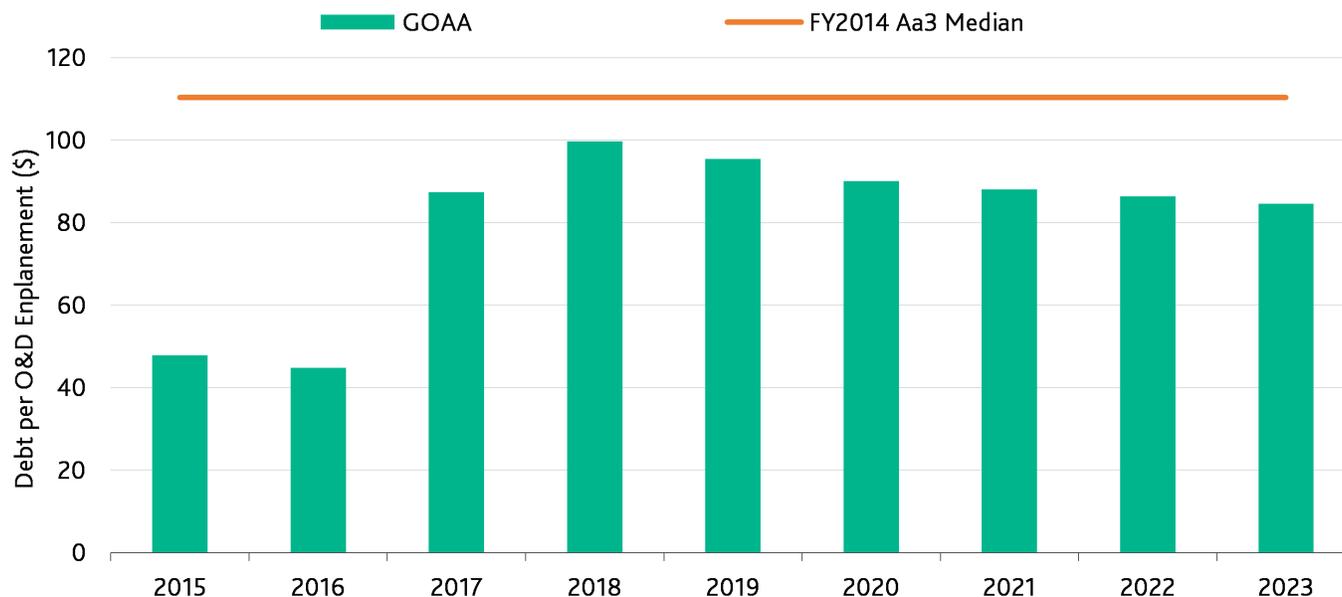
Summary Rating Rationale

Moody's Investors Service has assigned an Aa3 rating to the Greater Orlando Aviation Authority's (FL) (GOAA) Senior Lien Airport Facilities Revenue Bonds Series 2016A (AMT) and Senior Lien Airport Facilities Revenue Bonds, Series 2016B (Non-AMT), together estimated at approximately \$196 million, and \$40 million Senior Lien Airport Facilities Taxable Refunding Revenue Bonds, Series 2016C. The exact allocation between the 2016A and 2016B series will be determined at the time of sale. The outlook is stable.

The Aa3 rating on the outstanding senior lien obligations reflects the airport's near monopoly position for air travel into a world-class travel destination that continues to see economic growth and diversification away from the tourism industry. The A1 rating on the subordinate bonds reflects the subordinated nature of payment to existing senior lien obligations, weaker structural protections, and the authority's plan to maintain subordinate lien bonds balances well below that of senior lien bonds. Our ratings incorporate the authority's large \$3.0 billion capital plan that is expected to ramp up significantly over the next two years. While the size of the capital plan is large, financial metrics are expected to remain strong due to the existing low leverage and declining annual debt service requirements on existing debt that allows for a reduced impact on airline costs compared similarly sized projects at other large hub airports.

