



Actuarial Valuation

December 31, 2010

Prepared by

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June 16, 2011

Board of Trustees
Texas County & District Retirement System
P.O. Box 2034
Austin, TX 78768-2034

Re: Actuarial Valuation as of December 31, 2010

Dear Board of Trustees:

As requested, we have performed an actuarial valuation of the Texas County & District Retirement System (TCDRS) as of December 31, 2010. The major findings of the valuation are contained in this report. This report reflects the benefit provisions and contribution rates in effect for each of the 619 separate employer plans (618 active plans and one non-depositing plan) participating in TCDRS as of December 31, 2010. This is a summary report for TCDRS as a whole; detailed information for each individual employer can be found in the employer-specific valuation reports on TCDRS' website.

Actuarial Certification

This report is a summary of the valuation results. Additional detailed results are provided in the TCDRS comprehensive annual financial report (CAFR).

In preparing this report, we relied on information (some oral and some in writing) supplied by the TCDRS staff. This information includes, but is not limited to, statutory provisions, employee data and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes, although we have not audited the data at the source. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is found to be materially inaccurate or incomplete, our calculations will need to be revised.

All costs, liabilities, rates of interest, and other factors for TCDRS have been determined on the basis of actuarial assumptions and methods which are reasonable (taking into account the experience of TCDRS and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System. Further, in our opinion, the actuarial assumptions in the aggregate are reasonable and are related to the experience of the Plan and to reasonable expectations and represent a reasonable estimate of anticipated experience under the Plan.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of

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the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

These assumptions are based on our 2009 Investigation of Experience report. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix D.

Actuarial computations presented in this report are for purposes of determining the recommended funding amounts for TCDRS. Actuarial computations under GASB Statements No. 25, No. 27, No. 43 and No. 45 are for purposes of fulfilling financial accounting requirements and are provided separately. The computations prepared for accounting purposes may differ from those disclosed in this report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the funding requirements and goals of TCDRS. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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- a) TCDRS may provide a copy of Milliman's work, in its entirety, to the System's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the System.
- b) TCDRS may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report along with the information contained in the CAFR is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein



We would like to express our appreciation to Mr. Gene Glass, Director of TCDRS, and to members of his staff, who gave substantial assistance in supplying the data on which this report is based.

We respectfully submit the following report, and we look forward to discussing it with you.

Sincerely,

A handwritten signature in black ink that reads "Nick Collier".

Nick J. Collier, ASA, EA, MAAA
Consulting Actuary

NJC/MCO/nlo

A handwritten signature in black ink that reads "Mark C. Olleman".

Mark C. Olleman, FSA, EA, MAAA
Consulting Actuary

**Texas County and District Retirement System
Actuarial Valuation**

December 31, 2010

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Texas County & District Retirement System Actuarial Valuation

December 31, 2010

Section 1 Executive Summary



We are pleased to present the 2010 Valuation summary report. The actuarial valuation of TCDRS requires a separate valuation and determination of contribution rates for each of the 619 individual employer plans (618 active plans and one non-depositing plan). The results of this valuation determine the required employer contribution rates for 2012, assuming no changes in plan provisions or other significant events.

Overview

This document summarizes the results of the valuation for all plans and highlights key observations made regarding specific individual plans, as well as describing groups of plans that were reviewed.

Both the TCDRS system in total and the individual employer plans continue to be funded in an appropriate manner. The contribution rates being paid in 2011 and those calculated for 2012 satisfy the statutory requirements and meet the guidelines of the Government Accounting Standards Board (GASB). The overall funding of the system compares favorably with other public retirement systems.

Several key points to note for the 2010 Valuation are summarized as follows:

- **Funding:** The funded ratio for the system in aggregate decreased from 89.8% to 89.4%. The main factor causing this decrease was recognition of investment losses from 2008. No other factor had a significant impact. The funded ratio uses the smoothed actuarial value of assets which are currently deferring substantial investment losses. If the actual fund values were used instead (i.e., all investment losses were recognized), the funded ratio would be 85.7%.

Overview (continued)

- **Contribution Rates:** On average, the employer contribution rate increased by 0.47% of payroll (not including plan changes). Recognition of prior investment losses caused an increase of 0.41%. Additionally, payroll increases that were significantly less than expected caused a 0.18% increase in the average rate. The 2010 investment gain and other factors caused an offsetting decrease of 0.12%. The impact of all changes is discussed in more detail later in this section and in the Experience Analysis section of Section 2. This discussion includes the impact of plan changes which caused a decrease in the aggregate rate calculated in the prior valuation due to changes elected by a few of the larger employers that reduced future benefits for their employees.
- **Investment Return:** The employer accounts in the Subdivision Accumulation Fund (SAF) received an 18% interest credit. This had a positive impact on the valuation, although it was more than offset by the recognition of a portion of prior investment losses under the asset smoothing method.
- **Looking Ahead:** 30% of the 2008 investment loss has been recognized in the valuation due to the use of asset smoothing, with the remaining 70% to be recognized over the next seven valuations. This allows for increases in contribution rates to be more gradual and for a potential recovery to help offset the impact.

It should be noted that by deferring the recognition of the losses, this pushes expected increases in employer contribution rates off into the future. As a measure of this, if smoothing had not been applied to this valuation (i.e., if employer contribution rates had been based on the actual fund values), the average employer contribution rates would have been 1.07% of payroll higher. This is a rough measure of the increase employers can expect to see over the next seven years; however, the actual increase will ultimately either be greater or less depending on future investment returns and a number of other factors. It should also be noted that the impact by individual employer can vary significantly.

Key Results

The following chart summarizes the key numerical results of the valuation:

