

## Actuarial Valuation

December 31, 2008

Prepared by
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Board of Trustees
Texas County \& District Retirement System
P.O. Box 2034

Austin, TX 78768-2034

Re: Actuarial Valuation as of December 31, 2008

Dear Board of Trustees:
As requested, we have performed an actuarial valuation of the Texas County \& District Retirement System (TCDRS) as of December 31, 2008. 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 586 separate employer plans participating in TCDRS as of December 31, 2008. 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

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.

This report is a summary of the valuation results. Additional detailed results are provided in the TCDRS comprehensive annual financial report (CAFR). 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 which are consistent with the principles prescribed by the Actuarial Standards Board (ASB) and the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries.

We further certify that 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). These assumptions are based on our 2005 Investigation of Experience report. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix F. We believe they offer a reasonable estimate of anticipated experience affecting

[^0]TCDRS. Nevertheless, the emerging costs will vary from those presented in this report to the extent that actual experience differs from that projected by the actuarial assumptions.

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.

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 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.

Milliman's work product was prepared exclusively for TCDRS for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning TCDRS's operations, and uses TCDRS's data, which Milliman has not audited. It is not for the use or benefit of any third party for any purpose. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.

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 are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

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

## Sincerely,



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


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

## Texas County and District Retirement System Actuarial Valuation

December 31, 2008
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# Texas County \& District Retirement System Actuarial Valuation 

December 31, 2008

## Section 1 - Executive Summary



## Overview

We are pleased to present the 2008 valuation summary report to you. The actuarial valuation of the TCDRS requires a separate valuation and determination of contribution rates for each of the 586 individual employer plans. The results of this valuation determine the required employer contribution rates for 2010, assuming no changes in plan provisions or other significant events.

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 2009 and those calculated for 2010 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 2008 valuation are summarized as follows:

- Funding: The funded ratio for the system in aggregate decreased from $94.3 \%$ to $88.6 \%$. The main factor causing this decrease was investment returns that were significantly less than assumed. 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 71.2\%.
- Contribution Rates: On average, the employer contribution rate for variable-rate (VR) plans increased by $1.00 \%$ of payroll (not including plan changes). The investment loss caused a large increase (almost 2.00\%) in employer rates. This was somewhat offset by the change in methods which lengthened the period which the unfunded amount is paid off to 20 years. The impact of all changes is discussed in more detail later in this section and in the Experience Analysis section of Section 2.


## Overview (continued)

- Investment Return: The employer accounts in the Subdivision Accumulation Fund (SAF) received a -43\% interest credit. This had a significant negative impact on the valuation, although it was somewhat mitigated by the smoothing method applied to the actuarial value of assets which has deferred a significant portion of the losses.
- Inadequate Financing: There are five fixed-rate (FR) plans that have an inadequate financing arrangement. These employers will need to take corrective action, either increasing their contribution rate or decreasing the benefit level provided, or some combination thereof. If they do not take corrective action, there will be a mandatory reduction in benefits.
- Looking Ahead: Only a small portion of the 2008 investment loss has been recognized in the valuations due to the use of asset smoothing. 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 about $5.00 \%$ percent of payroll higher. This is a rough measure of the increase employers can expect to see over the next nine 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:

|  | 12/31/2008 | 12/31/2007 | \% Change |
| :---: | :---: | :---: | :---: |
| Number of Employers |  |  |  |
| Active Variable-Rate | 570 | 552 | 3.3\% |
| Active Fixed-Rate | 15 | 15 | 0.0\% |
| Non-Depositing | 1 | 7 | -85.7\% |
| Total | 586 | 574 | 2.1\% |
| Number of Members |  |  |  |
| Contributing | 120,347 | 116,858 | 3.0\% |
| Non-Contributing | 52,188 | 46,104 | 13.2\% |
| Annuitants | 36,509 | 34,362 | 6.2\% |
| Total | 209,044 | 197,324 | 5.9\% |
| Averages |  |  |  |
| Age (Actives) | 44.5 | 44.3 | 0.5\% |
| Years of Service (Actives) | 10.7 | 10.5 | 1.7\% |
| Annual Pay (Actives) | \$ 40,136 | \$ 37,828 | 6.1\% |
| Account Balance (ESF) | 24,027 | 23,536 | 2.1\% |
| Monthly Benefit (Annuitants) | 1,256 | 1,203 | 4.4\% |
| Actuarial Value of Assets |  |  |  |
| Employee Savings Fund | \$ 4,145.5 million | \$ 3,835.4 million | 8.1\% |
| Subdivision Accumulation Fund | 7,242.8 million | 7,513.5 million | -3.6\% |
| Current Service Annuity Reserve Fund | 3,473.5 million | 3,134.2 million | 10.8\% |
| Total Actuarial Value of Assets | \$ 14,861.8 million | \$ 14,483.1 million | 2.6\% |
| Funding |  |  |  |
| Actuarial Accrued Liabilities | \$ 16,767.9 million | \$ $15,364.5$ million | 9.1\% |
| Actuarial Value of Assets | 14,861.8 million | 14,483.1 million | 2.6\% |
| Unfunded Actuarial Accrued Liability | 1,906.1 million | 881.4 million | 116.3\% |
| Aggregate Funding Ratio | 88.6\% | 94.3\% | -6.0\% |
| Average Required Contribution Rate - Variable Rate Plans |  |  |  |
| Average Normal Cost Rate | 7.16\% | 7.12\% | 0.6\% |
| Average UAAL Rate | 3.23\% | 2.08\% | 55.1\% |
| Average Required Contribution Rate | 10.39\% | 9.20\% | 12.9\% |
| Special Funding Situations |  |  |  |
| Inadequate Fixed-Rate Plans | 5 | 0 | 100.0\% |
| Deposit Rate Less than 4\% | 0 | 0 | 0.0\% |
| Results Based on Fund Values (No Asset Smoothing) -- For Informational Purposes Only |  |  |  |
| Average Required Contribution Rate | 15.31\% | 9.20\% | 66.4\% |
| Aggregate Funding Ratio | 71.2\% | 94.3\% | -24.4\% |

## 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 2010, as determined by this 2008 valuation, increased by 1.19\% on average (including a $0.19 \%$ increase for plan changes). The weighted average contribution rate for all variable-rate plans increased from 9.20\% to $10.39 \%$. Note that the weighted average rate is determined as the total estimated required contributions for the next year (2010) divided by the total expected payroll. It does not reflect the cost of any changes in benefits that may be adopted during 2009. A historical perspective on 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 2007 valuation from $94.3 \%$ to $88.6 \%$. Note that a funded ratio of $88 \%$ indicates that actuarial assets are $12 \%$ less than liabilities. The system in total refers to all variable-rate and fixed-rate 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 89.1\%.

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

Plan Funding (continued)

## Funding Adequacy

As discussed earlier, the funded ratio has decreased since the last year. As shown below, prior to this year the funded ratio using the actuarial value of assets has remained very level since 1994. The only exception was a small increase two years ago due to an additional 6\% interest credit to the SAF. The funded ratio based on that actual fund values has been less stable.


A large portion of the general reserves was used to help buffer employers against the large investment loss. The remaining amount available to cover future adverse experience for TCDRS is $\$ 70$ million as of December 31, 2008. This is equal to $0.5 \%$ of the actuarial value of assets currently allocated for funding the system-wide benefit obligations, down considerably from 16.6\% last year.

