Memorandum

CITY OF DALLAS

DATE November 17, 2017

TO Honorable Mayor and Council Members

SUBJECT Moody's Investors Service Revised Outlook (from Negative to Stable) for City of Dallas Outstanding General Obligation and Certain Revenue Debt Obligations - INFORMATION

Today, Moody's Investors Service published the results of the "surveillance review" the agency recently conducted of certain outstanding debt obligations of the City. This was an unsolicited review of the City's credit ratings based on previous Moody's ratings. I am pleased to report that the agency affirmed the City's A1 credit rating for General Obligation debt, and revised the outlook upward from negative to stable.

Moody's states the improvement in outlook "recognizes the progress made by the city's recent pension reform and the dynamic economic landscape which affords much financial flexibility. The pension reform package materially improved the city's balance sheet leverage and reined in structural imbalance (inclusive of pension underfunding) to a more manageable level. Additionally the stable outlook considers the adequate level of operating reserves, and the enhanced fiscal management evidenced by forward planning tools put into place, including the biennial budget and longer range financial projections."

In addition, Moody's affirmed revenue bond ratings of Aa1 on previously rated Dallas Water Utilities' debt, Baa1 for Dallas Convention Center Hotel Development Corporation debt, A1 for Dallas Civic Center Convention Complex debt, and A2 for Downtown Dallas Development Authority. Moody's revised the outlook for all Dallas ratings included in this review from negative to stable.

Moody's revised outlook is recognition of the importance of House Bill 3158, the result of months of negotiation between the City, State Legislature, and Pension to fully fund the Dallas Police and Fire Pension System in an estimated 39 years - in 2056. The Governor signed the legislation on May 31, 2017, taking a pension system that would have been insolvent in less than 10 years, and stabilizing it to protect the retirements of Dallas' first responders.

Moody's last took action on February 17, 2017, when the agency revised the outlook for the General Obligation and the revenue obligations included in this review from stable to negative and lowered the rating on the Dallas Convention Center Hotel Development corporation debt from A3 to Baa1.

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Moody's is the third credit rating agency in as many months to revise the City's outlook to stable. Along with Fitch Ratings and Standard & Poor's Global Ratings, Moody's recognizes the strength of the City and our fiscal management. I look forward to continuing to work with you to further enhance Dallas' fiscal position and to encourage investment in our city.

Please let me know if you need additional information.

M. Elizabeth Reich

M. Elizabeth Reich
Chief Financial Officer

Attachment

c: T.C. Broadnax, City Manager
Larry Casto, City Attorney
Craig D. Kinton, City Auditor
Bilierae Johnson, City Secretary (Interim)
Daniel F. Solis, Administrative Judge
Kimberly Bizor Tolbert, Chief of Staff to the City Manager
Majed A. Al-Ghafry, Assistant City Manager
Jon Fortune, Assistant City Manager
Joey Zapata, Assistant City Manager
Jo M. (Jody) Puckett, Assistant City Manager (Interim)
Nadia Chandler Hardy, Chief of Community Services
Raquel Favela, Chief of Economic Development & Neighborhood Services
Theresa O'Donnell, Chief of Resilience
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CREDIT OPINION

17 November 2017

Update

Rate this Research

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City of Dallas, TX

Rating Update: Moody's Affirms Dallas' (TX) A1 GOLT, all Related Ratings Affirmed; Outlook Stable

