

CREDIT OPINION

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New Issue

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Fort Worth (City of) TX

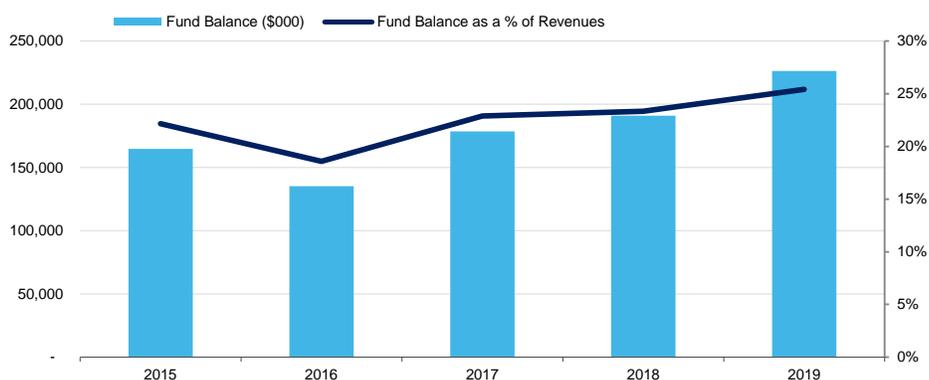
Update to credit analysis

Summary

The city of Fort Worth, TX's (Aa3 stable) credit profile continues to be constrained by a high unfunded pension liability and weak annual pension contributions, despite reform. Given contributions that are insufficient to amortize the slightly reduced unfunded pension liability, the liability will grow absent strong asset performance or additional pension reform and higher contributions beyond those already approved. However, the credit profile is supported by the city's ample financial flexibility to afford increasing pension costs due to strong economic growth, as well as the legal ability to reform benefits further, and the demonstrated political will to both exercise this legal right and to increase contributions. Further, the city's conservative budgeting and capital planning practices amid growth have lead to increasing and consistently healthy operating reserves, and a relatively manageable debt burden on par with peers.

We regard the coronavirus outbreak as a social risk under our environmental, social and governance framework, given the substantial implications for public health and safety and the economy. We do not see any material immediate credit risks for Fort Worth because the majority of the city's operating revenues are derived from property taxes, which tend to be more stable, and because the city is actively implementing expenditure cuts to make up the projected revenue shortfall in fiscal 2020. However, the situation surrounding coronavirus is rapidly evolving and the longer term impact will depend on both the severity and duration of the crisis. If our view of the credit quality of Fort Worth changes, we will update our opinion at that time.

Exhibit 1

Increased available operating fund reserves leading up to economic downturn


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

Credit strengths

- » Large and growing tax base
- » Regionally significant economy
- » Trend of operating revenue growth through February 2020; healthy operating reserves
- » Legal flexibility to reform pension benefits prospectively

Credit challenges

- » Large unfunded pension liability
- » High fixed costs

Rating outlook

The stable outlook reflects the city's strong fiscal management, ample budgetary flexibility and high nominal amount of governmental liquidity that will enable the city to weather the current economic downturn.

Factors that could lead to an upgrade

- » Considerable corporate investment and job creation within the city limits
- » Material reduction to unfunded pension liabilities and more rapid amortization
- » Moderation of fixed cost burden

Factors that could lead to a downgrade

- » Further material increases in the pension burden
- » Significant increase in debt profile
- » Poor financial performance leading to a significant decline in reserves
- » Trend of declining assessed values