The 2008 valuation indicated that all but five of the 585 active plans have an adequate financing arrangement based on the calculated contribution rates. For the five employers, the most significant factor that caused the inadequate funding arrangement was poor investment returns. They are listed below:

## Amortization Period Greater than 30 Years

Dallas County
Karnes County Hospital District
Hartley County Appraisal District
North Central Texas Municipal Water Authority
597
Bacliff Municipal Utility District

Individual Employer Plan Changes

## Experience Analysis

## CSARF \& OGTLF

Both the Current Service Annuity Reserve Fund (CSARF) and the Optional Group Term Life Fund (OGTLF) continue to maintain a level of assets in each fund to sufficiently support their expected benefit payments. The projected surplus for both funds increased over last year.

2009 Legislation

## Inactive Plans

Plan Data

Out of the 2009 legislative session, there are currently no changes that have a material impact on this valuation.

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.

The makeup of the valuation group changed from the 2001 to 2008 valuations as shown by the next three tables:

|  | Active Variable-Rate | Active Fixed-Rate | Inactive Plans | Total Plans |
| :---: | :---: | :---: | :---: | :---: |
| 2001 | 451 | 52 | 14 | 517 |
| 2002 | 477 | 44 | 14 | 535 |
| 2003 | 504 | 35 | 14 | 553 |
| 2004 | 513 | 31 | 15 | 559 |
| 2005 | 531 | 26 | 18 | 575 |
| 2006 | 545 | 20 | 8 | 573 |
| 2007 | 552 | 15 | 7 | 574 |
| 2008 | 570 | 15 | 1 | 586 |
|  | Active Contributing Members | Non- <br> 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 |
|  | Covered Payroll (in millions) | ContributingMembers | 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\% |

## Plan Data (continued)

## Recommended Board Action

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

|  | Active <br> Contributing <br> Members | Non-Contributing <br> Members | Annuitants |
| :--- | ---: | ---: | ---: |
| December 31, 2007 Valuation | $\mathbf{1 1 6 , 8 5 8}$ | $\mathbf{4 6 , 1 0 4}$ | $\mathbf{3 4 , 3 6 2}$ |
| Termination with Refund | $(6,055)$ | $(2,681)$ | - |
| Termination without Refund | $(7,083)$ | 7,083 | - |
| Active/Inactive Death with Annuity | $(122)$ | $(41)$ | 163 |
| Service Retirement | $(2,184)$ | $(503)$ | 2,687 |
| Disability Retirement | $(34)$ | $(16)$ | 50 |
| Annuitant Death without Beneficiary | - | - | $(610)$ |
| New Entrants | 17,926 | 3,140 | - |
| Rehires | 1,041 | $(898)$ | $(143)$ |
|  | $\mathbf{3 , 4 8 9}$ | $\mathbf{6 , 0 8 4}$ | $\mathbf{2 , 1 4 7}$ |
| Total Change | $\mathbf{1 2 0 , 3 4 7}$ | $\mathbf{5 2 , 1 8 8}$ | $\mathbf{3 6 , 5 0 9}$ |

We recommend the Board adopt a motion to do the following:
(1) Approve the required contribution rates for the 2010 plan year for:
(a) Fixed-rate plans that adopt a variable-rate plan in 2009;
(b) Variable-rate plans with no changes in 2009; and,
(c) Variable-rate plans that adopt a change in plan benefits in 2009. (The required contribution rates for these plans will be based on the 2008 valuation results, but reflect the benefit changes adopted during 2009.)
(2) Approve the 2010 premium rates for the Optional Group Term Life Fund as shown in Appendix E.

# Texas County \& District Retirement System Actuarial Valuation 

December 31, 2008

## Section 2 - December 31, 2008 Valuation Results



Plan Statistics

We performed an actuarial valuation for each of the 586 employers participating in TCDRS as of December 31, 2008. 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.

The following table summarizes the changes in the types of plans valued. Eighteen new plans joined since the last valuation. Six plans terminated.

| Jan. 1 | Active Variable-Rate Plans | Active Fixed-Rate Plans | Inactive Plans | Total |
| :---: | :---: | :---: | :---: | :---: |
| 2000 | 424 | 68 | 14 | 506 |
| 2001 | 440 | 56 | 13 | 509 |
| 2002 | 451 | 52 | 14 | 517 |
| 2003 | 477 | 44 | 14 | 535 |
| 2004 | 504 | 35 | 14 | 553 |
| 2005 | 513 | 31 | 15 | 559 |
| 2006 | 531 | 26 | 18 | 575 |
| 2007 | 545 | 20 | 8 | 573 |
| 2008 | 552 | 15 | 7 | 574 |
| 2009 | 570 | 15 | 1 | 586 |

Most active employers, 570 out of 585 , use a variable-rate funding method. Under this method, the employer contribution rate is re-determined each year as a result of actual experience since the last valuation. The employer contribution rate reflects any experience gains or losses which occurred during the past year and will decrease or increase as a result of this experience.

## Plan Statistics (continued)

## Summary Results

Fifteen active plans have a fixed-rate funding method. Under this method, the employer's contribution rate is fixed and any experience gains or losses which occurred during the past year will cause a decrease or increase respectively in the expected period over which contributions will fund benefits, the amortization period.

Under this method and TCDRS funding requirements, if any fixed-rate plan's amortization period is greater than 30 years, the contribution rate is determined to be inadequate and the employer must either lower future benefits or increase the fixedrate by adopting a supplemental contribution rate.

As of the December 31, 2008 valuation, two of the 15 active fixed-rate plans had adopted a supplemental contribution rate. These plans are discussed in further detail in Section 3 of this report regarding Funding Adequacy.

In addition to the 585 plans that are actively participating in TCDRS (570 variable-rate plans and 15 fixed-rate plans), there is one plan that is in inactive status. They no longer make contributions to their plan but have employees or former employees who are entitled to future benefits from the plan assets. These plans are also discussed in further detail in Section 3.

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 2007 and 2008 valuations.