Exhibit 1

GOAA's leverage is projected to remain below current median levels throughout its large capital plan



Source: Moody's Investors Service, Greater Orlando Aviation Authority

Credit Strengths

- » Service area is one of the premier tourism destinations in the country and the economy is becoming increasingly diverse
- » Carrier base is diversified and serves a market with historically strong enplanement growth and low airline cost per enplanement; Southwest retains the greatest market share at 27%
- » Leverage metrics remain below large hub medians, though expected to increase with coming capital projects

Credit Challenges

- » Heavy reliance on somewhat economically sensitive discretionary traffic
- » Terminal capacity constraints are a long-term customer service concern and will result in moderate leverage increase in the medium to long-term
- » Airport's move to rate setting by resolution with short term revenue share agreements with the airlines provides weaker security than the previous airline agreement that allowed for extraordinary coverage protection
- » Construction risk associated with the South Terminal Complex

Rating Outlook

The stable outlook is based on our expectation that the US economy will continue to grow, supporting the tourism industry, that the authority will successfully implement the capital plan without significant cost increases or delays, and that the airport's rates will not be challenged after the expiration of the current revenue sharing agreement later this year.

Factors that Could Lead to an Upgrade

- » Enplanement growth above 2.5% on a sustained basis

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- » Net revenue debt service coverage above 2.5 times after the full amortization of expected debt

Factors that Could Lead to a Downgrade

- » Capital plan results in substantial increases in debt above currently projected levels in the mid-term
- » Leverage exceeding \$200 debt per O&D passenger
- » Net revenue debt service coverage below 1.2 times
- » Sustained enplanement stagnation or declines

Key Indicators

Exhibit 2

GREATER ORLANDO AVIATION AUTHORITY, FL					
	2011	2012	2013	2014	2015
Enplanement Annual Growth (%)	3.7	-0.2	-1.7	0.6	7.4
Debt Outstanding (\$'000)	1,236,947	1,151,425	1,113,023	989,120	984,630
Debt to Operating Revenues (x)	3.3	3.0	2.9	2.4	2.3
Debt Per O&D Enplaned Passenger (\$)	62	57	56	52	48
Days Cash on Hand ('000)	511	624	731	732	790
Senior Lien Coverage By Net Revenues (x)	1.58	1.57	1.13	1.40	1.34
Total Coverage By Net Revenues (x)	1.44	1.48	1.08	1.31	1.27

Source: Moody's Investors Service Municipal Financial Ratio Analysis Database

Recent Developments

Enplanements at MCO have increased 10.5% for the first 9 months of FY16, with an increase of 9.8% and 15.9% in domestic and international enplanements, respectively.

We anticipate GOAA will issue new money bonds in April 2017, and October 2017, 2018, and 2019 to finance portions of the authority's 2016 – 2023 \$3.0 billion capital plan.

Detailed Rating Considerations

Revenue Generating Base

MCO is the primary commercial service airport serving the Orlando-Deltona-Daytona Beach, FL combined statistical area. The Orlando CSA has experienced population growth nearly three times greater than the US as a whole of the past three years. Moody's Analytics projects net-migration into Orlando to increase further to around 3% each year over the next five years. The Orlando economy is exposed to the volatile tourism industry, with a number of world-class theme parks creating leisure and hospitality jobs at a rate that will exceed the national and state averages. In addition to tourism growth, the regional economy's diversification appears sustainable with a number of quality healthcare institutions, the University of Central Florida and a growing technology presence.

The airport has maintained its dominant market position in the Central Florida region, with slight competition from smaller airports having minimal effect on demand for air service. The only other airport in the service area is Orlando Sanford International Airport (SFB), about 30 miles north of MCO. SFB is a small-hub airport and has a 3% share of the international enplanements to the Orlando MSA, its lowest share historically. For domestic commercial service, SFB is dominated by low cost carrier Allegiant for its roughly 2 million passenger per year. Tampa International Airport (Hillsborough County Aviation Authority, FL, Aa3 stable) presents a small amount of competition in the central Florida market as it is about 80 miles west or 1.5 hours driving distance from MCO. However, we do not expect the market position of the airport to deteriorate as a result of competition.

Enplanements at MCO increased 7.4% percent to 18.8 million in FY2015 from 17.5 million in FY2014. The high growth follows a period of four years of nearly flat growth. The airport's carrier mix is well diversified. Southwest remains the primary carrier at the airport

representing 27% of enplanements in FY2015, down slightly from its 28% market share in FY2014. Currently, thirty-three airlines provide commercial air service and four major domestic carriers all have market shares above 10% despite the expanding presence of foreign flag carriers. The airport continues to introduce international flights as it has added or will add service to Dubai, Sao Paulo, Reykjavik, Lima and Brasilia.