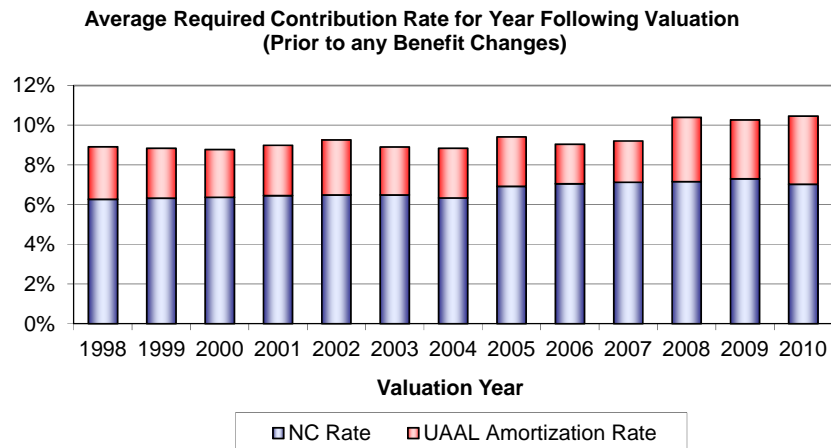
	<u>12/31/2010</u>	<u>12/31/2009</u>	<u>% Change</u>
Number of Employers			
Active	618	601	2.8%
Non-Depositing	<u>1</u>	<u>1</u>	0.0%
Total	619	602	2.8%
Number of Members			
Contributing	122,889	123,446	-0.5%
Non-Contributing	59,029	55,956	5.5%
Annuitants ⁽¹⁾	<u>40,836</u>	<u>37,979</u>	7.5%
Total	222,754	217,381	2.5%
Averages			
Age (Actives)	45.0	44.8	0.5%
Years of Service (Actives)	11.3	10.9	3.5%
Annual Pay (Actives)	\$ 42,428	\$ 41,864	1.3%
Member Deposit Rate	6.67%	6.84%	-2.5%
Account Balance (ESF)	26,442	25,185	5.0%
Monthly Benefit (Annuitants) ⁽¹⁾	1,372	1,310	4.7%
Actuarial Value of Assets			
Employee Savings Fund	\$ 4,810.3 million	\$ 4,518.3 million	6.5%
Subdivision Accumulation Fund	8,728.7 million	8,266.8 million	5.6%
Current Service Annuity Reserve Fund	<u>4,269.6 million</u>	<u>3,779.1 million</u>	13.0%
Total Actuarial Value of Assets	\$ 17,808.6 million	\$ 16,564.2 million	7.5%
Funding			
Actuarial Accrued Liabilities	\$ 19,931.2 million	\$ 18,448.1 million	8.0%
Actuarial Value of Assets	<u>17,808.6 million</u>	<u>16,564.2 million</u>	7.5%
Unfunded Actuarial Accrued Liability	2,122.6 million	1,883.9 million	12.7%
Aggregate Funding Ratio	89.4%	89.8%	-0.5%
Average Required Contribution Rate - Variable Rate Plans			
Average Normal Cost Rate	7.02%	7.30%	-3.8%
Average UAAL Rate	<u>3.44%</u>	<u>2.96%</u>	15.9%
Average Required Contribution Rate	10.46%	10.26%	1.9%
Results Based on Fund Values (No Asset Smoothing) -- For Informational Purposes Only			
Average Required Contribution Rate	11.53%	12.44%	-7.3%
Aggregate Funding Ratio	85.7%	81.7%	4.9%

⁽¹⁾ The average monthly benefits are the regular benefits paid in January following the valuation date. In cases of retirees with multiple accounts from a single employer, the accounts are considered as a single benefit. Benefits from multiple employers to a single retiree are calculated separately.

Plan Funding

The purpose of the valuation is to determine the contribution rates and measure the funding status of each employer plan based on the assumptions, benefits and membership of each plan. Funding status is measured by the funded ratio for each plan; contribution rates are based on the funded method used.

Employer contribution rates effective for 2012, as determined by this 2010 Valuation, increased by 0.47% on average when compared with the rate actually paid in 2011. The weighted average contribution rate for all plans increased from 9.99% to 10.46%. Note that the weighted average rate is determined as the total estimated required contributions for the next year (2012) divided by the total expected payroll. It does not reflect the cost of any changes in benefits that may be adopted during 2011. A historical perspective on required contribution rates is shown below.



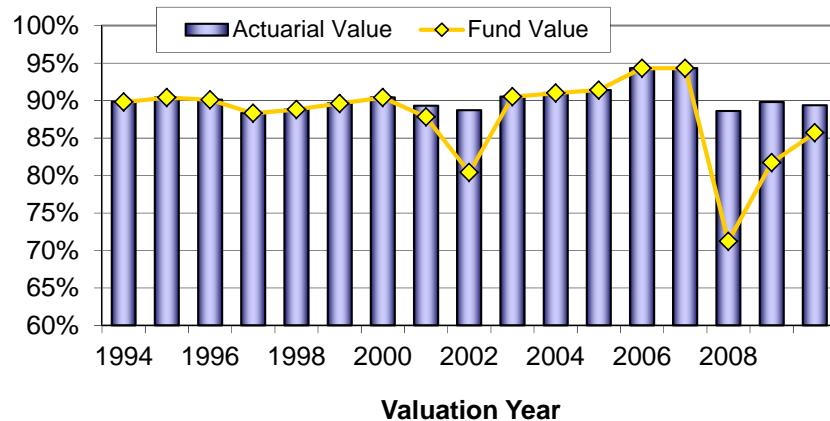
Looking at the system in total, the Funded Ratio of Actuarial Assets to Actuarial Accrued Liabilities has decreased since the 2009 valuation from 89.8% to 89.4%. Note that a funded ratio of 90% indicates that actuarial assets are 10% less than liabilities. The system in total refers to all employer plans, plus the Current Service Annuity Reserve Fund (CSARF), but does not include any assets currently held in the Endowment Fund. If the reserves held in the Endowment Fund were included in the Actuarial Assets, the Funded Ratio would be slightly higher at 92.5%.

All Funded Ratios discussed in this report are on an ongoing basis. The TCDRS Act allows for the termination of individual district plans under certain conditions. If measured on a termination basis, the liabilities would be higher and therefore the Funded Ratio would be lower than the measurement on an ongoing basis.

Plan Funding (continued)

As discussed earlier, the funded ratio has decreased slightly since the last year. As shown below, the funded ratio using the actuarial value of assets has remained fairly level since 1994 – very level when compared to other public retirement systems. The only exceptions were a small increase at December 31, 2006 due to an additional 6% interest credit to the SAF and the decrease two years ago due to the 2008 investment loss. The funded ratio based on the actual fund values has been less stable.

Historical Aggregate Funded Ratio



Individual Employer Plan Changes

During 2010, 112 employers changed their benefit provisions. Of these employers, 107 made changes that improved benefit provisions, and the remaining five lowered future benefits. The most common benefit changes were retiree Cost-of-Living Adjustments (COLAs).

Experience Analysis

A detailed analysis of the sources of the rate change was performed for each current plan that was also in the December 31, 2009 valuation. There are many factors that are measured when comparing one year's expected valuation results to the actual results a year later. This is discussed in further detail in Section 2.

The primary source for the increases in the employer contribution rates for individual employers was recognition of 2008 investment losses and decreases in payroll (or increases less than assumed). This was partially offset by the better-than-assumed investment return for 2010

**Plan Funding
(continued)**

The following chart shows how various factors affected the overall funding of TCDRS, as compared to the last valuation. The most significant changes are shown in bold.

Sources of Change	Weighted Contribution Rate	Aggregate Funding Ratio
Calculated Rate for 2011 (2009 Valuation)	10.26%	89.8%
Changes in Plan Provisions	-0.27%	0.1%
Average Rate Paid in 2011	9.99%	89.9%
Expected Year-to-Year Change	0.00%	0.8%
Employer Lump-Sum Contributions	-0.02%	0.1%
Investment Experience		
Investment Income -- Current Year	-0.09%	0.4%
Investment Income -- Prior Years	0.41%	-1.9%
Payroll Increase Less than Expected	0.18%	0.1%
Other Demographic Experience	-0.01%	0.0%
Other	0.00%	0.0%
Total Change	0.47%	-0.5%
Calculated Rate for 2012 (2010 Valuation)	10.46%	89.4%

CSARF & GTLF

Both the CSARF and the Group Term Life Fund (GTLF) continue to maintain a level of assets in each fund to sufficiently support their expected benefit payments. The projected surplus for the GTLF increased over last year.

The projected surplus for the CSARF decreased slightly since the prior year. The CSARF continues to maintain a projected surplus, but at a lower level. This should continue to be monitored going forward.