## Texas County \& District Retirement System Actuarial Valuation

|  | 2008 |  | 2007 |  |
| :---: | :---: | :---: | :---: | :---: |
| Assets |  |  |  |  |
| Cash and Cash Equivalents | \$ | 12,823,967 | \$ | 8,512,882 |
| Receivables: |  |  |  |  |
| Contributions |  | 63,045,476 |  | 59,535,481 |
| Investment Interest and Dividends |  | 56,825,575 |  | 61,043,282 |
| Securities-Lending Interest |  | 1,616,410 |  | 1,489,339 |
| Foreign Currency \& Exchange Contracts Receivables |  | 229,646 |  | 49,691,671 |
| Other |  | 33,392 |  | 61,813 |
| Total Receivables |  | 121,750,499 |  | 171,821,586 |
| Prepaid Expenses and Other Assets |  | 196,203 |  | 188,381 |
| Investments, at Fair Value: |  |  |  |  |
| Core Fixed Income |  | 2,261,740,673 |  | 3,313,785,339 |
| Domestic Equities |  | 2,759,878,464 |  | 4,192,782,575 |
| International Equities |  | 2,660,778,008 |  | 4,724,461,210 |
| High-Yield Debt |  | 1,401,346,698 |  | 1,324,447,406 |
| REITs |  | 352,709,281 |  | 461,995,925 |
| Absolute Return |  | 1,226,363,308 |  | 1,491,571,640 |
| TIPS |  | 348,421,169 |  | 1,066,803,314 |
| Private Equity |  | 236,804,910 |  | 126,682,205 |
| Short-Term Investment Fund |  | 809,295,751 |  | 90,424,989 |
| Total Investments |  | 12,057,338,262 |  | 16,792,954,603 |
| Invested Securities-Lending Collateral |  | 614,923,242 |  | 1,491,970,381 |
| Capital Assets, net |  | 13,258,512 |  | 10,581,451 |
| Total Assets |  | 12,820,290,685 |  | 18,476,029,284 |
| Liabilities |  |  |  |  |
| Accounts Payable |  | 11,695,526 |  | 7,735,034 |
| Investment Money Manager Fees Payable |  | 3,815,395 |  | 6,476,233 |
| Foreign Currency \& Exchange Contracts Payable |  | 266,102 |  | 49,475,902 |
| Funds Held for Optional Group Term Life Fund |  | 12,284,010 |  | 10,208,224 |
| Securities-Lending Collateral |  | 737,411,277 |  | 1,491,970,381 |
| Total Liabilities |  | 765,472,310 |  | 1,565,865,774 |
| Net Assets Held in Trust for Pension Benefits, Dec. 3 |  | 12,054,818,375 | \$ | 16,910,163,510 |

## Texas County \& District Retirement System

Actuarial Valuation
Changes in Plan Net Assets by Fund

## Additions

Deposits and Contributions
Employee Deposits and Employer Contributions
Total Deposits and Contributions
Investment Income
Net Appreciation (Depreciation) in Fair Value of Investments
Interest and Dividends
Total Investment Activity Income (Loss)
Less Investment Activity Expenses
Net (Loss) from Investment Activities
Net Income from Securities-Lending Activities Net (Depreciation) in Fair Value of Securities-Lending Net Income (Deprec.) from Securities-Lending

Total Net Investment (Loss)
Building Operations Income
Miscellaneous Income

## Total Additions

## Deductions

Benefits Paid
Withdrawals
Payments to Terminating Employers
Interest Allocation to Optional Group Term Life Fund Administrative Operations Expenses
Building Operations Expenses

## Total Deductions

## Transfers of Fund

Retirement Allowances
Partial-Year Interest
Annual Interest Adjustments
Terminating Employer Transfers
Expense Fund Transfer
Escheated Accounts, net
Allocation of General Reserves

## Net Transfers

Net Increase (Decrease) in Plan Net Assets Net Assets Held in Trust for Pension Benefits: Beginning of Period, Jan. 1
End of Period, Dec. 31

|  | Employees Saving Fund |  | Subdivision Accumulation Fund |  | Current Service nnuity Reserve Fund |  | Endowment Fund |  | Interest Fund |  | $\begin{gathered} \text { Expense } \\ \text { Fund } \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { Totals } \\ \text { Dec. } 31,2008 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 332,040,768 | \$ | 460,635,617 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 792,676,385 |
|  | 332,040,768 |  | 460,635,617 |  | - |  | - |  | - |  | - |  | 792,676,385 |
| - |  |  | - |  | - |  | - |  | $(5,261,557,019)$ |  | - |  | (5,261,557,019) |
|  |  |  | - |  | - |  | - |  | 352,171,171 |  | - |  | 352,171,171 |
|  | - |  | - |  | - |  | - |  | (4,909,385,848) |  | - |  | (4,909,385,848) |
| - |  |  | - |  | - |  | - |  | 27,844,487 |  | - |  | 27,844,487 |
| - |  |  | - |  | - |  | - |  | $(4,937,230,335)$ |  | - |  | $(4,937,230,335)$ |
| - |  |  | - |  | - |  | - |  | 13,877,787 |  | - |  | 13,877,787 |
|  |  |  | - |  | - |  | - |  | $(128,815,174)$ |  | - |  | $(128,815,174)$ |
| - |  |  | - |  | - |  | - |  | $(114,937,387)$ |  | - |  | $(114,937,387)$ |
| - |  |  | - |  | - |  | - |  | (5,052,167,722) |  | - |  | (5,052,167,722) |
| - |  |  | - |  | - |  | - |  | - |  | 1,259,393 |  | 1,259,393 |
|  |  |  | - |  | - |  | - |  | - |  | 25,128 |  | 25,128 |
| 332,040,768 |  |  | 460,635,617 |  | - |  | - |  | (5,052,167,722) |  | 1,284,521 |  | (4,258,206,816) |
| - |  |  | 202,644,851 |  | 317,970,804 |  | - |  | - |  | - |  | 520,615,655 |
| 62,979,980 |  |  | - |  | - |  | 26,252 |  | - |  | - |  | 63,006,232 |
| - |  |  | 22,900 |  | - |  | - |  | - |  | - |  | 22,900 |
|  | - |  | - |  | - |  | - |  | 747,465 |  | - |  | 747,465 |
| - |  |  | - |  | - |  | - |  | - |  | 11,274,765 |  | 11,274,765 |
| - |  |  | - |  | - |  | - |  | - |  | 1,471,302 |  | 1,471,302 |
| 62,979,980 |  |  | 202,667,751 |  | 317,970,804 |  | 26,252 |  | 747,465 |  | 12,746,067 |  | 597,138,319 |
| $(219,220,361)$ |  |  | $(217,795,933)$ |  | 437,016,294 |  | - |  | - |  | - |  | - |
| 6,652,594 |  |  | (217,795,933) |  | - |  | $(6,652,594)$ |  | - |  | - |  | - |
| 253,462,603 |  |  | $(3,230,576,993)$ |  | 220,061,031 |  | - |  | 2,757,053,359 |  | - |  | - |
| 166,308 |  |  | $(423,239)$ |  | 256,931 |  | - |  | - |  | - |  | - |
| - |  |  | - |  | - |  | $(18,000,000)$ |  | - |  | 18,000,000 |  | - |
| 82,368 |  |  | - |  | - |  | $(82,368)$ |  | - |  | - |  | - |
|  |  |  | - |  | - |  | (2,295,861,828) |  | 2,295,861,828 |  | - |  | - |
| 41,143,512 |  |  | (3,448,796,165) |  | 657,334,256 |  | (2,320,596,790) |  | 5,052,915,187 |  | 18,000,000 |  | - |
| 310,204,300 |  |  | $(3,190,828,299)$ |  | 339,363,452 |  | (2,320,623,042) |  | - |  | 6,538,454 |  | (4,855,345,135) |
| 3,835,373,179 |  |  | 7,513,453,373 |  | 3,134,146,188 |  | 2,409,316,327 |  | - |  | 17,874,443 |  | 16,910,163,510 |
| \$ | 4,145,577,479 | \$ | 4,322,625,074 | \$ | 3,473,509,640 | \$ | 88,693,285 | \$ | - | \$ | 24,412,897 | \$ | 12,054,818,375 |

# Texas County \& District Retirement System Actuarial Valuation 

## December 31, 2008

## Summary Actuarial Valuation Results



## Actuarial Value of Assets

## A. Assumptions

Each employer's valuation was based on actuarial assumptions adopted by the Board. The assumptions were studied during the 2001-2004 actuarial investigation of experience. A detailed disclosure is shown in Appendix F. 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 $5.3 \%$ 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.