Operational and Financial Performance

The financial position of the authority has improved while transitioning to the rates by ordinance methodology for airline costs in the presence of strong enplanement growth. Operating revenues increased 8% to \$428 million in FY2015 from \$396 million in FY2014. Operating expenses excluding depreciation increased 12.5% to \$238 million versus the previous fiscal year.

Total debt service coverage ratio (DSCR) as calculated by Moody's on a net revenue basis decreased to 1.27 times in FY2014 from 1.31 times in FY2014. However, the decrease in coverage was largely driven by an increase in airline revenue share to \$61 million from \$52 million. DSCR before revenue share increased to 1.81 times in FY2015 from 1.79 times in FY2014. On a bond ordinance basis, debt service coverage also increased to 2.02 times from 1.93 times in the previous fiscal year.

Cost per enplanement remained well below-median for large hub airports at \$4.50 in FY2015, a slight decrease from \$4.59 in FY2014. Costs to airlines are projected to increase and financial margins are expected to get slimmer as the authority proceeds through its large capital plan. The risk inherent in any large capital program is exacerbated by MCO's rates by ordinance agreement with the airlines, which provides little downside protection for financial metrics if an airline decides to depart the market or significantly reduce service.

LIQUIDITY

Liquidity increased to 790 days cash on hand in FY2015 from 732 days in FY2014. It was the fourth consecutive annual increase as the authority seeks to build cash balances to fund the 2023 capital plan. Based on projections provided by the airline consultant with the Series 2015A bonds, Moody's expects liquidity remain near or above current levels throughout the capital plan based on current enplanement projections.

Debt and Other Liabilities

The authority's FY2016-2023 \$3.0 billion capital improvement program (CIP) is both demand-driven and modular and incorporates the new South Terminal Complex (STC). Almost 55% of the CIP will be funded through GARBs, some of which will have PFC-revenue backing, and the remaining funds will come from PFC pay-go, internal funds, AIP and Non-AIP grants. The authority plans to issue new debt every year over the next five years.

The CIP focuses on expanding capacity of the North Terminal Complex (NTC) to accommodate the expected growth over the next several years. Projects at the NTC are scheduled to cost \$584 million and include modifications to the ticketing areas, an expansion of Airside 4, and improvements to the existing automated people movers (APMs) in Airsides 1 and 3. The CIP additionally allocates \$427 million to the South APM Complex, which will increase curbside capacity at the NTC. The South APM Complex will support multi-modal travel connections of the future STC including stations for the South APM, future passenger train service to Miami, and local commuter rail service. The South APM Complex also includes a ground transportation facility of 2,500 parking spaces. The project is already under construction using a guaranteed maximum price contract with Hensel-Phelps and is on schedule and under budget.

Phase I of the STC has an estimated cost of \$1.8 billion and is anticipated to open in October 2019. Major projects include the construction of an 835,000 square-foot airside terminal building with 16 swing gates, an 809,000 square-foot landside terminal, apron, additional parking and rental car space, and roadway improvements. We note there is significant construction risk associated with the completion of the new terminal and the multitude of projects in the capital plan as well as coordinating interactions with numerous contractors. Additionally, the project is early in design, which could also lead to significant cost increases. However, we expect the authority be able to manage the capital plan by entering into contracts with experienced contractors that transfer most of the risk of cost overruns away from the authority and onto the contractors themselves. Substantial delays in the construction schedule or significant cost increases that will not be covered by the contractors would place downward pressure on the rating.

DEBT STRUCTURE

Post-issuance, the authority will have roughly \$1.108 billion in debt outstanding over two liens, a senior lien and a subordinate lien, and all of the debt is fixed rate. We reckon this structure will change markedly as the authority issues the debt planned for its capital projects. We expect debt service to increase to above \$215 million in 2020 and 2021 and will gradually decline in the subsequent years.

The declining debt service profile allows the authority to layer in the new debt associated with this debt issuance as well as debt for the South Terminal Complex.

Three letters of credit used for interim financing of capital projects will move to the secondary subordinate lien when the consent amendments become effective. Three letters of credit are in place; a \$200 million subordinate line of credit with Bank of America N.A. (A1(cr)) which expires April 1, 2017, a \$250 million subordinate line of credit with Wells Fargo Bank, N.A. (Aa1(cr)) which was recently extended and expires June 29, 2018, and a \$100 million subordinate line of credit with PNC Bank, N.A. (A1(cr)).