Inactive Plans

There is currently one inactive plan where neither the members nor the employer are contributing to TCDRS. Adjustments in benefits may be needed based on the current and expected funding status of this plan. The unfunded amount for this plan is currently being funded by an active employer; therefore, we are recommending no adjustments be made at this time.

The actuary has determined that no inactive plans should have their supplemental benefits increased or decreased.

Plan Data

The makeup of the valuation group changed from the 2001 to 2010 Valuations as shown by the next three tables:

	Active	Inactive Plans	Total Plans
2001	503	14	517
2002	521	14	535
2003	539	14	553
2004	544	15	559
2005	557	18	575
2006	565	8	573
2007	567	7	574
2008	585	1	586
2009	601	1	602
2010	618	1	619

	Active Contributing Members	Non- Contributing Members	Annuitants	Total
2001	98,753	27,819	23,132	149,704
2002	101,415	29,194	24,862	155,471
2003	103,012	30,198	26,420	159,630
2004	104,545	31,177	28,496	164,218
2005	107,212	34,975	30,347	172,534
2006	110,791	39,781	32,440	183,012
2007	116,858	46,104	34,362	197,324
2008	120,347	52,188	36,509	209,044
2009	123,446	55,956	37,979	217,381
2010	122,889	59,029	40,836	222,754

	Covered Payroll (in millions)	Contributing Members	Annual Pay	
			Average	Percentage Increase
2001	3,050.2	98,753	30,887	4.7%
2002	3,274.1	101,415	32,284	4.5%
2003	3,426.7	103,012	33,265	3.0%
2004	3,610.8	104,545	34,539	3.8%
2005	3,804.5	107,212	35,486	2.7%
2006	4,054.3	110,791	36,594	3.6%
2007	4,420.5	116,858	37,828	3.4%
2008	4,830.3	120,347	40,136	6.1%
2009	5,168.0	123,446	41,864	4.3%
2010	5,213.9	122,889	42,428	1.3%

**Plan Data
(continued)**

An analysis of changes in the member group is presented in the following chart.

	Active Contributing Members	Non-Contributing Members	Annuitants
December 31, 2009 Valuation	123,446	55,956	37,979
Termination with Refund	(5,577)	(3,002)	-
Termination without Refund	(5,776)	5,776	-
Active/Inactive Death with Annuity	(93)	(30)	123
Service Retirement	(2,776)	(688)	3,464
Disability Retirement	(42)	(21)	63
Annuitant Death without Beneficiary	-	-	(693)
New Entrants	12,722	1,923	-
Rehires	985	(885)	(100)
Total Change	(557)	3,073	2,857
December 31, 2010 Valuation	122,889	59,029	40,836

**Recommended
Board Action**

We recommend the Board adopt the following:

- (1) Approve the required pension plan contribution rates for 2012 for plans with no changes in 2011 and for plans that adopt plan changes in 2011.
- (2) Approve the 2012 premium rates for the Group Term Life Fund.

Texas County & District Retirement System Actuarial Valuation

December 31, 2010

Section 2 Valuation Results



We performed an actuarial valuation for each of the 618 active (and one inactive) employers participating in TCDRS as of December 31, 2010. This section discusses the summary results for all or a specific group of plans as well as the basis for the valuation. Key results for each employer can be found in Appendix D. Detailed information for each individual employer can be found in their specific valuation report on the TCDRS website.

The purpose of the valuation is to measure the funding status and to determine the employer contribution rate based on the assumptions, benefits and membership of each separate employer plan. Funding status is measured by the funded ratio for each plan, contribution rates are based on the funding method used.

Summary Results

The tables on the next few pages present:

- (1) The summary of assets held by TCDRS Pension Trust Fund. Assets used to fund benefit obligations are the Employee Savings Fund (ESF), the Subdivision Accumulation Fund (SAF) and the Current Service Annuity Reserve Fund (CSARF). The Endowment Fund is used as a contingency fund. The Interest and Expense Funds are used for administrative purposes.
- (2) The summary valuation results for all plans in total for both the 2009 and 2010 valuations.

**Texas County & District Retirement System
Actuarial Valuation**

**Statements of Plan Net Assets
Pension Trust Fund
As of December 31, 2010 and 2009**

	2010	2009
Assets		
Cash and Cash Equivalents	\$ 5,364,443	\$ 11,509,857
Receivables:		
Contributions	78,794,567	73,621,282
Investment Interest and Dividends	63,210,152	50,424,928
Securities-Lending Interest	229,070	479,279
Other	15,103	43,181
Total Receivables	142,248,892	124,568,670
Prepaid Expenses and Other Assets	210,356	279,837
Investments, at Fair Value:		
Core Fixed Income	2,785,085,041	2,726,337,645
Domestic Equities	3,551,404,022	2,917,515,279
International Equities	3,679,307,589	3,422,740,137
High-Yield Debt	2,284,178,182	2,082,857,455
REITs	609,132,390	396,859,778
Absolute Return	2,868,271,181	2,179,012,895
TIPS	685,469,932	740,190,557
Private Equity	663,769,972	378,407,184
Private Real Estate	56,551,186	13,834,770
Commodities	370,111,105	0
Short-Term Investment Fund	45,722,567	588,063,368
Total Investments	17,599,003,167	15,445,819,068
Invested Securities-Lending Collateral	431,387,915	671,187,953
Capital Assets, net	16,375,454	18,088,412
Total Assets	18,194,590,227	16,271,453,797
 LIABILITIES		
Accounts Payable and Investments Payable	14,364,793	15,507,690
Funds Held for Optional Group Term Life Fund	19,039,310	15,389,963
Securities-Lending Collateral	431,426,513	685,016,632
Total Liabilities	464,830,616	715,914,285
Net Assets Held in Trust for Pension Benefits, Dec. 31	\$ 17,729,759,611	\$ 15,555,539,512