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 2009, covering the period 2005-2008.

## B. Benefits

TCDRS is a nontraditional defined benefit plan. Plan provisions are adopted by each individual employer based on options available under the TCDRS Act. The December 31, 2008 actuarial valuation reflects benefits in effect as of January 1, 2009.

Members can retire at age 60 with $5,8,10$, or 12 years of service, or at any age with 20 or 30 years of service. If the plan adopts the option, members can also retire when their age and service equals 75 or 80 .

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 $7 \%$, unless prior funding conditions have required a temporary reduction below $4 \%$. Currently, no plans have member contribution rates less than $4 \%$. The member's retirement benefits are based on the employee contributions made to the plan 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 2008, 221 plans made a total of 262 different benefit changes as summarized in the following chart. No fixed-rate plans adopted the variable-rate funding method in 2008.

## B. Benefits (continued)

| Number <br> of Plans |  | Type of Change |
| ---: | :--- | :--- |

## 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.

## C. Cost Method (continued)

## D. Data

Prior years expected accumulated normal cost contributions are measured using current assumptions, benefits and membership data and reported as the Actuarial Accrued Liability. The difference between this expected accumulation of prior costs and the actual allocation of assets for actuarial funding purposes for each plan is referred to as the Unfunded Actuarial Accrued Liability (UAAL). If the actuarial value of assets exceeds the Actuarial Accrued Liability, then there is an Overfunded Actuarial Accrued Liability (OAAL).

The UAAL or OAAL is assumed to be paid for over a period of time known as the amortization period. Under a variable-rate funding method, the amortization period is fixed and the resulting required contribution rate needed to fund the UAAL or OAAL over the fixed period is measured. Board policy adopted in 2009 amortizes a UAAL over 20 years and an OAAL over 30 years for variable-rate plans, except for plan changes which are amortized over 15 years. These amortization periods begin when the new required contribution rate starts (i.e., one year after the valuation date).

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 gain or loss, assumption change, or plan change over a new 20 -year (or 15 -year) period. The OAAL is amortized over a rolling 30-year period. That is, each year the entire OAAL is refinanced over a 30 -year period.

Under the fixed-rate funding method, the amortization period is determined based on how much of the total fixed contribution rate is available for funding the UAAL or OAAL after the normal cost requirements for the year have been satisfied. If the amortization period of the UAAL exceeds 30 years, the fixed rate is determined to be inadequate. Further details are in the portion of Section 3 dedicated to fixed-rate plans.

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.
D. Data (continued)

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 586 plans as of December 31, 2008.

|  | Active Contributing Members | NonContributing 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 |

The makeup of each individual employer plan within TCDRS varies quite a bit, not only by benefit provisions, but also by membership size. The median number of contributing members is slightly less than 50 , so about 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.

Distribution of Employers by 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.

The following graph illustrates a summary of the Funded Ratio measurement for all 586 plans as of December 31, 2008. For comparison purposes, the Funded Ratio is also shown for the 574 plans valued as of December 31, 2007.

Comparison of Funded Ratios (Actuarial Assets/Accrued Liability)


On a system-wide basis, the aggregate funded ratio decreased from $94.3 \%$ to $88.6 \%$. Similarly on the individual employer level, the funded ratios of most employers declined.

## Contribution Rates and Amortization Periods

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.

The fixed-rate plans do not have their total employer contribution rates change except due to an inadequate funding situation. Experience and benefit changes are measured by the changes in the amortization period used to fund the UAAL amounts, if any.

For the fixed-rate plans, the following chart indicates the number of plans by the length of the amortization period for each of the past two valuations.

Distribution of Fixed-Rate Plans by Amortization Period


During 2008, no active fixed-rate plans adopted the variable-rate funding method. Thus, the total number of active fixed-rate plans stayed the same at 15 in the 2008 valuation.

As shown on the following page, $80.8 \%$ of the 570 active variable-rate plans had a contribution rate increase. Of these, 66.8\% (391 plans) had a contribution rate increase greater than $0.35 \%$ of pay. Most of these increases in contribution rates were due to the negative investment return.

Changes in contribution rates are measured from the actual 2009 rate to the calculated rate for 2010. The actual 2009 rate is based on the 2007 valuation, but adjusted for any benefit changes adopted during 2008.

## Contribution Rates and Amortization Periods (continued)

19.2\% 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
Variable-Rate Plans (2009 to 2010)

$\square$ decrease of more than 0.35\%
$\square$ decrease of $0.35 \%$ or less (or no change)
$\square$ increase of $0.35 \%$ or less
$\square$ increase greater than $0.35 \%$

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

|  | Decrease or No Change | Increase of $0.35 \%$ or Less | Increase Greater Than 0.35\% |
| :---: | :---: | :---: | :---: |
| 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 |
| *Also reflects impact of new assumptions. |  |  |  |
| Note: Contribution rate changes exclude impact of post-valuation employer-elected plan changes. |  |  |  |

## Contribution Rates and Amortization Periods (continued)

## Experience Analysis - Contribution Rates

The graph below compares the number of plans in the 2007 valuation to the number in the 2008 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


A detailed analysis of the rate changes was performed as part of the 2008 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 by how many employers this impact was greater than $0.25 \%$. Appendix A lists each variable-rate plan that had a significant rate change from the 2007 to 2008 valuation, the amount of the rate change and the major reasons for the change.

## Sources of Decreases in Contribution Rates (Greater than 0.25\%)

Increased Amortization Period 358
Salary / Payroll Variation 128
Actual vs. Expected Termination 114
Employer Lump-Sum Contribution 34
Elected Rate > Actual Rate 30
Actual vs. Expected Retiree Mortality 12
Actual vs. Expected Retirement 9
Change in Average Entry Age 7
Actual vs. Expected Active Mortality 1
Sources of Increases in Contribution Rates (Greater than 0.25\%)
Actual vs. Expected Investment Return 505
Changes in Plan Provisions 144
Salary / Payroll Variation 56
Actual vs. Expected Termination 18
Change in Average Entry Age 6
Actual vs. Expected Retiree Mortality 4
Actual vs. Expected Retirement 1
Actual vs. Expected Active Mortality 1

## Experience Analysis - Contribution Rates (continued)

Actual to Expected Investment Return refers to the impact of the actual SAF return on an actuarial basis as compared to the assumed rate of $9.0 \%$.

Increased Amortization Period refers to one-time change in 2009 that increased the period for employers to pay off their UAAL from 15 years to 20 years.

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

Actual vs. Expected Termination refers to 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.

Payroll Variation refers to 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 creates gains, or decreases in contribution rates, as the employer may be contributing more than the calculated rate.

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.

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.

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 

December 31, 2008

## Section 3 - Funding Adequacy Based on 2008 Results



Variable-Rate Plans

Fixed-Rate Plans

For variable-rate plans, the actuarially determined rate is considered an adequate rate to fund benefits, based on the nature of the funding method.

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.

For fixed-rate plans, it is possible for the contribution rate to be too low to support the benefit level currently adopted. The Board has adopted a policy in accordance with the TCDRS Act, that if the amortization period of the UAAL exceeds 30 years, the fixed rate is determined to be inadequate.

