

CREDIT OPINION

4 October 2017

Update

Rate this Research



Contacts

Tatiana Killen 312-706-9972

AVP-Analyst
tatiana.killen@moodys.com

Rachel Cortez 312-706-9956 VP-Sr Credit Officer/ Manager

Alexandra S. Parker 212-553-4889 MD-Public Finance

alexandra.parker@moodys.com

rachel.cortez@moodys.com

CLIENT SERVICES

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

Indianapolis - Marion County, IN

Ratings Update - Moody's Affirms Indianapolis, IN's Aaa Issuer Rating; Outlook Negative

Summary Rating Rationale

Moody's Investors Service affirms the Aaa issuer rating on Indianapolis-Marion County (Indianapolis), IN. The rating reflects a diverse economy; improved financial position; and moderate pension liabilities. These attributes are balanced against challenges that include weak resident income indices; a restrictive revenue-raising environment; and high debt levels.

Concurrently, Moody's affirms the following ratings:

- » The Aaa rating on \$82 million of outstanding general obligation limited tax (GOLT) debt. The GOLT pledge is subject to Indiana's (Aaa stable) Circuit Breaker taxing limitations. It is rated on parity with Indianapolis' issuer rating given the ample margin under its rate limitation as well as the city's first budget obligation to levy ad valorem taxes for debt.
- » The Aa1 rating on \$515,000 of Certificates of Participation (COPs), Series 2010A and 2010B. The rating is notched once from the issuer rating because the pledge to make lease payments is subject to appropriation and the financed assets (public safety vehicles) are more essential.
- » The Aa2 rating on \$160 million of Bond Bank Bonds, Series 2010F (PILOT infrastructure Project - Build America Bonds). The Aa2 rating is notched twice from the issuer rating due to the moral obligation (MO) pledge to consider appropriating to replenish the debt service reserve (DSR) and because the financed assets (wastewater system infrastructure improvements) are more essential.
- » The Aa3 rating on \$376 million of MO debt issued for economic development projects. The Aa3 rating is notched three times from the issuer rating due to the MO pledge to consider appropriating to replenish the DSR and because the financed projects are less essential.

The outlook on all ratings is negative. While the city has made progress in improving its financial profile by reducing expenses, its debt burden and limited flexibility to raise revenues weakly position its issuer rating in the Aaa category. If there is no further improvement in financial or leverage metrics over the next 12 to 24 months, the rating could be pressured.

Credit Strengths

» A diverse economy and growing labor force

» An improved financial position following a significant distribution of income tax revenues from the state in fiscal 2016

» Moderate unfunded pension liabilities

Credit Challenges

- » Resident income indices are low and continue to decline relative to US medians
- » Limited revenue raising ability due in part to Indiana's circuit breaker taxing limitations
- » High debt levels for rating category

Rating Outlook

The negative outlook reflects weak resident income indices and a restrictive revenue-raising environment, both of which will challenge the city to grow revenues that keep pace with ongoing cost growth, particularly in the areas of public safety, capital maintenance, debt service, and pensions.

Factors that Could Lead to an Upgrade

» Not applicable

Factors that Could Lead to a Downgrade

- » Declines in tax base valuation and/or resident income indices
- » Declines in the general fund balance and/or general fund net cash position in the next 12 or 24 months
- » Fluctuations in property tax and/or income tax revenues similarly to disruptions experienced with the Circuit Breaker and the state income tax distribution error
- » Increases in debt levels and/or fixed costs associated with debt service or pensions in the next 12 or 24 months