**Texas County & District Retirement System
Actuarial Valuation
Changes in Plan Net Assets by Fund**

	Employees Saving Fund	Subdivision Accumulation Fund	Current Service Annuity Reserve Fund	Endowment Fund	Income Fund	Expense Fund	Totals
Additions							
<u>Deposits and Contributions</u>							
Employee Deposits and Employer Contributions	\$ 357,797,427	\$ 550,102,572	\$ -	\$ -	\$ -	\$ -	\$ 907,899,999
Total Deposits and Contributions	357,797,427	550,102,572	-	-	-	-	907,899,999
<u>Investment Income</u>							
Net Appreciation in Fair Value of Investments	-	-	-	-	1,712,863,123	-	1,712,863,123
Interest and Dividends	-	-	-	-	283,457,778	-	283,457,778
Total Investment Activity Income	-	-	-	-	1,996,320,901	-	1,996,320,901
Less Investment Activity Expenses	-	-	-	-	31,542,620	-	31,542,620
Net Income from Investment Activities	-	-	-	-	1,964,778,281	-	1,964,778,281
Net Income from Securities-Lending Activities	-	-	-	-	2,555,395	-	2,555,395
Net Appreciation in Fair Value of Securities-Lending	-	-	-	-	13,576,166	-	13,576,166
Net Income from Securities-Lending	-	-	-	-	16,131,561	-	16,131,561
Total Net Investment Income	-	-	-	-	1,980,909,842	-	1,980,909,842
Building Operations Income	-	-	-	-	-	1,410,153	1,410,153
Total Additions	357,797,427	550,102,572	-	-	1,980,909,842	1,410,153	2,890,219,994
Deductions							
Benefits Paid	-	245,419,922	387,876,279	15,260	-	-	633,311,461
Withdrawals	65,167,123	-	-	6,310	-	-	65,173,433
Interest Allocation to Optional Group Term Life Fund	-	-	-	-	1,152,389	-	1,152,389
Administrative & Building Operations Expenses	-	-	-	-	-	16,362,612	16,362,612
Total Deductions	65,167,123	245,419,922	387,876,279	21,570	1,152,389	16,362,612	715,999,895
Transfers of Funds							
Retirement Allowances	(306,533,350)	(304,775,643)	611,308,993	-	-	-	-
Investment Income and Other	305,809,344	1,219,833,131	267,047,636	174,367,342	(1,979,757,453)	12,700,000	-
Escheated Accounts, net	36,407	-	-	(36,407)	-	-	-
Net Transfers	(687,599)	915,057,488	878,356,629	174,330,935	(1,979,757,453)	12,700,000	-
Net Increase (Decrease) in Plan Net Assets	291,942,705	1,219,740,138	490,480,350	174,309,365	-	(2,252,459)	2,174,220,099
Net Assets Held in Trust for Pension Benefits:							
Beginning of Period, Jan. 1, 2010	4,518,316,184	6,776,850,725	3,779,085,676	454,919,400	-	26,367,527	15,555,539,512
End of Period, Dec. 31, 2010	\$ 4,810,258,889	\$ 7,996,590,863	\$ 4,269,566,026	\$ 629,228,765	\$ -	\$ 24,115,068	\$ 17,729,759,611

**Texas County & District Retirement System
Actuarial Valuation**

December 31, 2010

Summary Actuarial Valuation Results

	December 31, 2010	December 31, 2009
Results for Employer Plans		
Actuarial present value of future benefits		
Annuitants	\$ 2,277,716,877	\$ 2,022,642,076
Members	<u>16,308,134,370</u>	<u>15,709,206,416</u>
Total	\$ <u>18,585,851,247</u>	\$ <u>17,731,848,492</u>
Actuarial present value of future normal cost contributions	<u>2,836,299,901</u>	<u>2,971,552,978</u>
Actuarial accrued liability [1 - 2]	\$ 15,749,551,346	\$ 14,760,295,514
Actuarial value of assets		
Employees Saving Fund	\$ 4,810,258,889	\$ 4,518,316,184
Subdivision Accumulation Fund	<u>8,728,736,661</u>	<u>8,266,811,484</u>
	\$ 13,538,995,550	\$ 12,785,127,668
Unfunded actuarial accrued liability (UAAL)	\$ 2,233,511,133	\$ 1,999,350,293
Overfunded actuarial accrued liability (OAAL)	<u>(22,955,337)</u>	<u>(24,182,447)</u>
Funded actuarial accrued liability (UAAL), net of overfunded actuarial accrued liability (OAAL) [5 + 6]. Also equals [3 - 4].	2,210,555,796	1,975,167,846
Results for Pooled Benefits		
Actuarial present value of future benefits on the Current Service Annuity Reserve and for annuities in effect	\$ 4,181,565,778	\$ 3,687,866,784
Actuarial value of assets of the Current Service Annuity Reserve Fund	<u>4,269,566,026</u>	<u>3,779,085,676</u>
Unfunded actuarial accrued liability (UAAL) [8 - 9]	<u>(88,000,248)</u>	<u>(91,218,892)</u>
Systemwide UAAL net of OAAL [7 + 10]	\$ 2,122,555,548	\$ 1,883,948,954
Systemwide Funded Ratio [(4 + 9)/(4 + 9 + 11)]	89.4%	89.8%

Actuarial Value of Assets

The actuarial value of assets for the SAF recognizes the difference between each year's actual and expected return of the SAF evenly over 10-year periods, subject to a 40% corridor. The actuarial value of the assets for the ESF and the CSARF are equal to the fund values.

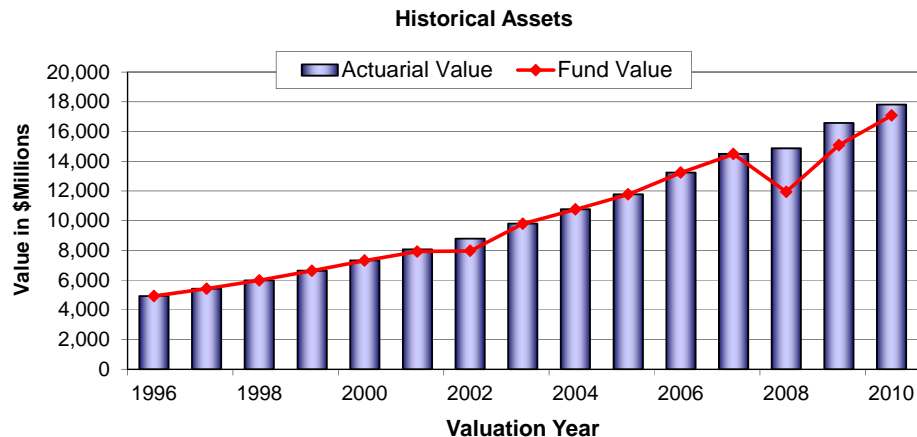
Since the actuarial value is smoothed, it does not reflect most of the adverse investment experience from the 2008 market decline. This has been somewhat offset by the strong 2009 and 2010 returns, but the SAF fund value is still about \$0.7 billion less than the actuarial value of the SAF, which represents losses to be reflected in future valuations.

Combined Fund Value*	\$17.08 Billion
Actuarial Value of Combined Fund	\$17.81 Billion
Fund Value/Actuarial Assets	96%

* Combined Fund is ESF, SAF and CSARF.

The actuarial value of assets (AVA) shown above is the sum of the AVA for each individual employer. Details on the derivation of the actuarial value of assets are provided in the employer-specific valuation reports.

A historical comparison of the actuarial value of assets and the actual total fund values is shown below:



Valuation Basis

Each year's actuarial valuation is dependent on the key components that are used in the valuation process. These include the actuarial assumptions used to project the probability of paying out benefits in the future, the actuarial cost method used to allocate costs to current and future periods, the benefit provisions that indicate the amount of the expected benefit, and the membership data that indicate to whom the benefits may be paid.

A. Assumptions

Each employer's valuation was based on actuarial assumptions adopted by the Board in 2009. The assumptions were studied during the 2005-2008 actuarial investigation of experience. A detailed disclosure is shown in Appendix D. Details on the assumptions for each employer are provided in the employer-specific valuation reports.

The demographic assumptions include probabilities of terminating active contributing and non-contributing membership due to withdrawal, death, disability or retirement. Withdrawal assumptions vary by age and years of service and by plan. The specific plan withdrawal assumption was based on that employer's experience during the investigative study period compared to the entire TCDRS experience.

Individual member salary increases are assumed to vary by length of service and by entry age group. The salary increases are based on both a general wage inflation component of 4.0% and a merit, promotion, and longevity component. The total salary increase over a member's career is expected to be about 5.4% per year on average.

The economic assumptions are summarized below. The underlying price inflation assumption used to establish the economic assumptions is 3.5%; however, the price inflation assumption itself is not directly used in the valuation.