An inadequately funded fixed-rate plan has several options to convert their funding status and again have an adequate financing arrangement. The first table in Appendix B illustrates the actions taken during 2008 for the fixed-rate plans that were determined to have an inadequate financing arrangement based on the 2007 valuation (none in last valuation).

As a result of the 2008 valuation, there are five fixed-rate plans that have an inadequate financing arrangement. For employers in this situation, there are a number of options available to change their funding status. If the employer takes no action during the year, the TCDRS Act requires a reduction in future benefit accruals. The options are illustrated in the second table of Appendix B.

Fixed-Rate Plans with SCR

Fixed-Rate Plans with Temporary Reduction in Employee Deposit Rate

## Inactive Plans

Based on prior valuation results, two fixed-rate plans had adopted a Supplemental Contribution Rate in order to maintain an adequate funding arrangement.

An employer may discontinue a Supplemental Contribution Rate (SCR) if the actuary determines it is no longer needed and the basic fixed rate provides an adequate financing arrangement. Based on the 2008 valuation, no fixed-rate plans may discontinue their SCR.

Under certain funding conditions, an employer may be required to temporarily reduce its employee deposit rate. Each year, the actuary reviews the funding situation of these affected employers to determine whether any plan may increase its deposit rate back to the prior rate.

There are no plans with a reduced employee deposit rate as of this valuation.

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.

In making our determinations for inactive plans, we use the fund value instead of the actuarial value. A smoothing method is appropriate for a plan with a long-term funding horizon. This is not true for inactive plans.

# Texas County \& District Retirement System Actuarial Valuation 

## December 31, 2008

## 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 loses 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 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, 2008, there was a total actuarial gain during the year of $\$ 15.4$ million. Combined with interest, this resulted in an increase in the dollar amount of the surplus. Based on the actuarial assumptions, the CSARF is expected to be sufficient to fund all future payments for current retirees.

| CSARF Experience | (All values in millions) |  |
| :--- | ---: | ---: | ---: |
|  | 12/31/2008 <br> Valuation | 12/31/2007 <br> Valuation |
| Beginning Surplus | $\$ 105.5$ | $\$ 109.7$ |
| Interest | 7.4 | 7.7 |
| Experience Gain <br> Change in Assumptions <br> Ending Surplus | 15.4 | $(11.9)$ |
| Total CSARF Liability <br> Surplus as a Percentage <br> of Total Liability | $\$ 128.2$ | $\$ 105.5$ |

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# Texas County \& District Retirement System Actuarial Valuation 

December 31, 2008

## Section 5 - Optional Group Term Life Fund



The TCDRS Act provides an optional 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 Optional Group Term Life Fund (OGTLF) 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 OGTLF rates for all active employers, including those that do not participate in the OGTLF. There was relatively little change in calculated employer premium rates based on the 2008 valuation results. A full listing of the OGTLF contribution rates is shown in Appendix E.

Change in Optional Group Term Life Rates


Increase/(Decrease) in Contribution Rates

The table below reports the financial condition of the OGTLF as of December 31, 2007 and December 31, 2008. During 2008, the OGTLF experience was positive, since contributions exceeded the benefit payments. The current surplus amount should be adequate to cover any adverse experience during 2009.

Optional Group Term Life Fund Experience

|  | as of December 31 |  |
| :---: | :---: | :---: |
|  | 2008 | 2007 |
| 1. Fund at the beginning of the year | \$ 10,194,180 | \$ 8,187,007 |
| 2. Employer premiums paid | 6,522,399 | 5,983,265 |
| 3. Income from regular interest | 747,465 | 603,773 |
| 4. Total assets | \$ 17,464,044 | \$ 14,774,045 |
| 5. Supplemental death benefit payments made during the year | \$ 5,269,548 | \$ 4,579,865 |
| 6. Less payments in the year for deaths occurring in the previous year | $(486,587)$ | $(393,780)$ |
| 7. Plus payments in the following year for deaths occurring in the current year | 590,603 | 486,587 |
| 8. Total incurred death benefits (actual benefits) | 5,373,564 | 4,672,672 |
| 9. Surplus at the end of the year (4. - 5.) | \$ 12,194,496 | \$ 10,194,180 |
| 10. Expected benefits during the prior year | \$ 6,522,399 | \$ 5,983,265 |
| 11. Ratio of incurred benefits to premiums (8. / 2.) | 0.824 | 0.781 |
| 12. Ratio of ending surplus to premiums (9. / 2.) | 1.870 | 1.704 |
| Number of employees covered at the end of the year | 58,130 | 56,391 |
| Number of employers participating at the end of the year | 257 | 247 |
| Weighted average OGTL contribution rate (based on prior year's covered payroll) | 0.33\% | 0.32\% |

Benefits provided by the OGTLF 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, 2008 CAFR.

# Texas County \& District Retirement System Actuarial Valuation 

December 31, 2008

## Section 6 - Glossary



Accrued Benefit

Actuarial Accrued
Liability

## Actuarial Assumptions

## Actuarial Gain (Loss)

Actuarial Present Value

Actuarial Valuation

## Actuarial Value of Assets

## Actuarially Equivalent

## Average Age of Contributing Members

Average Length of Service of Contributing Members

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.

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.
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.

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.

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.

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.

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.

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.

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

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

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<br>Employer Contribution Rate

Entry Age Actuarial Cost Method

Fixed-Rate Plan

## Multiple Matching <br> Benefits

Normal Cost

Normal Cost
Contribution Rate

Plan Year
Prior Service Benefits

Projected Benefits

## Overfunded Actuarial Accrued Liability (OAAL)

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

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.

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.
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.

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.

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.

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.
A twelve-month period beginning January 1 and ending December 31 .
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.

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.

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

Total Fund Value
Unfunded Actuarial
Accrued Liability
(UAAL)

Unfunded Actuarial Accrued Liability Contribution Rate

## Valuation Date

Variable-Rate Plan

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.

The sum of the fund value of the ESF, SAF and CSARF as of the valuation date.

The excess, if any, of the Actuarial Accrued Liability over the Actuarial Value of Assets.

Variable-Rate plans: The level percent of covered payroll to amortize the Unfunded Actuarial Accrued Liability 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 Unfunded Actuarial Accrued Liability, and the resulting negative Unfunded Actuarial Accrued Liability Contribution Rate is offset against the Normal Cost Contribution Rate.

Fixed-Rate plans: The fixed Employer Contribution Rate, including any Supplemental Contribution Rate, minus the Normal Cost Contribution Rate.
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.

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.

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## Texas County \& District Retirement System Actuarial Valuation

December 31, 2008

## Appendix A - Variable-Rate Plans with a Significant Rate Change

The sources of increase/decrease listed on the following pages are defined in Section 2 of the report.