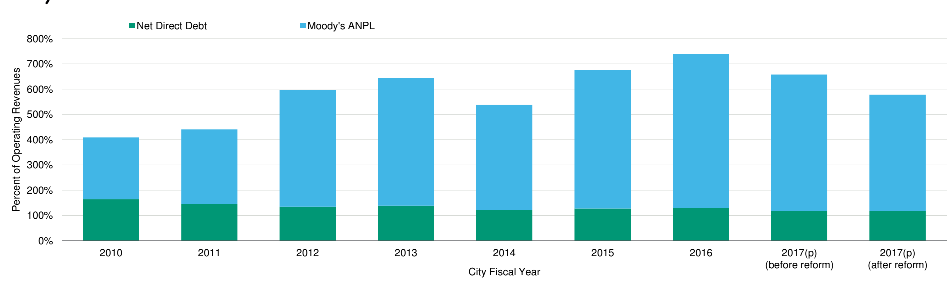
Summary Rating Rationale

Moody's Investors Service has affirmed seven underlying ratings for the City of Dallas and revised the outlook to stable from negative. The affirmed ratings include: An A1 on the general obligation limited tax and issuer ratings (affecting $1.6 billion of rated debt); the Aa1 Waterworks and Sewer System rating, affecting $1.6 billion in Moody's rated bonds and contract revenue bonds issued through Tarrant Regional Water District (Dallas Project); the P-1 ratings for two Commercial Paper programs with the General Obligation and Waterworks and Sewer purposes. Additionally, the Baa1 for the Dallas Convention Center Hotel Development Corporation ($462.9 million) and A2 for the Downtown Dallas Development Authority ($64.5 million tax increment debt) was affirmed. Finally, the A1 rating on $296.4 million of Dallas Civic Center Convention Complex debt was affirmed.

The A1 rating on the city's outstanding GOLT debt and issuer rating incorporates the positive effects of pension reform (House Bill 3158) on the city's near to medium term financial position, specifically the significant reduction in unfunded liabilities associated with the Dallas Police and Fire Pension Fund, as well as the city's ability to integrate higher pension contributions into its biennial budget. The rating additionally reflects the fact that even with reform, the pension burden relative to operating revenues and the tax base remains elevated and an outlier when compared to peers. Further, pension contributions, while higher, are still below a "tread water" level and we expect the liabilities to grow. The A1 rating also factors in the city's dynamic economy, adequate reserves and manageable debt burden.

Exhibit 1

Dallas' Balance Sheet Leverage to Materially Drop with Implementation of pension reform (HB 3158)



Fiscal 2017 information is a projection based on actuarial valuations and is not based on audited financial information from the city of Dallas

Source: Moody's Investors Service, Dallas audited financial reports, actuarial valuation reports

The P-1 ratings on the GO commercial paper program and the Waterworks and Sewer commercial paper program are based upon (i) Moody's short-term counterparty risk assessment (CR assessment) of the Banks; and (ii) Moody's assessment of the likelihood of termination of the applicable Liquidity Facility without payment at maturity of the applicable Notes. Events which could cause the Liquidity Facilities to terminate without payment at maturity of the Notes are directly related to the credit quality of the city.

The affirmation of the Aa1 ratings on Waterworks and Sewer Enterprise and the Tarrant Regional Water District (Dallas Project), considers the credit fundamentals of the system as well as the broad service area that is nearly double the size of the city and the strict separation of accounts and assets from the general fund per the city's charter.

The Baa1 rating on the Dallas Convention Center Hotel Development Corporation Series 2009A-C debt is based on a three notch rating differential for less essential assets with a city moral obligation, under current methodology. The A2 rating on the Downtown Dallas Development Authority 2006 and 2007 debt considers the moral obligation pledge of the city and notes the strengths of the project area under Moody's Tax Increment Debt methodology. Credit considerations include the large project area, healthy debt service coverage, strong AV growth expected to continue and favorable location in central Dallas; while also recognizing the high taxpayer concentration and weak volatility ratio. Finally, the A1 rating of the Civic Center Convention Complex debt reflects the credit fundamentals of the pledge, including the strong debt service coverage, stable operations and adequate legal provisions.

Credit Strengths

» Large, growing and diverse tax base that anchors the Dallas/Fort Worth metroplex

» Population and employment growth that surpass national averages

» Six consecutive years of operating surpluses on a reported basis; growth in operating reserves

» Legal flexibility to adjust pension benefits to current employees on a prospective basis, ample legal flexibility to raise revenues or cut expenditures

Credit Challenges

» Elevated unfunded pension liability expected to grow over near term; contributions below "tread water" level

» Budgetary pressures over the medium term stemming from increased pension contributions

» Significantly increasing public safety staffing levels

» Elevated fixed costs including debt service, OPEB and pension contributions

» Ongoing legal battle related to back-pay referendum that may result in an outsized city liability

Rating Outlook

The stable outlook recognizes the progress made by the city's recent pension reform and the dynamic economic landscape which affords much financial flexibility. The pension reform package materially improved the city's balance sheet leverage and reined in structural imbalance (inclusive of pension underfunding) to a more manageable level. Additionally the stable outlook considers the adequate level of operating reserves, and the enhanced fiscal management evidenced by forward planning tools put into place, including the biennial budget and longer range financial projections.

