



February 25, 2020

Key Takeaways

- The Texas Municipal Retirement System and the Texas County and District Retirement System are well funded and, given the generally prudent assumptions and methods, pose minimal credit pressure on local government issuers.
- The Teacher Retirement System of Texas features poor funding discipline in that the statutorily determined contribution amounts have fallen below actuarial recommendations. However, recent legislative changes to contributions are expected to improve funding discipline with minimal impact on affordability for participating issuers.
- The Employees Retirement System of Texas also features poor funding discipline as a result of low statutory contribution rates that are well below actuarial recommendations. This has led to a weak funded status and a projected depletion of plan assets. Absent legislative change to the plan's statutory funding rates, we expect that plan funding will continue to deteriorate.

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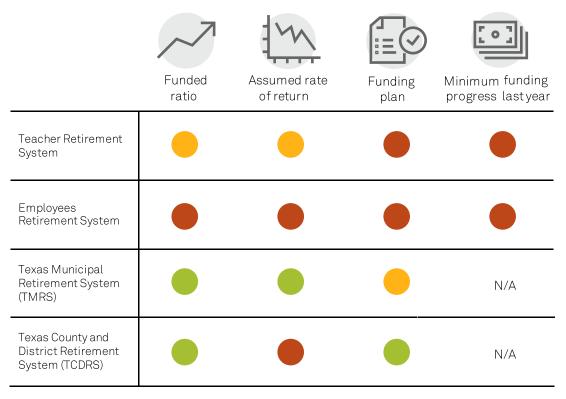
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Chart 1

Pension Overview: Texas



Note: Minimum funding progress for TMRS and TCDRS are evaluated at issuer level. Source: S&P Global Ratings. N/A--Not applicable. Copyright © 2020 by Standard & Poor's Financial Services LLC. All rights reserved.

Credit Fundamentals By Sector

- State of Texas: Among the greatest credit pressures facing the state are the management and funding progress of its pension systems as well as its other postemployment benefit (OPEB) liability. While the pressure is manageable at this time, the state will face increasing pressure to allocate additional resources to sufficiently fund its proportionate share of its liabilities for the Teacher Retirement System of Texas (TRS) and the Employees Retirement System of Texas (ERS). Absent meaningful legislative action, the weight of the state's pension systems will likely add budgetary and credit pressure. However, Texas' overall credit fundamentals remain strong, supported by favorable demographics, broad and diversified economic expansion, and strong budgetary performance and financial oversight.
- Local governments: A good portion of city and county employees' retirement benefits are administered through agent multiple-employer plans Texas Municipal Retirement System (TMRS) and Texas County and District Retirement System (TCDRS). We see the plans' funded status as generally satisfactory-to-strong, based on strong funding discipline and reasonable assumptions. In the near term, we anticipate persistently low risk or challenges to local governments that participate in TMRS and TCDRS. Single-employer plans, while relatively infrequent, have resulted in pockets of pressure within the state given weak funding discipline

The state will face increasing pressure to allocate resources to fund its share of liabilities for the Teacher and **Employees** Retirement Systems.

or poor plan oversight by participating employers.

- School districts: While TRS represents a sizable cost pressure for the state, the special funding situation, wherein the state bears most employer costs, results in minimal contributions and modest liabilities for school districts. With the passage of Senate Bill 12 in the 2019 legislative session, increased contributions from all participating entities is expected to improve the funding of the plan. However, we don't expect these increased costs to exert budgetary pressure on school districts.
- Enterprise: Institutes of higher education and charter schools participating in TRS face similar challenges to independent kindergarten through 12th-grade school districts, with statutory funding that has been less than actuarial recommendations and an only adequate funded status. In addition, legislative changes to contribution rates will affect higher education and charters, although charter schools are now also required to ensure that teachers are paid based on the state's minimum salary schedule, which will compound the effect of higher contribution rates. However, annual plan expenses are expected to remain manageable, with strong demographic and enrollment growth trends that are leading to rising revenue, mitigating the potential strain from rising costs.