# Texas County \& District Retirement System Actuarial Valuation 

December 31, 2008
Variable-Rate Plans with an Increase of $\mathbf{2 . 0 0 \%}$ or More
Counties

| Employer Number | Employer Name | Rate Increase | Sources of Increase |
| :---: | :---: | :---: | :---: |
| 101 | Andrews County | 2.34\% | Investment Return |
| 118 | Bowie County | 2.17\% | Investment Return |
| 134 | Castro County | 2.26\% | Investment Return |
| 151 | Crane County | 2.45\% | Payroll Variation Investment Return |
| 167 | Ector County | 4.32\% | Investment Return |
| 202 | Hartley County | 2.01\% | Investment Return |
| 236 | Kleberg County | 2.49\% | Investment Return |
| 277 | Nueces County | 2.55\% | Investment Return |
| 292 | Real County | 3.36\% | Investment Return |
| 305 | San Saba County | 2.08\% | Investment Return |
| 306 | Schleicher County | 2.29\% | Investment Return |
| 307 | Scurry County | 3.28\% | Payroll Variation Investment Return |
| 316 | Stonewall County | 2.00\% | Investment Return |
| 324 | Titus County | 2.24\% | Investment Return |
| 341 | Wheeler County | 3.16\% | Investment Return |

# Texas County \& District Retirement System Actuarial Valuation 

December 31, 2008

## Variable-Rate Plans with a Decrease of $\mathbf{2 . 0 0 \%}$ or More

## Counties

| Employer Number | Employer Name | Rate Decrease | Sources of Decrease |
| :---: | :---: | :---: | :---: |
| 250 | Loving County | -6.01\% | Employer Lump Sum |
|  |  |  | Retiree Mortality |
|  |  |  | Payroll Variation |
|  |  |  | Increased Amortization Period |
|  |  |  | Actual vs. Expected Retirement |

# Texas County \& District Retirement System Actuarial Valuation 

December 31, 2008

## Variable-Rate Plans with an Increase of $\mathbf{2 . 0 0 \%}$ or More

Districts

| Employer Number | Employer Name | Rate Increase | Sources of Increase |
| :---: | :---: | :---: | :---: |
| 404 | Jefferson County Drainage District \#3 | 3.18\% | Investment Return |
| 423 | Victoria County Drainage District \#3 | 5.15\% | Retiree Mortality - Supplemental Annuity Only Investment Return |
| 426 | San Patricio County Drainage District | 6.00\% | Payroll Variation |
|  |  |  | Investment Return |
|  |  |  | Actual vs. Expected Termination |
| 433 | Galveston County Drainage District \#2 | 6.48\% | Investment Return |
|  |  |  | Actual vs. Expected Termination |
| 444 | Ward Memorial Hospital | 2.02\% | Investment Return |
| 450 | Nueces County Water Control and Improvement D | 4.36\% | Investment Return |
| 451 | Jefferson County Water Control and Improvement | 3.39\% | Investment Return |
| 454 | West Jefferson County Municipal Water District | 2.41\% | Investment Return |
|  |  |  | Actual vs. Expected Termination |
| 459 | Aransas County Appraisal District | 2.82\% | Investment Return |
| 460 | Swisher County Appraisal District | 4.33\% | Retiree Mortality - Supplemental Annuity Only Investment Return |
| 461 | Austin County Appraisal District | 2.57\% | Investment Return |
| 463 | Dawson County Central Appraisal District | 3.92\% | Investment Return |
|  |  |  | Actual vs. Expected Termination |
| 466 | DeWitt County Appraisal District | 3.52\% | Investment Return |
| 467 | Dallas Central Appraisal District | 3.15\% | Investment Return |
|  |  |  | Actual vs. Expected Termination |
| 469 | Sherman County Appraisal District | 2.03\% | Investment Return |
| 470 | Shackelford County Appraisal District | 3.73\% | Retiree Mortality - Supplemental Annuity Only Investment Return |
| 471 | Tyler County Appraisal District | 2.33\% | Investment Return |
| 472 | Bexar Appraisal District | 3.13\% | Investment Return |
| 473 | Garza Central Appraisal District | 2.25\% | Investment Return |
| 474 | Fort Bend Central Appraisal District | 2.54\% | Investment Return |
| 476 | Wheeler County Appraisal District | 3.14\% | Retiree Mortality - Supplemental Annuity Only Investment Return |
| 483 | Grimes County Appraisal District | 2.11\% | Investment Return |
| 484 | Mitchell County Appraisal District | 2.92\% | Retiree Mortality - Supplemental Annuity Only Investment Return |
| 485 | Clay County Appraisal District | 4.46\% | Investment Return |
|  |  |  | Actual vs. Expected Termination |
| 487 | Cooke County Appraisal District | 2.70\% | Investment Return |
| 490 | Orange County Appraisal District | 4.15\% | Investment Return |
| 491 | McLennan County Appraisal District | 2.31\% | Investment Return |
| 492 | Midland Central Appraisal District | 4.80\% | Investment Return |
| 494 | Pecos County Appraisal District | 2.03\% | Retiree Mortality - Supplemental Annuity Only Investment Return |
|  |  |  | Actual vs. Expected Termination |
| 495 | San Patricio County Appraisal District | 2.60\% | Investment Return |
| 496 | Jones County Appraisal District | 2.57\% | Retiree Mortality - Supplemental Annuity Only Investment Return |
| 499 | Lubbock Central Appraisal District | 3.66\% | Actual vs. Expected Termination |
|  |  |  | Investment Return |
|  |  |  | Actual vs. Expected Termination |

# Texas County \& District Retirement System Actuarial Valuation 

December 31, 2008
Variable-Rate Plans with an Increase of $\mathbf{2 . 0 0 \%}$ or More
Districts

| Employer Number | Employer Name | Rate Increase | Sources of Increase |
| :---: | :---: | :---: | :---: |
| 501 | Titus County Fresh Water Supply District | 2.59\% | Investment Return |
|  |  |  | Actual vs. Expected Termination |
| 502 | Angelina County Appraisal District | 2.64\% | Investment Return |
|  |  |  | Change in Average Entry Age |
| 503 | Archer County Appraisal District | 5.95\% | Investment Return |
|  |  |  | Actual vs. Expected Termination |
| 504 | Montague County Tax Appraisal District | 8.17\% | Payroll Variation |
|  |  |  | Investment Return |
|  |  |  | Actual vs. Expected Termination |
| 506 | Bell County Appraisal District | 2.45\% | Investment Return |
| 507 | Somervell County Central Appraisal District | 3.71\% | Investment Return |
| 509 | Frio County Appraisal District | 3.70\% | Investment Return |
|  |  |  | Actual vs. Expected Retirement |
| 512 | McCulloch County Appraisal District | 4.81\% | Investment Return |
|  |  |  | Actual vs. Expected Termination |
| 515 | Navarro Central Appraisal District | 3.69\% | Investment Return |
| 516 | Hidalgo County Appraisal District | 2.45\% | Investment Return |
|  |  |  | Actual vs. Expected Termination |
| 518 | Gray County Appraisal District | 2.78\% | Investment Return |
| 519 | Knox County Appraisal District | 3.60\% | Payroll Variation |
|  |  |  | Investment Return |
|  |  |  | Change in Average Entry Age |
| 521 | Bosque County Central Appraisal District | 2.72\% | Investment Return |
| 522 | Brookshire Municipal Water District | 3.94\% | Investment Return |
| 524 | Karnes County Appraisal District | 2.36\% | Investment Return |
|  |  |  | Actual vs. Expected Termination |
| 526 | Gulf Coast Water Authority - Galveston County | 3.67\% | Investment Return |
| 533 | Winkler County Appraisal District | 2.17\% | Investment Return |
| 536 | Starr County Appraisal District | 2.40\% | Investment Return |
| 537 | Rains County Appraisal District | 2.19\% | Investment Return |
|  |  |  | Actual vs. Expected Termination |
| 546 | Galveston Central Appraisal District | 3.77\% | Investment Return |
| 551 | Atascosa County Appraisal District | 3.25\% | Retiree Mortality - Supplemental Annuity Only Investment Return |
|  |  |  | Actual vs. Expected Termination |
| 559 | Wichita-Wilbarger 9-1-1 District | 2.29\% | Investment Return |
| 564 | Randall County Appraisal District | 4.24\% | Payroll Variation |
|  |  |  | Investment Return |
| 565 | Ward County Central Appraisal District | 2.52\% | Investment Return |
| 569 | Harris County Water Control and Improvement Dis | 2.08\% | Investment Return |
|  |  |  | Change in Average Entry Age |
| 570 | Midland Emergency Communication District | 2.09\% | Payroll Variation |
|  |  |  | Investment Return |
| 572 | Newton Central Appraisal District | 2.12\% | Investment Return |
| 589 | Galveston County Emergency Communication Dis | 2.26\% | Investment Return |
|  |  |  | Actual vs. Expected Termination |
| 592 | Jack County Appraisal District | 2.11\% | Investment Return |
| 594 | Kent County Tax Appraisal District | 2.30\% | Payroll Variation |
|  |  |  | Investment Return |
| 602 | Central Appraisal District of Taylor County | 2.19\% | Investment Return |
| 616 | Bistone Municipal Water Supply District - Limeston | 3.58\% | Payroll Variation |
|  |  |  | Investment Return |
|  |  |  | Change in Average Entry Age |
|  |  |  | Actual vs. Expected Termination |
| 653 | Kerr Emergency 9-1-1 Network | 2.58\% | Payroll Variation |
|  |  |  | Investment Return |
| 688 | West Nueces -Las Moras Soil and Water Conservi | 4.31\% | Investment Return |