Factors that Could Lead to an Upgrade

- Budgetary management resulting in additional operating costs absorption and structural balance
- Demonstrated balanced operations inclusive of pension funding at actuarially determined levels
- Material reduction in the Moody's Adjusted Net Pension Liability (ANPL) relative to operating revenues

Factors that Could Lead to a Downgrade

- Underperforming assets in the pension plans resulting in material increases to ANPL; increased gap in annual contributions to "tread water" relative to operating revenues
- Reduction in operating reserves to a level inconsistent with the rating category
- A considerable judgment regarding pending wage litigation without adequate funding schedules or sources

Key Indicators

Exhibit 2

Dallas (City of) TX	2012	2013	2014	2015	2016
Economy/Tax Base					
Total Full Value ($000)	$ 81,993,746	$ 83,681,722	$ 87,251,522	$ 93,138,211	$ 100,318,937
Full Value Per Capita	$ 67,920	$ 68,470	$ 70,308	$ 73,879	$ 79,762
Median Family Income (% of US Median)	70.2%	70.8%	71.0%	71.0%	71.0%
Finances					
Operating Revenue ($000)	$ 1,237,309	$ 1,250,319	$ 1,327,996	$ 1,377,442	$ 1,355,442
Fund Balance as a % of Revenues	10.9%	11.6%	12.3%	14.2%	13.2%
Cash Balance as a % of Revenues	10.5%	11.3%	11.7%	14.4%	13.9%
Debt/Pensions					
Net Direct Debt ($000)	$ 1,730,717	$ 1,778,653	$ 1,683,386	$ 1,882,725	$ 1,951,220
Net Direct Debt / Operating Revenues (x)	1.4x	1.4x	1.3x	1.4x	1.4x
Net Direct Debt / Full Value (%)	2.1%	2.1%	1.9%	2.0%	1.9%
Moody's - adjusted Net Pension Liability (3-yr average) to Revenues (x)	3.3x	4.2x	4.4x	4.7x	5.3x
Moody's - adjusted Net Pension Liability (3-yr average) to Full Value (%)	5.0%	6.2%	6.7%	7.0%	7.1%

Source: Moody's Investors Service, city audited financial reports

Recent Developments

Since the publication of Moody's rating update report in February 2017, House Bill 3158 was passed and is now in effect; as of September 1, 2017. The bill makes sweeping and positive changes to the Dallas Police and Fire Pension Fund and averts the recent insolvency projection over the near term. Additionally, with HB 3158 comes additional contributions for the city, which have been absorbed into its biennial fiscal 2018 and 2019 budget, reflecting no budgeted draws on operating reserves. Further discussion regarding the impacts of pension reform and the city's finances are found in the Detailed Rating Considerations.