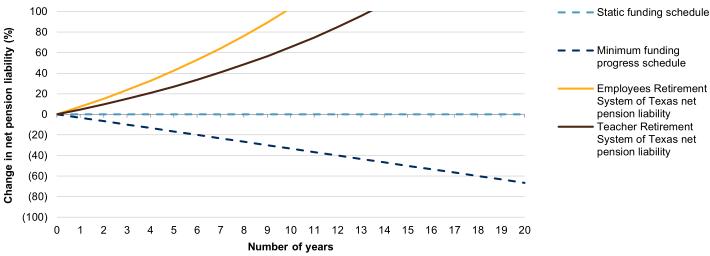
Plan Summary

The majority of issuers within the state participate in one of four major defined benefit pension plans. Both TMRS and TCDRS are agent plans for local governments only, while TRS is a multiple-employer plan for employees of school districts and institutes of higher education. ERS is considered a single-employer plan, for the benefit of employees of the State of Texas. The Texas constitution authorized the creation of these plans, protects the benefits granted to participants, and limits the ability to amend benefits to alleviate rising liabilities. Pension plans in Texas are also subject to the oversight of the Texas Pension Review Board, which ensures compliance with state statute as well as reports on the actuarial soundness and health of public retirement systems throughout the state. We believe that this unique oversight commission supports transparency and adds a layer of protection for beneficiaries and taxpayers throughout the state. Despite this added layer of protection and oversight, the state's largest plans have been chronically underfunded, as shown in chart 2.

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Chart 2

Texas Pension Contribution Sufficiency



Note: This is an illustration based on 2019 and not intended to be a projection. Source: S&P Global Ratings. Copyright © 2020 by Standard & Poor's Financial Services LLC. All rights reserved.

Chart 2 reflects contributions for the most recent year compared with our static funding and minimum funding progress metrics, with the net pension liability projected forward assuming continuation of that practice with all else held constant. This chart is not a look into the future, particularly given that these figures do not reflect recently passed reforms to TRS contributions. Rather, chart 2 illustrates the most recent contribution sufficiency for the largest plans in the state, showing that, absent change, the net pension liability for ERS will double over the next decade. But for the contribution changes for TRS, the teacher plan, was on a similar path.

Texas Municipal Retirement System

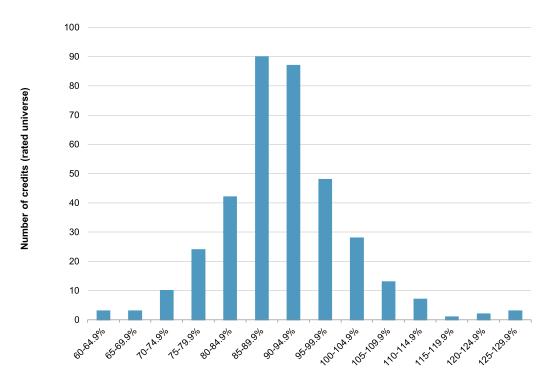
TMRS administers hybrid defined benefit pension plans for municipal employers. As a hybrid plan, members contribute at a designated rate that employers match. At retirement, the employee's account balance, including credited interest and matching employer contributions, is used to calculate the benefit. Municipalities voluntarily participate in TMRS, and plan provisions might vary from city to city. However, cities are required to pay 100% of their actuarially determined contribution. Furthermore, participating employers might elect to make additional contributions to help offset future adverse experiences or pay off liabilities faster. TMRS administers 833 local government plans.

Despite differences in plan provisions, assumptions and methods are common across all TMRS plans. These include a discount rate of 6.75%, which we consider generally conservative given the risk-sharing plan features as well as young demographics in Texas, and closed level-percent-of-pay amortization periods (not to exceed 30 years). While the amortization periods vary by plan, the 30-year maximum is what we consider an aggressive deferral of costs. Within our rated universe, Governmental Accounting Standards Board (GASB) funded ratios range from 61% to 129% (see chart 3). Also somewhat unique to TMRS is its asset smoothing methodology, which cancels offsetting gains and losses to minimize contribution jumps and keeps the smoothed value

of assets generally within 15% of the market value.

Chart 3

Texas Municipal Retirement System Funded Ratio Distribution



Source: S&P Global Ratings.

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In the summer of 2019, the State Legislature passed Senate Bill 1337. While the bill largely addressed various aspects of TMRS administration, it also addressed amortization periods for participating cities, establishing maximums and giving TMRS authority to establish separate amortization periods for each participating city. Most significant, however, the legislation clarified that the maximum amortization period for all participating cities is 30 years. Given the generally conservative discount rate, unique asset smoothing policy, and statutory maximum amortization methods, we expect that contribution volatility will largely be mitigated and costs generally predictable and manageable for participating municipalities.