Economic Assumption	Annual Rate
Investment Return	
Subdivision Accumulation Fund – SAF	9.0%
Employee Savings Fund – ESF	7.0%
Current Service Annuity Reserve Fund – CSARF	7.0%
Aggregate Investment Return	8.0%
General Wage Inflation	4.0%
Payroll Increase *	4.0% or less
Price Inflation	3.5%
Cost-of-Living Adjustments	0% **

* *The actual payroll increase assumption varies by plan based on experience from the last investigation of experience.*

** *TCDRS does not permit automatic Cost-of-Living Adjustments (COLAs) for post-retirement benefits. However ad hoc COLAs are permitted.*

We believe the assumptions adopted by the Board are reasonable as long-term average expectations and collectively represent reasonable expectations of experience over the long-term future. The next investigation of experience will be performed in 2013, covering the period 2009-2012.

B. Benefits

TCDRS is a nontraditional defined benefit plan that shares many characteristics with a cash balance plan. Plan provisions are adopted by each individual employer based on options available under the TCDRS Act. The December 31, 2010 actuarial valuation reflects benefits in effect as of January 1, 2011.

Members can retire at age 60 with five, eight, or 10 years of service, or at any age with 20 or 30 years of service. Members can also retire when their age and service equals 75 or 80, depending on which option the employer adopts.

Each employer has the ability to change future benefit accruals and specific plan provisions that apply to their employees; however, prior accrued benefits cannot be reduced. The basic employer match equals the employee account balance at retirement; the accounts are then converted to annuities. In addition, the employer may provide additional benefits by matching at a higher rate than one-to-one.

The member's contribution rate is an integer rate between 4% and 7%. The member's retirement benefits are based on the employee contributions made to the plan accumulated with interest. At retirement the member's account is matched at the rate or rates selected by the employer, and these total benefit credits are converted to a monthly annuity.

Details on the benefit provisions for each employer are provided in the employer-specific valuation reports.

Based on the results of each year's valuation, information is available to the individual employers about the cost to implement certain benefit increases or decreases, more generous retirement eligibility provisions, ad hoc COLAs for annuitants, and certain other changes. The COLA cost information is provided each spring with the employer's "Retirement Plan Assessment." Additional cost information is provided by TCDRS staff, upon request.

Following the valuation each year, an employer may elect to modify the plan provisions applicable to their employees for the subsequent plan year. During 2010, 112 plans made a total of 122 different benefit changes as summarized in the chart on the following page.

**B. Benefits
(continued)**

Number of Changes	Type of Change
46	Added a one-time CPI-related COLA increase for retired members' benefits
34	Added a one-time flat percentage increase to retired members' benefits
19	Increased the Employer Match Rate
6	Lowered the years of service for vesting
3	Increased the Employee Contribution Rate
3	Increased Prior Service Credits
3	Added 20-Year Retirement Eligibility
3	Decreased the Employer Match Rate
2	Decreased the Employee Contribution Rate
2	Added Rule of 75 Retirement Eligibility
1	Added a partial lump sum benefit feature
122	Total Changes (112 Employers)

C. Cost Method

The actuarial cost method refers to how benefits are assumed to be funded by contributions and investment income in an orderly manner. The result is that sufficient funds are expected to be accumulated by the time benefit payments commence. The determination of the employer contribution rate is based on the entry age cost method.

The entry age cost method will compute an annual cost – the normal cost rate – that is expected to accumulate funds evenly over a member's working career. For TCDRS, the rate is expressed as a percentage of pay. The normal cost as a percentage of pay is not expected to vary over the period of time the member participates in the plan. For an individual employer's plan, the total normal cost rate will remain fairly stable if the average age at hire, or entry age, of all employees remains level. All plans in TCDRS use the entry age cost method to compute annual costs.

Note that the 20-year (or 15-year) amortization of the UAAL is over a closed period. In each successive year, a new layer is set up to amortize the actuarial gain or loss or assumption change, over a new 20-year period. Plan changes are amortized over new 15-year periods. If the plan has an Overfunded Actuarial Accrued Liability (OAAL), this amount is amortized over a rolling 30-year period. That is, each year the entire OAAL is refinanced over a 30-year period.

**C. Cost Method
(continued)**

All plans use the variable-rate funding method except for Dallas County. The County's fixed-rate contribution rate has to meet the same minimum funding standards as the variable rate plans. If not, the fixed rate is determined to be inadequate, and the fixed rate needs to be increased if future benefits are not reduced.

D. Data

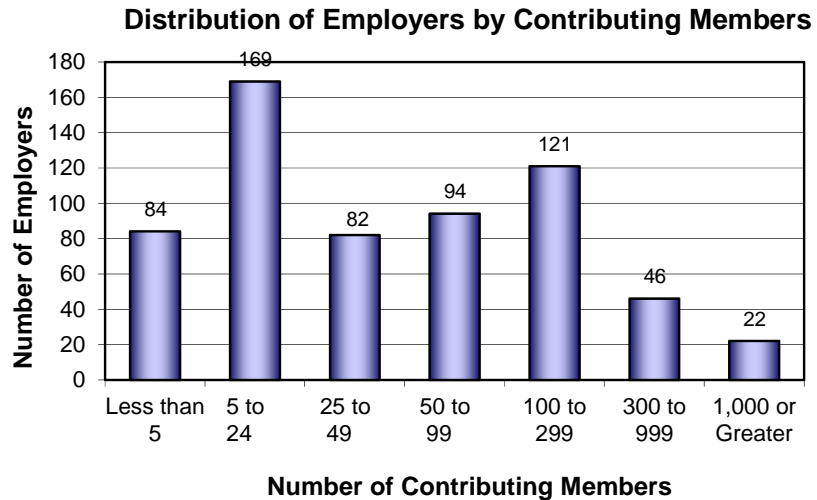
The valuation is a snapshot measurement as of a single day, the valuation date, of the expected benefits to be paid by the employer to those members who have an interest in a future benefit payment. The valuation only considers members participating as of the valuation date and does not project or assume benefits for any employees not included in the membership on the valuation date. However, the active population of an individual employer is assumed to remain level for purposes of projecting payroll.

Thus, the measurement of the adequacy of any single employer's plan is dependent not only on the assumptions used to project benefit payments, and the plan provisions which define the benefit amounts, but also by the members actually participating on each valuation date. The following table indicates the total membership of all 618 active plans, as well as the one inactive plan, as of December 31, 2010.

	Active Contributing Members	Non- Contributing Members	Annuitants	Total
2000	96,739	24,677	21,897	143,313
2001	98,753	27,819	23,132	149,704
2002	101,415	29,194	24,862	155,471
2003	103,012	30,198	26,420	159,630
2004	104,545	31,177	28,496	164,218
2005	107,212	34,975	30,347	172,534
2006	110,791	39,781	32,440	183,012
2007	116,858	46,104	34,362	197,324
2008	120,347	52,188	36,509	209,044
2009	123,446	55,956	37,979	217,381
2010	122,889	59,029	40,836	222,754

**D. Data
(continued)**

The makeup of each individual employer plan within TCDRS varies significantly, not only by benefit provisions, but also by membership size. The median number of contributing members is slightly less than 50, so over half the employers have less than 50 contributing members. The following graph indicates the number of plans by size as measured by the number of contributing members.