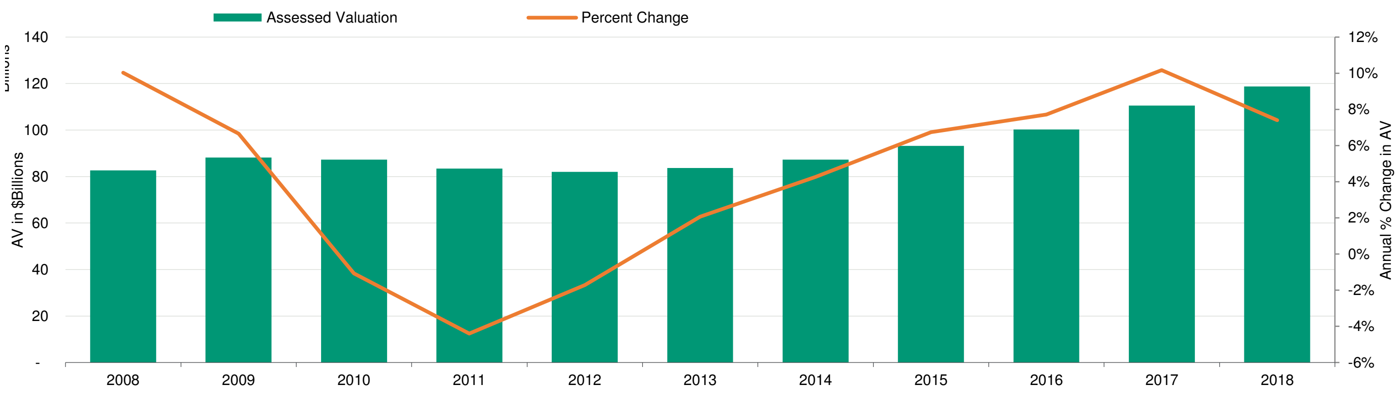
Detailed Rating Considerations

Economy and Tax Base: Strong Economic Indicators and Tax Base Growth to Continue

We expect Dallas' vibrant economy to continue to attract business and development that augments the landscape in the forseeable future. Dallas' tax base will continue to demonstrate strong growth over the near term due to ongoing positive job growth fueling property appreciation and substantial commercial and residential construction. Located in North Texas, Dallas is the ninth largest city in the United States, and third largest in Texas after Houston (Aa3 stable) and San Antonio (Aaa stable). Residents in the metropolitan area enjoy a diverse economic base with employment opportunities in the information technology (IT), banking, commerce, medical, transportation, government and logistics sectors, among many others.

Exhibit 3

Tax Base Grows 7% Annually Over the Past 5 Years; Expansion Continuing



Source: City audited financial reports and operating budget

Population growth is among the highest relative to other large cities nationally, and has increased by over 9% since the 2010 census to 1.3 million in 2016. Dallas continues to have the largest job base in the metropolitan area, serving as home to several fortune 500 companies, with a daytime population that swells by over 20% relative to the resident population. As such, Dallas is a regional economic center for the metro area with thousands of people commuting to the city for work. With strong job growth in the city that continues to outpace the nation, the labor force has continued to increase while unemployment remains low. As of September 2017, the unemployment rate in the city was 3.5%, reflecting a very tight labor market.

Financial Operations and Reserves: General Fund to Remain Stable despite Increased Public Safety Expenditures

The General Fund will maintain stable reserves over the near term. The biennial budget incorporates ongoing growth in key revenue sources, higher annual pension contributions, public safety pay increases, additional public safety work force, and continued expansion of core services. The city has posted six consecutive years of General Fund surplus, bringing the available General Fund balance to $170.8 million, an adequate 15% of General Fund revenues. However, the structural balance is muted when considering the underfunding of the annual pension over the past few years. This is largely attributable to statutory caps on contributions and was exacerbated by asset loss. Post reform, Moody's assessment of the new level of pension contributions will fall short of a "tread water", as described below, but will be much closer than absent legislative reform.

Pension funding aside, prudent fiscal management over the past six years has annually added to the General Fund reserves from a relatively low $64.7 million in fiscal 2010 to $181.7 million in fiscal 2015. The drop to $170.8 million in fiscal 2016 is attributable to shifting the sanitation fund to a separate enterprise fund. Absent this change, the unassigned General Fund balance increased year-over-year, bringing it to $153.7 million, or 14.9% of General Fund revenues, up from 14.7% of revenues in fiscal 2015. Inclusive of the Debt Service Fund, combined operating funds available balance totaled $179 million in fiscal 2016, or 13.2% of operating revenues. Based on unaudited results for fiscal 2017, we expect to see a modest General Fund surplus reported. Expenditure savings were largely generated through below-budget public safety staffing, though the city used a portion of the savings on needed road improvements. The fiscal 2018 and 2019 budget is balanced, and incorporates aggressive public safety hiring goals.

Core operating revenues are growing, and the city has the legal ability to raise revenues further if needed. The majority of operating revenues (General and Debt Service funds) were derived from property taxes (55.7%) and sales taxes (21.1%) in fiscal 2016. While the city cannot raise sales tax rates, revenues have grown an average of 3.2% over the past five years, a similar pace of growth is expected over the near term. The city has a high degree of legal flexibility to raise the property tax rate, though a more modest practical ability to do so. The city remains well under the statutory maximum for property taxes of $25.00/$1000 of AV, having levied a rate of $7.97/$1000 of AV from fiscal 2011 – 2016, and then dropping the rate to $7.83 in 2017, and most recently to $7.81 for fiscal 2018 amidst strong property value growth. The city is annually mindful of setting the rate below the effective 8% yield control, which could trigger a rollback rate election if exceeded. Based on the city's fiscal 2018 adopted $7.81 tax rate, it could have raised an additional $9.5 million in revenues had it set the rate at the effective yield rate.

LIQUIDITY

As of fiscal 2016, the city's cash and investment position in the combined operating funds was $187.9 million, an adequate 13.9% of operating revenues.