The Joint Participant Agreement with FDOT could introduce risk to bondholders in the event that rail tenants are unable to pay rates and charges as projected, however Moody's views these risks to effectively mitigated. The use of the agreement funds is partially used to provide infrastructure to the proposed All Aboard Florida (AAF) rail service to southern Florida, which will compete with airlines for travel between the market. GOAA believes that the airport revenues would be able to be used to pay debt service on the FDOT loan, but if airlines were successful in challenging this use of revenues, there would be no source of funds to pay the loan if AAF never operates at the airport. The indenture has been updated to provide that in the event the FAA does not allow airport revenues to pay debt service on the loan, the loan does not cross-default to other subordinate obligations and there is no acceleration.

DEBT-RELATED DERIVATIVES

None.

PENSIONS AND OPEB

The financial impact of unfunded pension and OPEB obligations of this issuer are minor and thus not currently a major factor in our assessment of its credit profile.

Management and Governance

Orlando International Airport is owned by the city of Orlando (Orlando (City of) FL, Aa1 stable) which has transferred custody, control, and management of the airport to GOAA through a transfer agreement for a term that will expire September 30, 2065. The authority also operates Orlando Executive Airport, a general aviation airport that does not constitute a part of the airport system and the revenues derived from the airport are not pledged to the bonds.

GOAA is governed by a seven-member board. Five of such members are appointed by the Governor of Florida, one member is the Mayor of the city of Orlando, and the final member is the Mayor of Orange County, FL. The gubernatorial appointed members serve four-year terms, while the elected government officials are elected to two-year terms. Board members may be reappointed but maximum consecutive service may not exceed eight years. The authority elects its own officers and appoints an Executive Director. The authority management serves at the pleasure of the Executive Director.

The authority set rates and charges to airlines on an ordinance basis via rate and revenue sharing agreements that run through September 30, 2016. A new agreement that will run through September 2019 is currently being executed and Moody's expect that all major airlines will sign. The landing fee rate is established according to a cost center residual methodology while apron use and terminal fees and charges are based on compensatory and commercial compensatory rate making methodologies, respectively. Additionally, airlines that have agreed not to challenge the terms of the rates by ordinance agreement are entitled to revenue sharing equal to all revenues less debt service and operating expenditures in excess of \$65 million at varying percentages and thresholds over three-year term. The airport consultant has assumed the new revenue sharing structure in the forecast period.

The airport's lack of airline agreement increases the risk that airlines could reduce service to the airport if the STC is deemed too costly. However, Moody's feels the strong O&D demand and the general lack of competition in the service area reduce the risk of large scale loss of enplanements and related revenues.

Legal Security

Senior lien bonds are secured by the net revenues of the authority including earnings on funds and investments. Portions of senior lien bonds are also supported by pledged passenger facility charge (PFC) collections at 125% of debt service requirements. The additional bonds test is both historical and forward-looking. Net revenues for any consecutive twelve month period of the thirty calendar months preceding the bond issuance must be equal to 1.25 times debt service. Additionally, projected net revenues must exceed 1.25 times for

the three years following expected project completion. GOAA's projections for paying debt service are based on collection of PFCs at the \$4.50 level. Debt service reserves are cash-funded at the standard IRS three-prong test.

Subordinate lien bonds are secured by a subordinate claim on net revenues of the authority and do not have a pledge of PFC collections. The additional bonds test is both historical and forward-looking. Net revenues for any consecutive twelve month period of the thirty calendar months preceding the bond issuance must be equal to 1.10 times debt service. Additionally, projected net revenues must exceed 1.10 times for the three years following expected project completion. Debt service reserves will be cash-funded at the standard IRS three-prong test.

On June 24, 2015, the authority approved amendments to the bond resolution, which was subsequently approved by both the city and the trustee on July 31, 2015. These amendments modernized some definitions in the bond resolution from 1978 and elevated subordinated indebtedness in the flow of funds above the O&M reserve, capex, R&R and discretionary funds.