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Key indicators

Exhibit 2

Fort Worth (City of) TX	2015	2016	2017	2018	2019
Economy/Tax Base					
Total Full Value (\$000)	\$47,075,950	\$49,667,068	\$54,517,129	\$61,244,653	\$67,762,925
Population	796,614	806,380	815,430	829,560	848,860
Full Value Per Capita	\$59,095	\$61,593	\$66,857	\$73,828	\$79,828
Median Family Income (% of US Median)	94.4%	94.9%	94.3%	92.6%	92.6%
Finances					
Operating Revenue (\$000)	\$743,301	\$727,094	\$780,172	\$817,711	\$890,586
Fund Balance (\$000)	\$164,767	\$135,100	\$178,465	\$190,871	\$226,332
Cash Balance (\$000)	\$130,023	\$122,175	\$172,276	\$188,303	\$231,371
Fund Balance as a % of Revenues	22.2%	18.6%	22.9%	23.3%	25.4%
Cash Balance as a % of Revenues	17.5%	16.8%	22.1%	23.0%	26.0%
Debt/Pensions					
Net Direct Debt (\$000)	\$812,433	\$834,796	\$794,634	\$769,819	\$883,919
3-Year Average of Moody's ANPL (\$000)	\$2,389,366	\$2,652,562	\$3,160,829	\$3,506,795	\$3,627,956
Net Direct Debt / Full Value (%)	1.7%	1.7%	1.5%	1.3%	1.3%
Net Direct Debt / Operating Revenues (x)	1.1x	1.1x	1.0x	0.9x	1.0x
Moody's - adjusted Net Pension Liability (3-yr average) to Full Value (%)	5.1%	5.3%	5.8%	5.7%	5.4%
Moody's - adjusted Net Pension Liability (3-yr average) to Revenues (x)	3.2x	3.6x	4.1x	4.3x	4.1x

Cash and fund balance includes the general fund, crime control and prevention district and debt service fund
 Source: Moody's Investors Service, city audited financial reports

Profile

The city of Fort Worth is located in Tarrant (Aaa stable), Denton (Aaa stable), Parker, Johnson and Wise counties covering 345 square miles in the western portion of the expansion Dallas-Fort Worth metroplex. The city's estimated population as of 2019 was 848,860, and is the 13th largest city in the US.

Detailed credit considerations

Economy and tax base: large metropolitan tax base in north Texas to see growth in fiscal 2021

The coronavirus is driving an unprecedented economic slowdown which is impacting the city of Fort Worth. We currently forecast US GDP to decline significantly during 2020 with a gradual recovery commencing toward the end of the year. Local governments with the highest exposure to tourism, hospitality, health care, retail and oil and gas could suffer particularly severe impacts. Given that Fort Worth is a large and diverse economy, these are industries that operate within the city, among many and are being negatively impacted.

Nonetheless, the city continues to be a regionally significant economic center, serving as the western anchor point to the larger Dallas-Fort Worth metroplex. Residents and commuters have an array of employment options in the city, including military, government, health care and education, manufacturing, transportation and warehousing and energy. Major employers include [American Airlines Inc.](#) (Ba1 RUR down), which is being negatively impacted by the significant drop in air travel, and [Lockheed Martin Corporation](#) (A3 stable). City officials continue to target corporate economic development to generate high paying jobs within the city. Before the coronavirus pandemic, the city's unemployment rate had consistently hovered around 3.4-3.6% over the past several years, though similar to the rest of the nation, though increased to 4.7% as of March 2020 and is likely to increase as April and May data is released.

The city of Fort Worth will continue to see assessed value (AV) growth through fiscal 2021, though AV may decline in fiscal 2022. The fiscal 2021 value will be based on property appraisal as of January 2020, before the coronavirus pandemic. Strong population growth driving demand, and ongoing residential and commercial development will be reflected on the tax roll for the coming fiscal year. However, fiscal 2022 values will be reflective of economic slowing through the current calendar year. The city's tax base is large

at \$77.1 billion as of fiscal 2020, and has exhibited strong average annual growth of 10.4% over the past five years. Despite a robust employment base, residential assessed value (AV) has been expanding at a faster pace than commercial development, contributing to a very diverse tax base. The Top 10 taxpayers accounted for a low 6.2% of the fiscal 2020 AV.

Finances and liquidity: expected stable operating reserves through economic downturn

Despite increasing pension costs, the city's financial profile will remain stable through fiscal 2021 because of sophisticated management that has been able to quickly react to a severe economic downturn, ample expenditure flexibility and expected strong AV growth in 2021 that can help to offset weak sales taxes. Longer term, the city's revenue-raising flexibility is reduced starting in fiscal 2021 under legislation passed in 2019 and it will be challenged to maintain structural balance. However management has been quick to focus on budgetary adjustments that will need to be made beyond the current fiscal year given longer term revenue losses and a slow recovery coming out of the pandemic. The city has been building reserves over the past several years amid strong revenue growth, which provides an additional financial buffer.