Key Indicators

Exhibit 1 Indianapolis - Marion County, IN 1

Indianapolis - Marion County	2012	2013	2014	2015	2016
Economy/Tax Base					
Total Full Value (\$000)	\$ 61,470,135	\$ 60,893,186	\$ 61,224,577	\$ 61,108,135	\$ 61,957,219
Full Value Per Capita	\$ 73,630	\$ 72,200	\$ 72,132	\$ 70,827	\$ 72,451
Median Family Income (% of USMedian)	82.4%	81.0%	79.9%	79.9%	79.9%
Finances					
Operating Revenue (\$000)	\$ 674,183	\$ 706,147	\$ 730,187	\$ 748,690	\$ 831,197
Fund Balance as a % of Revenues	72.9%	57.7%	51.5%	48.6%	46.7%
Cash Balance as a % of Pevenues	88.8%	72.4%	64.1%	60.5%	59.7%
Debt/Pensions					
Net Direct Debt (\$000)	\$ 1,278,157	\$ 1,121,596	\$ 1,140,005	\$ 1,278,270	\$ 1,202,401
Net Direct Debt / Operating Revenues (x)	1.9x	1.6x	1.6x	1.7x	1.4x
Net Direct Debt / Full Value (%)	2.1%	1.8%	1.9%	2.1%	1.9%
Moody's - adjusted Net Pension Liability (3-yr average) to Pevenues (x)	0.0x	0.6x	0.7x	0.7x	0.8x
Moody's - adjusted Net Pension Liability (3-yr average) to Full Value (%)	0.0%	0.7%	0.8%	0.8%	1.1%

Source: Indianapolis' Audited Financial Statements, BLS Census, and Moody's Investors Service

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

Detailed Rating Considerations

Economy and Tax Base: Diverse economy anchored by state capital; weak resident income indices

Although resident income levels are low and continue to decline relative to national medians, we expect Indianapolis' economy to remain sound due to the stability provided by government and health care employers. As the state capital of <u>Indiana</u>, Indianapolis is the primary driver of economic activity for the state. The region serves as a significant transportation and logistics hub, as it benefits from the confluence of several interstates. The Indianapolis airport is home to the world's second largest <u>Federal Express Corporation</u> (Baa2 stable) processing and distribution facility, and the area is also home to distribution centers for other corporations. In addition to logistics, the city benefits from a large health care sector. The top three employers in the region are health-related organizations, including <u>Indiana University Health</u> (Aa2 stable), which employs more than 20,000, and St. Vincent Hospital and Health Services, which employs more than 11,000. Indianapolis' largest taxpayer (2.9% of 2016 valuation) and third largest employer, <u>Eli Lilly and Company</u> (A2 stable), reportedly has stabilized operations.

The city's sizeable tax base (net assessed valuation is \$42.5 billion and gross assessed valuation is \$61.9 billion) has improved over the past five years. The tax base lost valuation between 2008 and 2012 due in part to the implementation of a supplemental homestead credit and Indiana's Circuit Breaker legislation. The tax base has since increased modestly due to steady development among the city's largest employers and taxpayers. The city's 3.5% unemployment rate for July 2017 approximated the state's rate of 3.4% and was lower than the national rate of 4.6% for the same period. Resident income indices are low, with Marion County's median family income at 79.9% of the nation, based on 2015 American Community Survey estimates.

Financial Operations and Reserves: Improved fund balance and liquidity, but constrained revenue-raising ability remains a credit weakness

In fiscal 2016, Indianapolis' general fund balance improved by \$61 million, which primarily reflected \$53 million in nonrecurring County Option Income Tax (COIT) revenues from the state. At the close of fiscal 2016, the General Fund balance was a strong \$264 million (39% of revenues). Across all operating funds (general and debt service funds), available reserves were ample at \$388 million (47% of revenues).

Although the city's financial position is currently strong, revenue-raising constraints may challenge the city's ability to meet long-term growth in operating costs. Circuit Breaker legislation, enacted in 2008 and fully phased in 2010, limits the total amount of property taxes for which a taxpayer is liable from all taxing units within a county. The limitation depressed property tax revenues dramatically during the early stages of implementation and continue to result in significant revenue declines. In fiscal 2017, the city estimates a loss of \$32 million in property tax revenues due to the impact of the Circuit Breaker legislation, a slight increase from the \$29 million loss experienced in 2016. Income tax revenues are also constrained somewhat by limitations on use and a maximum rate cap, which is currently set at 2.75% of the income tax expenditure rate. Legislative changes recently consolidated the various local income taxes into a single expenditure local income tax that consist of three rate components: County Option Income Taxes (COIT), Local Option Income Tax (LOIT), and Public Safety Income Tax (PSIT). While constrained, the city currently levies a total income tax rate of 1.97% providing some flexibility under the maximum rate. Additionally, the state changed the level of income tax revenue held in arrears which will result in an increase in income tax distributions to the city.