There are additional amendments to the bond resolution that require bondholder consent. The authority anticipates receiving the requisite consent in FY2018. The revised additional bonds test is weaker than the previous one as it eliminates the need to satisfy both historic and prospective coverage test, allowing the authority to only satisfy one of those. The modified rate covenant will allow rolling coverage up to 25% of the 125% rate covenant. The amendments will also allow for PFCs to be excluded from revenue and applied directly to debt service, with only the remaining net debt utilized for the purposes of debt service coverage ratios. The subordinate lien will be split into a priority subordinate and secondary subordinate lien. Finally, the amendments will include new definitions for "Special Purpose Facilities" to allow the authority to pledge certain special facilities' revenues to specific owners or projects and designate whether or not special facilities' revenues will constitute part of the airport system. On whole, the effects of these changes are mildly negative and could result in lower net revenue debt service coverage as calculated by Moody's. However, the revised provisions are common at other US airports.

Other Considerations; Mapping to the Grid

The grid is a reference tool that can be used to approximate credit profiles in the toll road industry in most cases. However, the grid is a summary that does not include every rating consideration. Please see the Publicly Managed Airports and Related Issuers rating methodology for more information about the limitations inherent to grids.

Exhibit 3

Methodology Scorecard Factor Scoring

Regional Position:		National	
Rate Making Framework:		Compensatory	
Factor	Subfactor	Score	Metric
1. Market Position	a) Size of Service Area (millions)	Aa	3.13
	b) Economic Strength and Diversity of Service Area	A	
	c) Competition for Travel	Aa	
2. Service Offering	a) Total Enplanements (millions)	Aaa	18.8
	b) Stability of Traffic Performance	Aaa	
	c) Stability of Costs	Ba	
	d) Carrier base (Primary Carrier as % of Total Enplanements)	Aa	26.9
3. Leverage and Coverage	a) Debt Service Coverage by Net Revenues - Compensatory	Baa	1.27x
	b) Debt in USD per O&D Enplaned Passenger - National	Aaa	\$47.80
		Metric	Notch
4. Liquidity	Days Cash on Hand	790	+1.0
5. Connecting Traffic	O&D Traffic		0
6. Potential for Increased Leverage			-0.5
7. Debt Service Reserves			0
Scorecard Indicated Rating:		Aa3	

Source: Moody's Investors Service

Use of Proceeds

The Series 2016A and 2016B bonds will be used to fund the Airside 1 & 3 APMs, South APM Complex, and the Loop Road Overlay capital projects.

The proceeds of the Series 2016C bonds will be used to advance refund portions of existing senior lien bonds.

Obligor Profile

Greater Orlando Aviation Authority is primarily responsible for the operations of Orlando International Airport (MCO), which is owned by the City of Orlando. MCO is a large-hub origin and destination (O&D) airport in central Florida. The airport is nine miles southeast of downtown Orlando in Orange County, FL. The primary service area is then Orlando-Kissimmee MSA. The Orlando region is one of the primary tourism destinations in the world, with world class amusement parks and attractions, supplemented by a rapidly diversifying economy with a large healthcare presence and several universities. MCO facilities include four runways connecting to the North Terminal Complex with 93 gates and almost 20,000 parking spaces. The four airside terminal concourse was constructed in 1981 and is connected by automated people movers.

Methodology

The principal methodology used in these ratings was Publicly Managed Airports and Related Issuers published in November 2015. Please see the Ratings Methodologies page on www.moody.com for a copy of this methodology.

Ratings

Exhibit 4

Greater Orlando Aviation Authority, FL

Issue	Rating
Senior Lien Airport Facilities Revenue Bonds Series 2016A (AMT)	Aa3
Rating Type	Underlying LT
Sale Amount	\$85,000,000
Expected Sale Date	09/22/2016
Rating Description	Revenue: Government Enterprise
Senior Lien Airport Facilities Revenue Bonds, Series 2016B (Non-AMT)	Aa3
Rating Type	Underlying LT
Sale Amount	\$111,000,000
Expected Sale Date	09/22/2016
Rating Description	Revenue: Government Enterprise
Senior Lien Airport Facilities Taxable Refunding Revenue Bonds, Series 2016C	Aa3
Rating Type	Underlying LT
Sale Amount	\$40,000,000
Expected Sale Date	09/22/2016
Rating Description	Revenue: Government Enterprise

Source: Moody's Investors Service

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