Moody's considers the city's operating funds to include the general fund and debt service fund, as well as the crime control and prevention district (CCPD), which supports a material amount of annual public safety expenditures and is funded by a 0.5% citywide sales tax. As of fiscal 2019 (ending September 30), the combined operating funds reported an available fund balance of \$226.3 million, a healthy 25.4% of operating revenues. The available operating funds balance has increased over the past five years, up from 18.5% of revenues in fiscal 2015.

Operating revenues in fiscal 2020 are expected to decline significantly, and the city is expecting a drop of \$53 million relative to the general fund and crime control and prevention district budgets combined or about 6.4% of budgeted revenues. The revenue decline projection is largely driven by expected sales tax losses. The city has sourced and is making expenditure cuts to fully make up this loss through hiring freezes, deferment of pay-go capital, discretionary spending savings and other areas. Looking ahead, the city is in the process of updating long range financial planning models to incorporate a more prolonged economic decline and recovery. Critical to this planning is the renewal of the 0.5% sales tax that supports the CCPD, which sunsets this year. The city plans to seek voter approval in July to renew the tax for another 10 years. Revenues from this sales tax support over 10% of public safety expenditures.

Property taxes are favorably the city's largest source of operating revenues, and tend to be less susceptible to economic cycles, though a modest decline in AV is possible for fiscal 2022. As of fiscal 2019, property taxes accounted for 55.7% of combined operating revenues, followed by sales tax at 27.3%. Starting in fiscal 2021, the city will be capped at increasing property tax revenues on existing property to 3.5%, down from 8%, absent voter approval and this is incorporated into their forward projections. Per the legislation, the city may increase revenues by 8% under a disaster declaration, which is in place now, but management does not have an intention to exercise this right. With strong growth expected for fiscal 2021, including new construction value, this reduced revenue raising flexibility will become more constraining in fiscal 2022.

LIQUIDITY

The city's liquidity position is likely to remain stable over the near term. Liquidity in the combined operating funds as of fiscal 2019 was \$231.4 million, or 26% of operating revenues.

Debt and pensions: high balance sheet leverage driven by pension burden

The city's direct debt burden is likely to remain relatively low and manageable in the near term despite additional debt planned to support capital investment throughout the city. As of the most recent bond sale, the city had \$919.3 million of net direct debt outstanding, including \$868.1 million of GOLT debt. The city's net direct debt burden represents a moderately-low and manageable 1.2% of the 2020 full value and includes GOLT debt, capital leases and other guaranteed obligations. The net direct GOLT debt included in the debt burden calculation is net of \$3 million backed by the solid waste system. The city plans to issue its remaining \$249.5 million of authorized but unissued GOLT debt over the next several years. With tax base growth to continue over the near term, the net direct debt burden is likely to remain in line with historic levels.

The city's fixed costs, which include debt service, pension contributions and OPEB, are high at 27.9%. While the city is exercising its ample legal flexibility to adjust the budget during the coronavirus pandemic, high fixed costs are a constraining factor to flexibility. If the city were to increase its pension contributions to prevent the unfunded liability from growing, fixed costs would increase to about 35% operating revenues, once reporting has fully caught up to reforms put in place in 2019.

DEBT STRUCTURE

Given the city's practice to issue new debt with a twenty year amortization and level annual principal, the overall debt profile pays off quickly with 75.8% retired within 10 years.

DEBT-RELATED DERIVATIVES

The city is not a party to any derivative agreements.

PENSIONS AND OPEB

The city's pension burden continues to be the primary weakness of the credit profile. The enacted pension reform, which was adopted in March 2019, reduced the unfunded pension liability slightly, reduced the amortization period and improved annual funding of the plan, though the liability remains high and negative cash flow persists. Absent additional benefit reductions, or investment returns that exceed assumptions, the city and membership will need to increase contributions further to amortize the unfunded liability.