Between fiscals 2011 and 2015, Indianapolis' general fund balance declined to \$203 million from \$373 million. The fund balance declined as officials used reserves received from the sale of the city's water and wastewater systems to support increased operational and capital expenditures. Meanwhile, taxes were kept relatively flat, although effective January 1, 2015, the Public Safety Income Tax rate increased from 0.35% to 0.5%, which generated \$16 million in additional revenue in fiscal 2015 and a \$7 million increase in total income tax revenue in fiscal 2016. Other than these and other relatively modest revenue increases, the city has primarily used fund balance and nonrecurring revenue sources to meet ongoing operating costs in recent years.

The fiscal 2017 budget calls for a \$24 million decline in the general fund balance, although management expects to end more favorably given positive budget variances associated with income tax revenues and expenditure savings generated from the elimination of 50 positions. The proposed fiscal 2018 budget does not call for fund balance use despite an increase in public safety and capital spending. Future reliance on fund balance or other nonrecurring sources to meet ongoing expenditures could pressure the rating.

LIQUIDITY

Despite the aforementioned declines, Indianapolis' liquidity position is healthy. At the close of fiscal 2016 (the most recent year for which audited financial statements are available), net cash and investments in the city's operating funds totaled \$496 million, or an ample 60% of operating revenue.

Debt and Pensions: Elevated debt burden for rating category; moderate pension obligations

At 1.9% and 2.6% of full value (gross assessed value), respectively, Indianapolis' direct and overall debt burdens are high relative to comparably rated credits. Debt service comprised a moderate 18% of operating expenses in fiscal 2016. The city's fixed costs (combined debt service, pension, and other post employment benefit expenditures) totaled \$184 million, which equaled an elevated 23% of operating revenues. At this time, the city plans to issue debt totaling \$80 million for various projects, including construction of a community justice center.

DEBT STRUCTURE

All of the city's outstanding debt is long-term and fixed rate. Principal amortization is slow with 65% of principal expected to be repaid over the next ten years.

DEBT-RELATED DERIVATIVES

The city has no derivative exposure.

PENSIONS AND OPEB

Indianapolis has an affordable pension burden, based on liabilities for its participation in four separate plans: the Statutory Plan; two Pre-1977 Plans; and the All Other City Employees' Plan. The city's contribution to the four plans totaled \$43.1 million or 5.2% of operating revenues, in fiscal 2016.

The Statutory Plan is a cost-sharing multiple-employer plan administered by the Indiana Public Retirement System (INPRS) that covers all police and firefighters hired after 1977. The city currently pays half of the employee contribution in accordance with labor agreements, in addition to the annual employer's contribution amount determined by INPRS.

The Pre-1977 plans are two single employer retirement plans covering police and firefighters hired before 1977. The city accounts for the Pre-1977 Plans in a pension trust fund, and the two plans are funded on a pay as you go basis. Beginning in 2009, the state agreed to pay the entire annual cost of future pension payments to the police and firefighters. The city still must pay the benefits under the plans and be reimbursed by the state.

The All Other City Employees' Plan is an agent multi-employer plan administered by INPRS. The city is required to contribute 3% of each employee's annual salary as well as the required amounts to fund the plan as outlined in state statute.

The city's three-year average Moody's adjusted net pension liability (ANPL), our measure of a local government's pension burden, is a low 0.80x operating revenues in fiscal 2016. However, the single-year ANPL of \$890 million in fiscal 2016 is up significantly from the prior year \$552 million. The Moody's ANPL reflects the use of a market-based discount rate to value liabilities, and, beginning in fiscal 2015, reflects the cost-sharing plan allocations reported by the city under new GASB accounting standards. Our pension adjustments are not intended as a guide, but rather to enhance the comparability of rated entities in our credit analysis.

The city operates a single-employer defined benefit health care plan. The plan is funded on a pay-go basis. In fiscal 2015, city contributions for retiree health care benefits totaled \$1.7 million. As of December 31, 2015, the most recent actuarial valuation date, the plan had an unfunded actuarial accrued liability (UAAL) of \$166 million.