Funded Status

As mentioned earlier, one purpose of the valuation is to measure the funding status of each plan. The funding status can be determined several ways. One measurement required by GASB (the Governmental Accounting Standards Board) is the Funded Ratio. The Funded Ratio is the value of the Actuarial Value of Assets over the Actuarial Accrued Liability, all measured as of a single date – the valuation date.

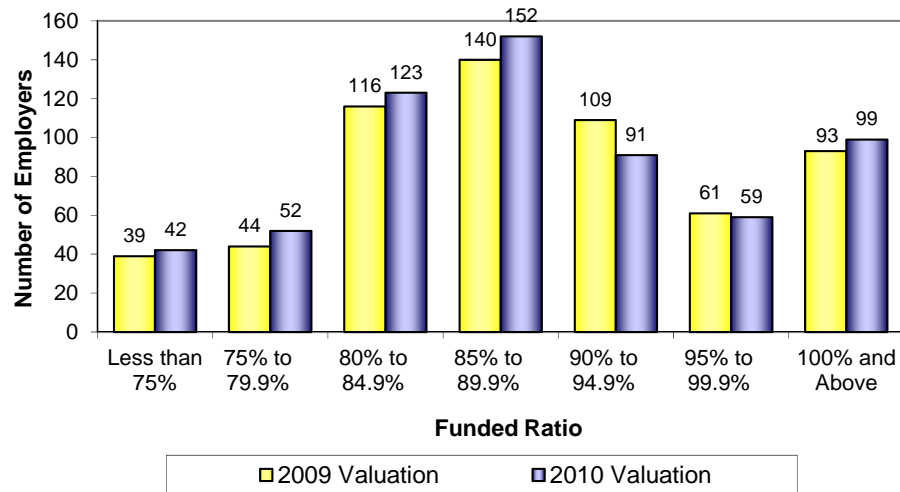
If the funded ratio is less than 100%, the plan has a UAAL, or a measured shortfall from the expected accumulated prior years normal cost contributions. If the ratio is more than 100%, the plan has an OAAL, or a measured excess from the expected accumulated prior years normal cost contributions.

Differences between the Actuarial Accrued Liability and the assets arise primarily due to experience different than the assumptions and benefit changes that are applied retroactively to accrued service credits.

**Funded Status
(continued)**

The following graph illustrates a summary of the Funded Ratio measurement for all 618 active plans as of December 31, 2010. For comparison purposes, the Funded Ratio is also shown for the 602 plans valued as of December 31, 2009.

Comparison of Funded Ratios (Actuarial Assets/Accrued Liability)



On a system-wide basis, the aggregate funded ratio decreased from 89.8% to 89.4%. Similarly, on the individual employer level, the funded ratios of most employers declined slightly.

Contribution Rates

Another measurement of the valuation results is to study how much the employer contribution rates have changed over the past year due to experience and assumption changes. Contribution rates can also change due to benefit plan provisions. However, the following discussions of changes in rates only reflect experience changes.

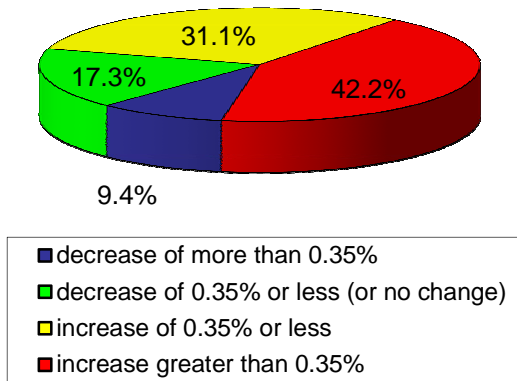
As shown on the following page, 73.3% of the 618 active plans had a contribution rate increase. Of these, 42.2% (261 plans) had a contribution rate increase greater than 0.35% of pay. Most of these increases in contribution rates were due to the recognition of prior investment losses.

Changes in contribution rates are measured from the actual 2011 rate to the calculated rate for 2012. The actual 2011 rate is based on the 2009 valuation, but adjusted for any benefit changes adopted during 2010.

**Contribution Rates
(continued)**

26.7% of the plans had either a decrease or no change in the total employer contribution rate since last year's valuation

**Change in Total Employer Contribution Rates
Active Plans (2010 to 2011)**



For comparison purposes, information regarding the percentage of plans with changes in variable-rate employer contribution rates from past valuations is reported below:

	<u>Decrease or No Change</u>	<u>Increase of 0.35% or Less</u>	<u>Increase Greater Than 0.35%</u>
2000	74.8%	21.2%	4.1%
2001*	66.5	24.4	9.1
2002	35.4	45.1	19.5
2003	92.4	6.2	1.4
2004	72.9	22.2	4.9
2005*	39.0	35.2	25.8
2006	89.4	8.4	2.2
2007	58.7	34.9	6.4
2008	19.2	14.0	66.8
2009*	67.9	27.6	4.5
2010	26.7	42.2	31.1

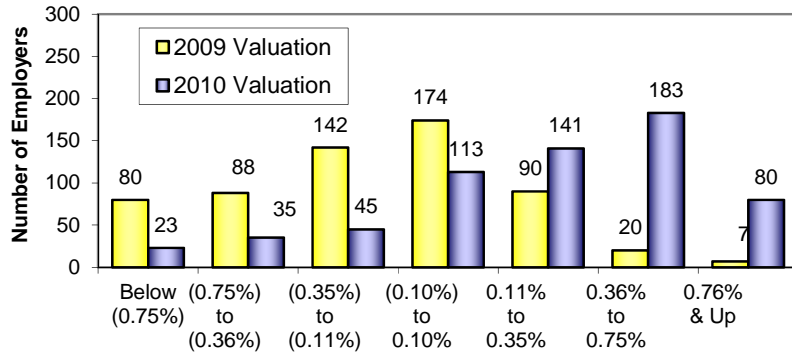
**Also reflects impact of new assumptions.*

Note: Contribution rate changes exclude the impact of post-valuation employer-elected plan changes.

**Contribution Rates
(continued)**

The graph below compares the number of plans in the 2009 valuation to the number in the 2010 Valuation that had a change in the total employer contribution rate as measured by the size of the change.

**Change in the Total Employer Contribution Rates
Variable-Rate Plans**



**Experience Analysis
– Contribution Rates**

A detailed analysis of the rate changes was performed as part of the 2010 valuation process for each variable-rate plan. There are many factors that are measured when comparing one year's expected valuation results to the actual results a year later. The following table lists the factors which had the most significant impact on contribution rates. Appendix A lists each variable-rate plan that had a significant rate change from the 2009 to 2010 valuation, the amount of the rate change and the major reasons for the change.