Debt and Pensions: Manageable Debt Burden; Significantly Improved Pension Liability Post-Reform

Given strong tax base growth, we expect the voter approved $1.05 billion bond package to grow the direct debt burden yet remain at a manageable level, on par with historic levels. The November 2017 bond package was overwhelmingly supported by voters and will translate to needed investment in public infrastructure. The city maintains a debt policy which stipulates a maximum debt burden of 4% of the estimated market value of taxable property in the city. Inclusive of accreted interest on outstanding bonds, the city has typically maintained a debt burden consistent with peers at around 2% of the assessed valuation. As of the 2016 audit, the city's outstanding net direct debt totaled $1.9 billion, approximately $1.6 billion of which is rated by Moody's.

DEBT STRUCTURE

All of the city's debt is fixed rate and amortizes over the long term. Principal amortization is average with 74.3% retired within ten years.

DEBT-RELATED DERIVATIVES

The city is not a party to any derivative agreements.

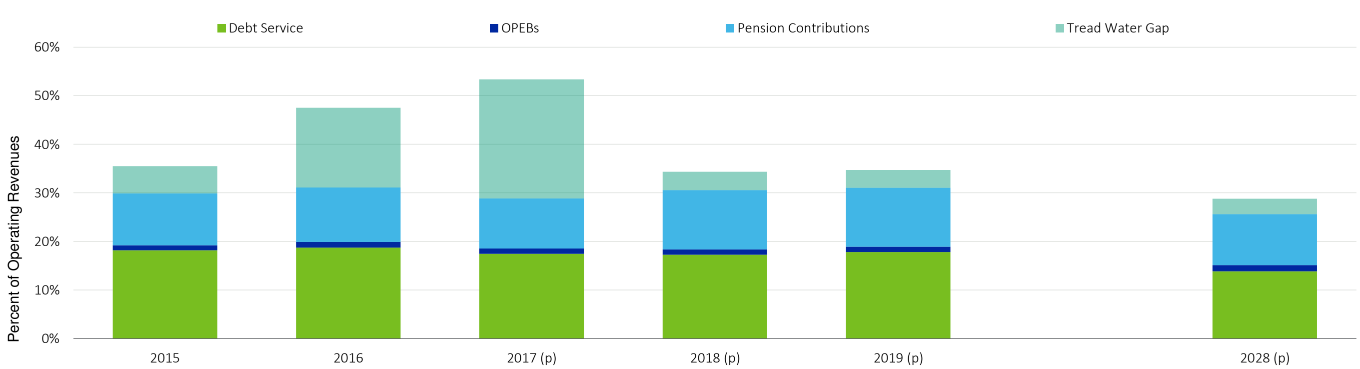
PENSIONS AND OPEB

Pension reform for two of the city's three single-employer plans made meaningful and positive impacts to the city's balance sheet leverage, though relative pension risks remain the key weakness of the credit profile. Leverage remains elevated post-reform, and the success of the reforms are highly dependent on meeting earnings targets; deviation from expected returns could require higher contributions and/or further benefit adjustments.

The city participates in three single-employer systems: the Employees' Retirement Fund (ERF), the Dallas Police and Fire Pension Fund (DPFP) and the Supplemental Police and Fire Pension Plan. Contribution rates for the systems are set by ordinances or statutes, and the ERF and the DPFP are each managed by separate boards. HB 3158 makes sweeping changes to the DPFP plan, including reduced prospective pension benefits for current and future employees, significant reductions to DROP, including time limits to participation, ceased lump-sum withdrawals and elimination of guaranteed interest, increased statutorily required contributions from the city and membership, and governance changes. While attention has been focused on DPFP, favorably city voters approved ERF pension benefit changes for new employees starting January 2017, which has the effect of lowering the normal cost, and the pace at which pension liabilities are accrued.

Exhibit 4

Dallas' Fixed Costs Materially Reined In With Pension Reform but are Projected to Remain Elevated



Operating revenue projections in fiscal 2018 and 2019 are based on the biennial budget, 4% revenue growth assumed thereafter; assumes recently approved bond package issued in $200-$300 million phases annually with overall front-loaded amortization.
Source: Moody's Investors Service, city audited financial reports, DPFP valuation reports

The city's ANPL dramatically decreases with the implementation of HB 3158, which went into effect September 1, 2017, though remains above peers. Absent reforms, the city's ANPL, as of fiscal 2016, ballooned to $8.3 billion; a high 6.1 times operating revenues. The ANPL is net of support to ERF from the city's enterprise funds, namely the Waterworks and Sewer Fund and the airport. Due to the nine month lag in actuarial reporting versus the city's fiscal year, fiscal 2017 is expected to show a similarly high ANPL. If the reforms were in place for fiscal 2017 reporting, we estimate the ANPL would reduce to approximately $7 billion, or about 4.6 times the estimated $1.5 billion in 2017 operating revenues.