Management and Governance: Moderate institutional framework

Indiana cities have an Institutional Framework score of A, which is moderate. Institutional Framework scores measure a sector's legal ability to increase revenues and decrease expenditures. Property taxes are subject to limitations under Circuit Breaker legislation, and cities rely heavily on income tax distributions from the state, which can be unpredictable. Cities have a high ability to adjust expenditures, which mostly consist of public safety and health service costs, given limited public sector union presence.

Indianapolis' willingness to implement expenditure controls and modest revenue enhancements is credit positive. Still, there are legal and practical limits on the city's ability to implement significant revenue enhancements that can keep pace with growing costs.

Legal Security

The Multipurpose Refunding Bonds, Series 2013C; Taxable Bond Bank Refunding Bonds, Series 2013B; GOLT Bonds, Series 2008 (Public Communications Systems & Computer Facilities District); and Local Public Improvement Bond Bank Bonds, Series 2007D, are secured by the city's GO pledge to levy an ad valorem tax on all taxable property. The pledge is subject to Indiana's Circuit Breaker taxing limitations. These GO bonds are rated Aaa.

The COPs, Series 2010A and 2010B, are secured by the city's pledge to make lease payments. The pledge is subject to annual appropriation. These COPs were issued for more essential purposes and are rated Aa1.

The Bond Bank Refunding Bonds, Series 2015D (Fort Harrison Reuse Authority Project); Bond Bank Bonds, Series 2015C (Fort Harrison Reuse Authority Project); Bond Bank Taxable Bonds, Series 2014B; Bond Bank Bonds, Series 2014A; Bond Bank Bonds, Series 2013F; Local Public Improvement Bond Bank, Series 2011C; Taxable Bonds, Series 2011B; Qualified Midwestern Disaster Area Bonds, Series 2011A; Bond Bank Bonds, Series 2010F (PILOT Infrastructure Project - Build America Bonds); Local Public Improvement Bond Bank Bonds, Series 2010D; Local Public Improvement Bond Bank Bonds, Series 2009D (Fort Harrison Reuse Authority Project); and Refunding Bonds, Series 2009 B, are secured by tax increment financing (TIF) revenue and the city's MO pledge to consider appropriating monies to replenish the DSR to the minimum reserve requirement if necessary. Before December 1 of each year, the Chairman of the Bond Bank is required to notify the City-County Council of the sum, if any, required to restore the DSR to the minimum reserve requirement. Upon notification by the Chairman, the City-County Council will review the appropriation request. The Series 2010F bonds were issued for more essential purposes and are rated Aa2. The other series of MO bonds listed in this paragraph were issued for less essential purposes and are rated Aa3.

Use of Proceeds

Non applicable

Obligor Profile

The City of Indianapolis is the largest city in the state and the 14th largest city in the nation with an estimated population of 862,781. On January 1, 1970, the governments of Marion County and the City of Indianapolis were unified and their services consolidated. Four municipalities (Beech Grove, Lawrence, <u>Speedway</u> (A1), and Southport) were specifically excluded from the consolidated government. The city is located at the geographic center of the state and encompasses a land area of 402 square miles.

Methodology

The principal methodology used in the general obligation rating was US Local Government General Obligation Debt published in December 2016. The principal methodology used in the lease and moral obligation rating was Lease, Appropriation, Moral Obligation and Comparable Debt of US State and Local Governments published in July 2016. Please see the Rating Methodologies page on www.moodys.com for a copy of these methodologies.

© 2017 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS AND MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE. HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should contact your financial or other professional adviser.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER

1092811

Contacts **CLIENT SERVICES** Tatiana Killen 312-706-9972 Rachel Cortez 312-706-9956 Americas 1-212-553-1653 AVP-Analyst VP-Sr Credit Officer/ Asia Pacific 852-3551-3077 tatiana.killen@moodys.com Manager rachel.cortez@moodys.com Japan 81-3-5408-4100 Alexandra S. Parker 212-553-4889 EMEA 44-20-7772-5454 MD-Public Finance alexandra.parker@moodys.com