**Sources of Contribution Rate Change
(Greater than 0.25% of Payroll)**

<u>Sources of Decrease</u>	<u># of Plans</u>
Actual vs. Expected Termination	81
Salary / Payroll Variation	45
Elected Rate > Actual Rate	43
Employer Lump-Sum Contribution	29
Actual vs. Expected Retirement	12
Change in Average Entry Age	12
Actual vs. Expected Retiree Mortality	7
Changes in Plan Provisions	4
Investment Income	1
<u>Sources of Increase</u>	<u># of Plans</u>
Investment Income	406
Salary / Payroll Variation	72
Changes in Plan Provisions	54
Actual vs. Expected Termination	37
Change in Average Entry Age	7
Actual vs. Expected Retiree Mortality	6
Actual vs. Expected Retirement	5
Actual vs. Expected Active Mortality	2

**Experience Analysis
– Contribution Rates
(continued)**

Investment Income refers to the impact of the actual SAF return on an actuarial basis as compared to the assumed rate of 9.0%.

Changes in Plan Provisions refers to the impact on the required contribution rate due to a plan change.

Actual vs. Expected Termination refers to the impact of both the probability a member ceases active employment and whether or not they withdrew their employee contributions, thereby forfeiting their right to an employer-provided benefit.

Salary / Payroll Variation refers to the impact of how the total amount of the employer's payroll changed from the prior valuation different from what was expected based on assumptions. Greater than expected increases in payroll generally mean a lower contribution rate is necessary to pay off the Unfunded Actuarial Accrued Liability.

An **Elected Rate > Actual Rate** creates gains, or decreases in contribution rates, as the employer is contributing more than the calculated rate.

Actual vs. Expected Retiree Mortality refers to the probability a retired member dies at a certain age, and impacts the employer rates only if a supplemental annuity benefit is being paid.

Employer Lump-Sum Contribution creates gains as more employer contributions than expected were received.

Change in Average Entry Age refers to a shift in the makeup of the employer's membership group due to employees who left and returned, and others newly hired. Under the entry age cost method, a change in the average entry age results in a change in the normal cost rate.

Actual vs. Expected Active Mortality refers to the probability a non-retired member dies. More deaths than expected will generally result in a gain, creating a decrease in the employer contribution rate.

Actual vs. Expected Retirement refers to the probability a non-retired member retires. More retirements than expected will generally result in a loss, creating an increase in the employer contribution rate.

Texas County & District Retirement System Actuarial Valuation

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Section 3 Funding Adequacy Based on 2010 Results



Active Plan Funding

For active plans, the actuarially determined rate is considered an adequate rate to fund benefits, based on the nature of the funding method. All plans fund based on a variable-rate method (except for Dallas County), where their contribution rate is recalculated each year. Dallas County has slightly different funding requirements that meet or exceed the requirements for all other plans.

Variable-rate plans with an OAAL have a Funding Excess. The Funding Excess is the amount by which the actuarial value of assets exceeds the Actuarial Accrued Liability. For GASB reporting purposes, the Funding Excess must be recognized and amortized over a period of time. The amortization payment of the Funding Excess is treated as an offset to any required employer contribution rate. Thus, the resulting calculated contribution rate is less than the normal cost contribution rate.

Under Board policy, for variable-rate plans the UAAL, as of December 31, 2008, is amortized over a closed 20 years starting January 1, 2010. Subsequent changes are amortized over 20 years creating a new layer of payment, except for plan changes which are amortized over 15 years. Any OAAL is amortized over a rolling 30 years.

Inactive Plans

There is currently one inactive plan where neither the members nor the employer are contributing to TCDRS. Adjustments in benefits may be needed based on the current and expected funding status of this plan. The unfunded amount for this plan is currently being funded by an active employer; therefore, we are recommending no adjustments be made at this time.

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Section 4 Analysis of Retired Member Payments – CSARF



When a member retires, the accumulated contribution credits in all of his or her accounts in TCDRS are converted into a monthly benefit. The monthly benefit amount is determined to be paid as two types of annuities. The current service annuity is based on the employee's account value and the first 100% employer matching contributions. The supplemental benefit amount is based on all other account values, including employer matching contributions in excess of 100%, if any.

All supplemental benefit annuity payments are made from the Subdivision Accumulation Fund (SAF). However, at the time of retirement, all funds used to determine the current service annuity are transferred from the applicable employer's SAF accounts and the member's Employee Savings Fund (ESF) account into the Current Service Annuity Reserve Fund (CSARF), which is a pooled fund. Thus, no actuarial gains or losses occurring for the current service annuity payments are reflected in an individual employer's valuation. Each year, the actuary reviews the funding status of the pooled CSARF to determine if the fund is adequate to pay all projected current service annuity payments.

The following table summarizes the changes in the CSARF. Based on the value of the expected benefits as of December 31, 2010, there was an actuarial loss during the year of \$9.6 million due to fewer deaths than expected by the assumptions. Combined with interest, this resulted in a small decrease in the dollar amount of the surplus. The CSARF is still expected to be sufficient to fund all future payments for current retirees; however, the margin is decreasing, so this should be reviewed closely with the next investigation of experience.

CSARF Experience	(All values in millions)	
	12/31/2010 Valuation	12/31/2009 Valuation
Beginning Surplus	\$91.2	\$128.2
Interest	6.4	9.0
Experience Gain / (Loss)	(9.6)	(9.3)
Change in Assumptions	-	(36.7)
Ending Surplus	\$88.0	\$91.2
Total CSARF Liability	\$4,181.6	\$3,687.9
Surplus as a Percentage of Total Liability	2.1%	2.5%

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Section 5 Group Term Life Fund



The TCDRS Act provides an Group term life insurance benefit. The benefit coverage can be adopted by the employers for either their current eligible active employees or for both their eligible active and retired employees.

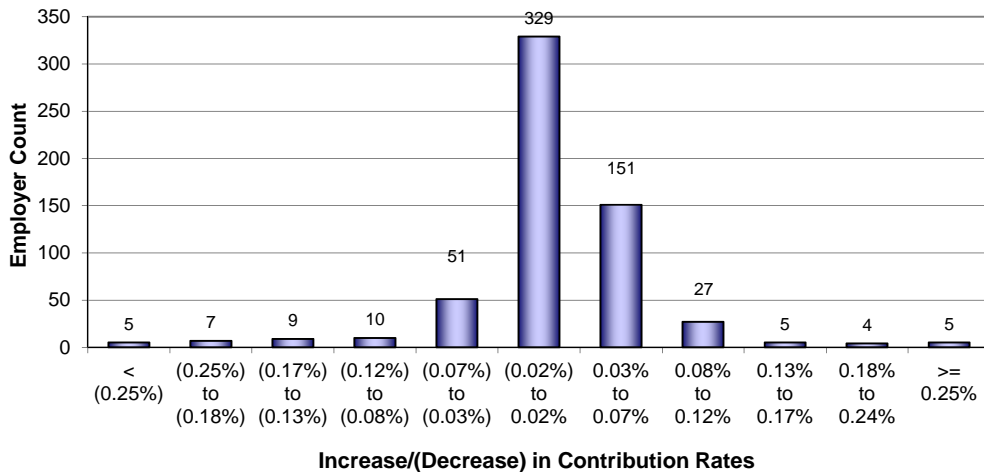
Active employees are insured for an amount equal to their total compensation from the past twelve months of employment. Retired employees are insured for a fixed amount of \$5,000. Life insurance benefits are paid as a lump sum payment.

An annual valuation is performed to determine the premium rates for active and retired employees based on age and gender. An individual employer's premium is then based on the demographic makeup and salaries of its covered employee group.

The Group Term Life Fund (GTLF) is pooled with the TCDRS funds for investment purposes, but its benefit obligations are separate from the TCDRS obligations.