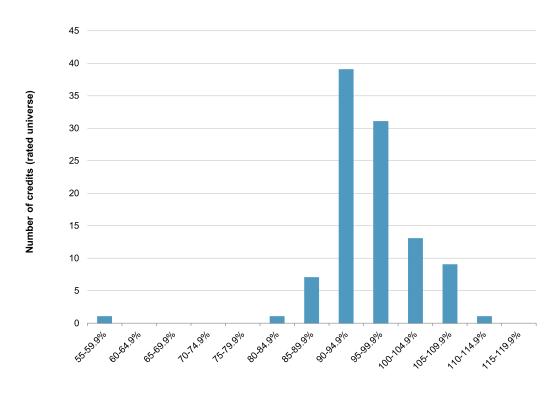
Texas County and District Retirement System

TCDRS serves as an agent multiple-employer plan for 781 counties and districts throughout the state. Participating employers chose their plan provisions (within the options provided by the TCDRS Act) and each plan is funded independently by the county or district, its employees, and investment earnings. Contributions by employers are actuarially determined and employers are required to make the full required payment. Employers can also pay more to prefund benefit increases or mitigate future negative plan experiences.

While TCDRS does feature an 8% assumed rate of return assumption that we consider aggressive

(in that it could lead to volatile contributions), we believe that the asset smoothing methodology (similar to TMRS') helps stabilize contribution rates from rapid market movements. Furthermore. the plan's amortization policy limits maximum amortization periods to 20 years, in line with our guidelines, leading to an average weighted amortization period of 12.6 years. Given the plan's satisfactory aggregate funded status (ranging from 56% to 110% across our rated universe; see chart 4), actuarially determined contributions, and closed amortization periods of modest length and level percent of pay, we don't expect participating employers to face material increases or volatility of contributions leading to unmanageable costs.

Texas County and District Retirement System Funded Ratio Distribution



Source: S&P Global Ratings.

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Employees Retirement System

ERS is a single-employer defined benefit plan for employees of the State of Texas. Employer contributions to the plan are statutorily set at 10% of payroll, which has been insufficient to meet actuarial recommendations. In fact, the plan has a GASB projected depletion date in fiscal 2047. The assumed rate of return of 7.5% is aggressive for a plan with fixed liabilities resting completely on the state. Absent changes to the statutory contribution rates, or benefit provisions, we expect the funded status for ERS to continue to deteriorate and become more of a budgetary burden for the state.

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Teacher Retirement System

TRS benefits public school employees (including charter schools), as well as some employees of institutes of higher education. The state, as outlined in the Texas constitution, is required to contribute at least 6% but not more than 10% of participating payroll costs to fund benefits. For local schools, this results in the state (as a nonemployer contributing entity) assuming a large share of the annual expenses as well as the liability. However, the employer contribution (consisting of the state's and school's shares) is determined statutorily rather than actuarially, and this has resulted in persistent underfunding of the plan over the years. In fact, only twice in the past 17 years have actual contributions to the plan been made at levels equal to or above the actuarially determined rate. As with ERS (discussed above), these contribution insufficiencies will accelerate growth of the respective plan's net pension liability.

However, legislation passed in June 2019 resulted in mandatory increases in contributions from all parties over a six-year period, as shown in table 1. With a discount rate of 7.25%, which we consider high for this plan, and an open amortization period (projected to be 30 years with the contribution increases), we expect funding progress to remain slow with contributions likely falling below not only our minimum funding progress target, but also below static funding levels. This will likely weigh heaviest on the state's balance sheet, as the state is the largest contributing entity. However, we expect liabilities and contributions by participating schools to remain manageable, as payments typically represent a small portion of operating expenses.