Unique relative to many other large city peers in the state, the city maintains local control to adjust pension benefits and increase employers contributions and therefore can remain nimble going forward if further reforms are required to maintain solvency of the pension fund. The city exercised this authority several times in recent history, having reduced benefits to employees on a prospective basis in 2011 and 2014 and finally in 2019.

As shown in the exhibit below, the city's Moody's adjusted net pension liability, net of enterprise support, is still high at \$3.6 billion, nearly 4 times operating revenues. The ANPL will reduce again slightly as reforms implemented catch up with audited reporting, though we still expect that the ANPL would represent at least 3.5 times operating revenues in fiscal 2020. Moody's calculated the ANPL based on a discount rate of 4.17% in 2019, compared to a reported single equivalent GASB rate of 5.35% in the city's 2019 audit. The plan has favorably reduced its assumed rate of return to 7%, from 7.75%, though was still projecting depletion as of the 2019 audit and was required to assume a single rate pursuant to GASB 68 accounting rules. Based on the 2019 actuarial report, implemented reforms remove the depletion projection and the reported liability will assume 7% in the city's 2020 audit.

Exhibit 3

Snapshot of Fort Worth's balance sheet leverage and fixed costs

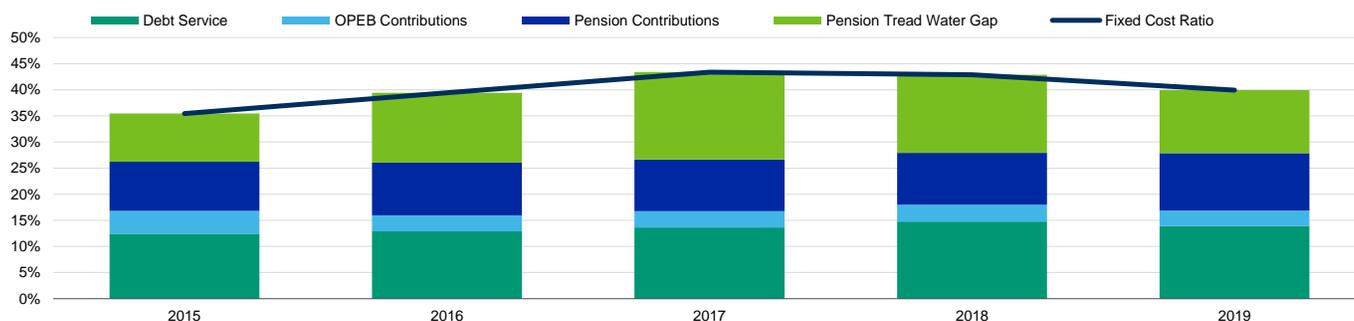
2019	(000)	% of Operating Revenues	Discount Rate
Operating Revenue	891,415	n/a	n/a
Reported Unfunded Pension Liability	2,685,556	301%	5.35%
Moody's Adjusted Net Pension Liability	3,555,617	399%	4.17%
Reported Net OPEB Liability	791,255	89%	3.86%
Moody's Adjusted Net OPEB Liability	748,306	84%	4.17%
Net Direct Debt	796,830	89%	n/a
Debt & unfunded retirement benefits (Moody's adjusted)	5,100,752	572.21%	
Pension Contribution	98,051	11.00%	n/a
OPEB Contribution	26,520	2.98%	n/a
Debt Service	124,041	13.92%	n/a
Total Fixed Costs	248,612	27.89%	n/a
Tread Water Gap	107,442	12.05%	n/a
Moody's Adjusted Fixed Costs	356,054	39.94%	n/a

The tread water gap is calculating based on reported assumptions, which includes the GASB single-discount rate of 5.35%, compared to the plan's assumed rate of return of 7.75% as of the 2018 actuarial report, because the plan amortization trajectory failed the GASB depletion test.

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

The ANPL is likely to increase again because contributions to the plan are not sufficient to prevent the unfunded liability from growing, based on reported assumptions. As shown in the exhibit below, annual contributions relative to the unfunded liability have slightly improved and will improve more in the coming years under the risk sharing provisions of the reform plan, which require automatic increases to contributions if the ADEC is not met. However, even with the automatic contribution increases, the projected annual underfunding will still be a substantial, estimated at over \$60 million or about 6-7% of operating revenues.