The following graph shows a comparison of the GTLF rates for all active employers, including those that do not participate in the GTLF. On average, there was a slight increase in calculated employer premium rates based on the 2010 valuation results. A full listing of the GTLF contribution rates is shown in Appendix C.

Change in Group Term Life Rates



**Group Term Life
Fund Experience**

The table below reports the financial condition of the GTLF as of December 31, 2009 and December 31, 2010. During 2010, the GTLF experience was positive, since contributions exceeded the benefit payments. The current surplus amount should be adequate to cover any adverse experience during 2011.

	For Year	
	2010	2009
1. Fund at the beginning of the year	\$ 15,298,540	\$ 12,194,496
2. Employer premiums paid	7,340,463	7,130,058
3. Income from regular interest	1,152,389	920,949
4. Total Assets Before Payments	\$ 23,791,392	\$ 20,245,503
5. Supplemental death benefit payments made during the year	\$ 4,537,617	\$ 4,946,963
6. Less payments in the year for deaths occurring in the previous year	(669,618)	(590,603)
7. Plus payments in the following year for deaths occurring in the current year	387,588	669,618
8. Total incurred death benefits (actual benefits)	4,255,587	5,025,978
9. Surplus at the end of the year (4. - 5.)	\$ 19,253,775	\$ 15,298,540
10. Expected benefits during the year	\$ 7,340,463	\$ 7,130,058
11. Ratio of incurred benefits to premiums (8. / 2.)	0.580	0.705
12. Ratio of ending surplus to premiums (9. / 2.)	2.623	2.146
Number of employees covered at the end of the year	58,126	58,503
Number of employers participating at the end of the year	270	266
Weighted average OGTL contribution rate (based on prior year's covered payroll)	0.35%	0.34%

Benefits provided by the GTLF must be reported under Government Accounting Standards Board Statements No. 43 (system) and No. 45 (employer) if retirees are covered. Results for TCDRS are shown at the end of the Actuarial Section in the December 31, 2010 CAFR.

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Section 6 Glossary



The following definitions include excerpts from a list adopted in 1994 by the major actuarial organizations in the United States. In some cases, the definitions have been modified for specific applicability to TCDRS and include terms used exclusively by TCDRS. Defined terms are capitalized throughout this Section.

Accrued Benefit

The amount of an individual's benefit (whether or not vested) as of a specific date, determined in accordance with the terms of a pension plan and based on compensation and service to that date.

Actuarial Accrued Liability

That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of pension plan benefits and expenses which is not provided for by future Normal Costs.

Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, termination, disablement, and retirement; changes in compensation; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; and other relevant items.

Actuarial Gain (Loss)

A measure of the difference between actual experience and that expected based on a set of Actuarial Assumptions during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.

Actuarial Present Value

The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions.

Actuarial Valuation

The determination, as of a Valuation Date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a pension plan.

Actuarial Value of Assets

The value of cash, investments and other property belonging to a pension plan, as used by the actuary for the purpose of an Actuarial Valuation.

Actuarially Equivalent

Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.

Average Age of Contributing Members

The average attained age as of the Valuation Date, weighted by the average monthly deposit for the year preceding the Valuation Date.

Average Length of Service of Contributing Members

The average length of total credited service in TCDRS as of the Valuation Date, weighted by the average monthly deposit for the year preceding the Valuation Date.

Current Service Benefits

Benefits attributable to the member's accumulated deposits and a matching amount provided by the employer.

Employer Contribution Rate	The sum of the Normal Cost Contribution Rate and the Unfunded Actuarial Accrued Liability Contribution Rate. Both rates are expressed as a percent of compensation. The calculated Employer Contribution Rate will go into effect, one year after the Valuation Date.
Entry Age Actuarial Cost Method	A method under which the Actuarial Present Value of the Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit ages. The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of this Actuarial Present Value not provided for at a Valuation Date by the Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability.
Fixed-Rate Plan	A plan of retirement, death, and disability benefits for which the employer adopts an employee contribution rate (4%, 5%, 6%, or 7%), which also becomes the Employer Contribution Rate. The actuary determines the plan of benefits that can be adequately financed by the commitment of the employer to contribute the same amount as the member employees. The plan of benefits, adopted at plan inception and when benefit increases are adopted, is limited by statute to benefits that allow the Unfunded Actuarial Accrued Liability to be amortized over a period of no more than 20 years. If a plan has had adverse experience (i.e., predominantly actuarial losses over time), the law has provisions which allow the employer to contribute at a rate above the employee contribution rate or to reduce benefits accruing in the future. Currently, there is only one fixed-rate plan, Dallas County. The County's fixed-rate contribution rate has to meet the same minimum funding standards as the variable rate plans.
Multiple Matching Benefits	Benefits attributable to an amount provided by the employer as a percentage of the member's accumulated deposits in excess of the Current Service Benefit matching amount.
Normal Cost	That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.
Normal Cost Contribution Rate	A rate equal to the Actuarial Present Value at hire of Projected Benefits divided by the Actuarial Present Value at hire of anticipated future compensation. It is calculated for each contributing member, and the average is determined, weighted by compensation.
Plan Year	A 12-month period beginning January 1 and ending December 31.
Prior Service Benefits	Benefits attributable to an amount provided by the employer for service rendered by an employee prior to the date of participation of the employer in the System.
Projected Benefits	Those pension plan benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits.
Overfunded Actuarial Accrued Liability (OAAL)	The excess, if any, of the Actuarial Value of Assets over the Actuarial Accrued Liability. Standard actuarial terminology defines this as the "Funding Excess". TCDRS uses the term "Overfunded Actuarial Accrued Liability".

Supplemental Contribution Rate	Fixed-rate plans contribute the same percent of payroll as the members. In cases where this contribution is not sufficient to adequately fund the plan, an additional contribution may be required. This is referred to as the Supplemental Contribution Rate.
Total Fund Value	The sum of the fund value of the ESF, SAF and CSARF as of the valuation date.
Unfunded Actuarial Accrued Liability (UAAL)	The excess, if any, of the Actuarial Accrued Liability over the Actuarial Value of Assets.
UAAL Contribution Rate	<p><u>Variable-Rate plans:</u> The level percent of covered payroll to amortize the UAAL over a closed period of 20 years (15 years for plan changes). If the plan has an Overfunded Actuarial Accrued Liability, it is amortized over an open period of 30 years as a negative UAAL, and the resulting negative UAAL Contribution Rate is offset against the Normal Cost Contribution Rate.</p> <p><u>Fixed-Rate plans:</u> The fixed Employer Contribution Rate, including any Supplemental Contribution Rate, minus the Normal Cost Contribution Rate.</p>
Valuation Date	The date upon which the Normal Cost, Actuarial Accrued Liability, and Actuarial Value of Assets are determined. Generally, the Valuation Date will coincide with the ending of a Plan Year.
Variable-Rate Plan	A plan of retirement, death and disability benefits adopted by the employer for which the actuary annually determines the Employer Contribution Rate so that the rate is expected to remain approximately level as a percent of the employer's covered payroll from year to year. If there are predominantly actuarial gains over time, the rate will decrease from year to year. Conversely, predominantly actuarial losses over time will cause the rate to increase from year to year.