Table 1 **Teacher Retirement System Statutory Contributions**

Fiscal 2019 Fiscal 2020 Fiscal 2021 Fiscal 2022 Fiscal 2023 Fiscal 2024 Fiscal 2025+ (% of payroll) District 1.50 1.60 1.70 1.90 2.00 1.50 1.80 State 6.80 7.50 7.50 7.75 8.00 8.25 8.25

7.70

Single-Employer Plans Around The State

7.70

7.70

Employee

Single-employer municipal retirement systems total 17: 14 enabled by state statute and three created by city ordinances or city charters. These plans are mainly associated with the large metropolitan areas in the state, including Austin, Dallas, El Paso, Fort Worth, Galveston, Houston, and San Antonio. In addition to these systems, the Texas Local Fire Fighters Retirement Act, Article 6243(e) of Vernon's Civil Statutes, is the governing statute of plans for the state's paid, part-paid, and volunteer fire systems, which account for 41 single-employer plans across the state.

8.00

8.00

8.25

8 25

While the plan fundamentals, administration, and benefits are unique to each participant, we note several past downgrades of issuers participating in single-employer plans. The plans have partially influenced those downgrades, by way of overly aggressive assumptions, including above-average discount rates, as well as histories of poor funding discipline that have led to weak funded ratios and rising fixed costs that have pressured budgetary performance.

Table 2

Plan Details As Of Most Recent Plan Comprehensive Annual Financial Report

	Teacher Retirement System Aug. 31, 2019	Employees Retirement System Aug. 31, 2019	Texas Municipal Retirement System Dec. 31, 2018	Texas County and District Retirement System Dec. 31, 2018	S&P Global Ratings' view
(Mil. \$)					
Funded ratio	75.24%	47.70%	87.10%	88.50%	TMRS and TCDRS funded ratios are an average of actuarial funded ratios and not GASB reported.
Discount rate	7.25%	7.50%	6.75%	8.00%	A discount rate higher than our 6.5% guideline indicates higher market-driven contribution volatility than what we view as within typical tolerance levels around the country.
Total Plan ADC	\$4,288	\$946	\$882	\$808	Total contributions to the plan recommended by the actuary.
Total Actual Contribution	\$3,500	\$713	\$882	\$870	Total contributions to the plan that were made last year.
Actual contribution as % ADC	82%	75%	100%	108%	Given statutory funding of TRS and ERS, payments have historically not met ADC.
Actual contribution as % MFP	63%	41%	N/A	N/A	Under 100% indicates funding slower than what we view as minimal progress. Planwide data for TMRS and TCDRS is not available.
Actual contribution as % SF	76%	51%	N/A	N/A	Under 100% indicates negative funding progress. Due to amortization notes below, this will likely continue to be under 100%, though statutory increases in TRS contributions will likely move this closer to SF. Planwide data for TMRS and TCDRS is not available.
Amortization met	:hod				
Period	Open	Open	Closed	Closed	A closed funding period ensures the obligor plans to fully fund the obligation during the amortization period.
Length	87	31	Varies	Varies	Length greater than 20 generally correllates to slow funding progress and increased risk of escalation due to adversity. Amortization periods for TMRS and TCDRS are capped at 30 years and 20 years, respectively.
Basis	Level % of payroll	Level % of payroll	Level % of payroll	Level % of payroll	Level % explicitly defers costs, resulting in slow or even negative near-term funding progress. Escalating future contributions may stress affordability, particularly if payroll growth is less than the assumption.
Payroll growth assumption	3%	3.50%	3%	3.25%	The higher this is, the more contribution deferrals are incorporated in the level percent funding methodology. There is risk not only of market or other adversity causing unforeseen escalations to contributions, but of hiring practices not keeping up with assumed payroll growth leading to contribution shortfalls.
Longevity	Generational	Generational	Generational	Generational	A generational assumption reduces risks of contribution "jumps" due to periodic updates from experience studies.

ADC--Actuarially determined contribution. ERS--Employees Retirement System. GASB--Governmental Accounting Standards Board. MFP--Minimum funding progress. N/A--Not applicable. SF--Static funding. TCDRS--Texas County and District Retirement System. TMRS--Texas Municipal Retirement System.

Related Research

- Guidance: Assessing U.S. Public Finance Pension And Other Postemployment Obligations For GO Debt, Local Government GO Ratings, And State Ratings, Oct. 7, 2019
- U.S. State Pension Reforms Partly Mitigate The Effects Of The Next Recession, Sept. 26, 2019
- Fifteen Largest U.S. City Pensions See Modest Gains In 2018, But Recession Risk And Rising OPEB Cost Challenges Persist, Sept. 23, 2019

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