Exhibit 4



The tread water gap is calculating based on reported assumptions, which includes the GASB single-discount rate, compared to the plan's assumed rate of return of 7.75% (through the 2018 actuarial report), because the plan amortization trajectory failed the GASB depletion test from 2014-2018 (reflected in 2015-2019 audits).

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

Environmental, social and governance considerations

ENVIRONMENTAL

The city is within the Great Plains region, which is forecast to be most affected by rising temperatures that put increasing strain on water supplies and energy. The region is also expected to see periods of extreme rainfall that can cause flooding. The city maintains a robust water, wastewater and stormwater capital improvement and conservation plans to manage these risks, which are expected to materialize over the long term. The city purchases raw water from the Tarrant Regional Water District, which continually invests in sourcing new water supply to manage regional growth and water demand.

SOCIAL

Demographic and socioeconomic trends in the city are favorable. Since 2016, the city's population has increased 5.2% as strong job growth through February 2020 was fueling in-migration. The median family income in the city as of 2018 was slightly below average, but favorable for a large urban center at 92.6% of the national median. Median age in the city is also relatively young, at 32.5 years, compared to a national median of 37.9 as of 2018.

GOVERNANCE

The city operates under a council/manager form of government where the mayor and eight council members are elected to two year terms. The city's management practices include formal financial policies and comprehensive budgeting and forecasting.

Texas Cities have an institutional framework score of "Aa," which is strong. The sector's major revenue sources (property taxes and sales taxes) account for about a third of revenues each and are subject to a cap; the remaining third is derived from other fees and is not subject to a cap. Property taxes, are subject to a statutory cap of \$25 per \$1,000 of assessed values, with no more than \$15 allocated for debt. Most cities are well under the cap, and on an annual basis can increase their property tax revenues by 8% on existing property without voter approval. Most cities are at the sales tax cap for operating purposes. Unpredictable revenue fluctuations tend to be minor, or under 5% annually. Across the sector, fixed and mandated costs are generally less than 25% of expenditures and are primarily debt service expenditures. Unpredictable expenditure fluctuations tend to be minor, under 5% annually.

Rating methodology and scorecard factors

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

Exhibit 5

Fort Worth (City of) TX

Scorecard Factors	Measure	Score
Economy/Tax Base (30%) ^[1]		
Tax Base Size: Full Value (in 000s)	\$77,063,764	Aaa
Full Value Per Capita	\$90,785	Aa
Median Family Income (% of US Median)	92.6%	Aa
Notching Factors: ^[2]		
Regional Economic Center		Up
Finances (30%)		
Fund Balance as a % of Revenues	25.4%	Aa
5-Year Dollar Change in Fund Balance as % of Revenues	11.2%	Aa
Cash Balance as a % of Revenues	26.0%	Aaa
5-Year Dollar Change in Cash Balance as % of Revenues	13.4%	Aa
Management (20%)		
Institutional Framework	Aa	Aa
Operating History: 5-Year Average of Operating Revenues / Operating Expenditures (x)	1.0x	Aa
Debt and Pensions (20%)		
Net Direct Debt / Full Value (%)	1.2%	Aa
Net Direct Debt / Operating Revenues (x)	1.0x	A
3-Year Average of Moody's Adjusted Net Pension Liability / Full Value (%)	4.7%	A
3-Year Average of Moody's Adjusted Net Pension Liability / Operating Revenues (x)	4.1x	Baa
Notching Factors: ^[2]		
Unusually Strong or Weak Security Features: GO secured by statute		Up
Other Analyst Adjustment to Debt and Pensions Factor (specify): Persistent and large tread water gap		Down
	Scorecard-Indicated Outcome	Aa2
	Assigned Rating	Aa3

[1] Economy measures are based on data from the most recent year available.

[2] Notching Factors are specifically defined in the US Local Government General Obligation Debt methodology dated December 16, 2016.

[3] Standardized adjustments are outlined in the latest GO Methodology Scorecard Inputs publication.

Source: Issuer's audited financial statements; US Census Bureau

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