[^1]
## Texas County \& District Retirement System Actuarial Valuation

December 31, 2008

## Variable-Rate Plans with an Decrease of $\mathbf{2 . 0 0 \%}$ or More

## Districts

| Employer <br> Number |  |  | Rate <br> Decrease | Employer Name |
| :--- | :--- | :--- | :--- | :--- |
|  | Sources of Decrease |  |  |  |

# Texas County \& District Retirement System <br> Actuarial Valuation 

December 31, 2008

## Appendix B - Fixed-Rate Plans With Inadequate Financing

## Fixed-Rate Plans With an Inadequate Financing Arrangement in the 12/31/2007 Valuation

|  |  | Current Plan |  |  | Option \#1 |  | Option \#2 | No. of Contributing Members |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Deposit | Matching |  | Deposit | Matching |  |  |  |
| No. | Subdivision Name | Rate | Ratio | SCR | Rate | Ratio | SCR | 12/07 | 12/06 |

No Fixed Rate plans have an Inadequate Financing Arrangement based on the 2007 Valuation.

## Fixed-Rate Plans With an Inadequate Financing Arrangement in the 12/31/2008 Valuation

| No. | Subdivision Name | Current Plan |  |  | Option \#1 |  | Option \#2 | No. of Contributing Members |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Deposit | Matching |  | Deposit | Matching |  |  |  |
|  |  | Rate | Ratio | SCR | Rate | Ratio | SCR | 12/08 | 12/07 |
| 156 | Dallas County | 7\% | 200\% | 1.50\% | 7\% | 175\% | 2.40\% | 7,161 | 7,026 |
| 455 | Karnes County Hospital District | 6\% | 200\% |  | 6\% | 170\% | 1.20\% | 93 | 83 |
| 520 | Hartley County Appraisal District | 7\% | 180\% |  | 7\% | 135\% | 2.10\% | 2 | 3 |
| 556 | North Central Texas MWA | 7\% | 100\% |  | 6\% | 100\% | 0.60\% | 9 | 9 |
| 597 | Bacliff Municipal Utility District | 4\% | 150\% | 1.70\% | 4\% | 140\% | 1.80\% | 9 | 7 |

## Notes:

1) There are other options in addition to the ones shown. These include a lump-sum contribution or some combination of a lower matching ratio or employee deposit rate and a supplemental contribution rate (SCR).
2) Option 1 is the statutory remedy if the employer does not elect one of the options.
3) Option 2 is the supplemental contribution rate necessary to maintain the current plan. receive this work.

## Texas County \& District Retirement System <br> Actuarial Valuation

December 31, 2008

## Appendix C - Fixed-Rate Plans With a Supplemental Contribution Rate

| Employer Number | Employer Name | Regular Rate | Supplemental Rate | Total Rate |
| :---: | :---: | :---: | :---: | :---: |
| 156 | Dallas County | 7.00\% | 1.50\% | 8.50\% |
| 597 | Bacliff Municipal Utility District | 4.00\% | 1.70\% | 5.70\% |