The city's fixed costs inclusive of Moody's "tread water" indicator are elevated, though have been brought back to more manageable levels post-reform. Moody's calculates fixed costs as debt service, pension contributions and retiree health benefits (OPEB) relative to operating revenues, and for the city, these costs were elevated at 31% in fiscal 2016. Due to statutory caps on the city's pension contributions under the previous statute governing the public safety plan, as well as the local cap to the city's contribution to the employees' retirement fund per the local ordinance, annual contributions have fallen below a level that would "tread water" on the unfunded pension liabilities. Fixed costs in fiscal 2016 assuming pension contributions were at "tread water" increase to a significant 48% of 2016 operating revenues. Moody's "tread water" indicator is calculated as the normal cost plus interest on the unfunded liability, based on reported assumptions. It represents the contribution amount that would prevent liabilities from growing, if all assumptions hold. As of fiscal 2016, the city contributed the legally required $152 million to the three pension plans, which was below the "tread water" indicator by a high $223 million, or 15% of operating revenues. Absent reforms, Moody's estimates that this gap would jump to over $380 million, a gap of 25% of estimated fiscal 2017 revenues. The DPFP reform bill includes increasing contributions from 30% of computational pay, to 34.5%, plus $13 million and subject to a nominal floor over an initial seven year period. The higher contributions equate to an additional $41 million from the city in fiscal 2018 relative to the previous statute. With the increased contributions, coupled with the reduced normal cost for both plans and the reduced liability in DPFP, we project the gap to "tread water" to reduce to 4-5% of projected operating revenues. This gap is above peers nationally, and indicates the liability will grow over the medium term absent earnings at or above targeted levels.

Management and Governance: Management Team Exhibits Strong Forward Planning and Political Will to Bring About Needed Reforms

Texas 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. Property taxes, one of the sector's major revenue sources are subject to a cap, which cannot be overridden. However, the cap of $25 per $1,000 of assessed values with no more than $15 allocated for debt, still allows for significant revenue-raising ability. Unpredictable revenue fluctuations tend to be minor, or under 5% annually. Across the sector, fixed and mandated costs are generally greater than 25% of expenditures. Texas is a Right to Work state, providing significant expenditure-cutting ability. Unpredictable expenditure fluctuations tend to be minor, under 5% annually.

The city operates under a council-manager form of government. Dallas' city manager and CFO are relatively new to Dallas, and have worked to implement enhanced forward-thinking and strategic planning to bolster the already sophisticated financial management of the city. The political will exhibited over the course of fiscal 2017 to bring about needed reforms to the public safety pension further demonstrate the strength of the management team in place at the city.

Legal Security

The general obligation limited tax bonds constitute direct and general obligations of the city, payable from the levy and collection of a direct and continuing annual ad valorem tax, within the limits prescribed by law, on all taxable property located within the city.

Use of Proceeds

Not applicable.

Obligor Profile

The city of Dallas is the ninth largest city in the US and third largest in Texas behind Houston and San Antonio. The city serves as the anchor city to the DFW metroplex. The current population in Dallas is approximately 1.3 million.

Methodology

The principal methodology used in the general obligation and Hotel Revenue bonds rating was US Local Government General Obligation Debt published in December 2016. The additional methodology used in the Hotel Revenue Bonds rating was Lease, Appropriation, Moral Obligation and Comparable Debt of US State and Local Governments published in July 2016. The principal methodology used in the Tax Increment Contract Revenue Bonds rating was Tax Increment Debt published in June 2015. An additional methodology used in the Tax Increment Contract Revenue Bonds rating was Lease, Appropriation, Moral Obligation and Comparable Debt of US State and Local Governments published in July 2016. The principal methodology used in the Civic Center Convention Complex Bonds rating was US Public Finance Special Tax Methodology published in July 2017. The principal methodology used in the Waterworks and Sewer System Bonds was US Municipal Utility Revenue Debt published in October 2017. The principal methodology used in the Commercial Paper Notes rating was Variable Rate Instruments Supported by Conditional Liquidity Facilities published in March 2017. Please see the Rating Methodologies page on www.moodys.com for a copy of these methodologies.

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