# Texas County \& District Retirement System Actuarial Valuation 

December 31, 2008

Appendix D - Summary Valuation Results by Individual Employer

| Employer | Employer | Required Contribution Rate |  |  | Funded Ratio at December 31 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Name | 2010 | 2009 | Change | 2008 | 2007 | Change |
| 638 | Acton MUD | 6.98\% | 6.22\% | 0.76\% | 86\% | 92\% | (6\%) |
| 615 | Alamo Area Council of Governments | 8.46\% | 8.06\% | 0.40\% | 81\% | 85\% | (4\%) |
| 721 | Alamo Regional Mobility Authority | 10.65\% | 10.58\% | 0.07\% | 92\% | 91\% | 1\% |
| 100 | Anderson County | 8.85\% | 8.72\% | 0.13\% | 79\% | 85\% | (6\%) |
| 691 | Anderson County Central Appraisal District | 6.79\% | 6.80\% | (0.01\%) | 77\% | 76\% | 1\% |
| 101 | Andrews County | 14.46\% | 12.12\% | 2.34\% | 82\% | 90\% | (8\%) |
| 684 | Angelina and Nacogdoches Counties WC\&ID \#1 | 6.58\% | 6.27\% | 0.31\% | 87\% | 90\% | (3\%) |
| 102 | Angelina County | 9.16\% | 8.50\% | 0.66\% | 85\% | 91\% | (6\%) |
| 502 | Angelina County Appraisal District | 9.19\% | 6.55\% | 2.64\% | 97\% | 105\% | (8\%) |
| 576 | Angleton Drainage District | 8.73\% | 7.13\% | 1.60\% | 89\% | 94\% | (5\%) |
| 614 | Aquilla Water Supply District - Hill County | 7.18\% | 6.43\% | 0.75\% | 87\% | 90\% | (3\%) |
| 103 | Aransas County | 7.84\% | 6.59\% | 1.25\% | 89\% | 98\% | (9\%) |
| 459 | Aransas County Appraisal District | 14.40\% | 11.58\% | 2.82\% | 87\% | 94\% | (7\%) |
| 668 | Aransas County Navigation District \#1 | 10.82\% | 10.32\% | 0.50\% | 89\% | 94\% | (5\%) |
| 104 | Archer County | 8.42\% | 7.61\% | 0.81\% | 85\% | 90\% | (5\%) |
| 503 | Archer County Appraisal District | 6.03\% | 0.08\% | 5.95\% | 104\% | 116\% | (12\%) |
| 105 | Armstrong County | 5.18\% | 3.71\% | 1.47\% | 107\% | 118\% | (11\%) |
| 106 | Atascosa County | 7.15\% | 5.72\% | 1.43\% | 92\% | 99\% | (7\%) |
| 551 | Atascosa County Appraisal District | 8.39\% | 5.14\% | 3.25\% | 92\% | 103\% | (11\%) |
| 107 | Austin County | 8.09\% | 7.24\% | 0.85\% | 88\% | 93\% | (5\%) |
| 461 | Austin County Appraisal District | 6.71\% | 4.14\% | 2.57\% | 108\% | 120\% | (12\%) |
| 597 | Bacliff MUD | 5.70\% | 5.70\% | 0.00\% | 88\% | 93\% | (5\%) |
| 108 | Bailey County | 6.36\% | 6.19\% | 0.17\% | 81\% | 86\% | (5\%) |
| 109 | Bandera County | 8.79\% | 7.99\% | 0.80\% | 88\% | 95\% | (7\%) |
| 110 | Bastrop County | 9.88\% | 9.07\% | 0.81\% | 87\% | 94\% | (7\%) |
| 111 | Baylor County | 8.33\% | 7.15\% | 1.18\% | 88\% | 95\% | (7\%) |
| 685 | Baylor County Appraisal District | 6.56\% | 6.16\% | 0.40\% | 90\% | 93\% | (3\%) |
| 613 | Bayview Irr. Dist. \#11 | 6.59\% | 6.48\% | 0.11\% | 79\% | 80\% | (1\%) |
| 690 | Bayview MUD | 2.78\% | 1.78\% | 1.00\% | 111\% | 134\% | (23\%) |
| 112 | Bee County | 7.11\% | 6.09\% | 1.02\% | 94\% | 100\% | (6\%) |
| 113 | Bell County | 11.00\% | 10.18\% | 0.82\% | 83\% | 89\% | (6\%) |
| 506 | Bell County Appraisal District | 9.33\% | 6.88\% | 2.45\% | 88\% | 96\% | (8\%) |
| 418 | Bell County WCID \#1 | 5.03\% | 4.55\% | 0.48\% | 83\% | 88\% | (5\%) |
| 708 | Benbrook Water Authority | 7.00\% | 7.04\% | (0.04\%) | 77\% | 77\% | 0\% |
| 472 | Bexar Appraisal District | 13.07\% | 9.94\% | 3.13\% | 90\% | 97\% | (7\%) |
| 114 | Bexar County | 10.62\% | 9.58\% | 1.04\% | 84\% | 91\% | (7\%) |
| 544 | Bexar County WCID \#10 | 7.07\% | 6.41\% | 0.66\% | 87\% | 91\% | (4\%) |
| 716 | Bexar Metro 9-1-1 Network District | 6.86\% | 8.50\% | (1.64\%) | 102\% | 90\% | 12\% |
| 737 | Bexar-Medina-Atascosa WCID \#1 | 4.89\% | 5.11\% | (0.22\%) | 71\% | 52\% | 19\% |
| 616 | Bistone MWSD - Limestone County | 11.20\% | 7.62\% | 3.58\% | 87\% | 98\% | (11\%) |
| 115 | Blanco County | 8.04\% | 7.37\% | 0.67\% | 87\% | 92\% | (5\%) |
| 116 | Borden County | 11.33\% | 11.50\% | (0.17\%) | 81\% | 84\% | (3\%) |
| 525 | Borden County Appraisal District | 7.00\% | 7.00\% | 0.00\% | 175\% | 126\% | 49\% |
| 117 | Bosque County | 2.07\% | 1.55\% | 0.52\% | 114\% | 121\% | (7\%) |
| 521 | Bosque County Central Appraisal District | 9.59\% | 6.87\% | 2.72\% | 97\% | 103\% | (6\%) |


| Employer | Employer | Required Contribution Rate |  |  | Funded Ratio at December 31 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Name | 2010 | 2009 | Change | 2008 | 2007 | Change |
| 118 | Bowie County | 8.64\% | 6.47\% | 2.17\% | 91\% | 100\% | (9\%) |
| 119 | Brazoria County | 10.27\% | 9.30\% | 0.97\% | 85\% | 91\% | (6\%) |
| 508 | Brazoria County Appraisal District | 9.59\% | 7.65\% | 1.94\% | 91\% | 98\% | (7\%) |
| 413 | Brazoria County Cons. and Recl. District \#3 | 17.57\% | 17.65\% | (0.08\%) | 71\% | 75\% | (4\%) |
| 424 | Brazoria County Drainage District \#4 | 11.15\% | 12.68\% | (1.53\%) | 90\% | 87\% | 3\% |
| 681 | Brazoria County Drainage District \#5 | 3.29\% | 3.52\% | (0.23\%) | 93\% | 89\% | 4\% |
| 120 | Brazos County | 11.93\% | 11.11\% | 0.82\% | 80\% | 86\% | (6\%) |
| 689 | Brazos County Appraisal District | 11.72\% | 11.32\% | 0.40\% | 79\% | 83\% | (4\%) |
| 600 | Brazos County ECD | 7.79\% | 6.15\% | 1.64\% | 94\% | 102\% | (8\%) |
| 744 | Brazos River Authority | 7.61\% | 7.97\% | (0.36\%) | 54\% | 18\% | 36\% |
| 121 | Brewster County | 9.43\% | 8.81\% | 0.62\% | 82\% | 87\% | (5\%) |
| 581 | Brewster County Appraisal District | 9.87\% | 8.99\% | 0.88\% | 83\% | 88\% | (5\%) |
| 745 | Bright Star-Salem SUD | 2.93\% | 3.11\% | (0.18\%) | 105\% | 0\% | 105\% |
| 122 | Briscoe County | 6.49\% | 4.95\% | 1.54\% | 95\% | 101\% | (6\%) |
| 123 | Brooks County | 7.15\% | 5.45\% | 1.70\% | 108\% | 120\% | (12\%) |
| 554 | Brookshire - Katy Drainage District | 4.00\% | 4.00\% | 0.00\% | 106\% | 105\% | 1\% |
| 522 | Brookshire Municipal Water District | 7.24\% | 3.30\% | 3.94\% | 96\% | 107\% | (11\%) |
| 124 | Brown County | 6.53\% | 5.66\% | 0.87\% | 88\% | 96\% | (8\%) |
| 702 | Brownsville Irr. Dist. | 5.92\% | 5.93\% | (0.01\%) | 78\% | 79\% | (1\%) |
| 642 | Brushy Creek MUD - Williamson County | 5.21\% | 5.11\% | 0.10\% | 102\% | 106\% | (4\%) |
| 125 | Burleson County | 7.59\% | 7.52\% | 0.07\% | 80\% | 85\% | (5\%) |
| 609 | Burnet Central Appraisal District | 17.84\% | 16.95\% | 0.89\% | 73\% | 77\% | (4\%) |
| 126 | Burnet County | 10.99\% | 10.60\% | 0.39\% | 77\% | 81\% | (4\%) |
| 127 | Caldwell County | 4.22\% | 3.50\% | 0.72\% | 94\% | 100\% | (6\%) |
| 718 | Caldwell County Appraisal District | 5.55\% | 5.10\% | 0.45\% | 81\% | 91\% | (10\%) |
| 128 | Calhoun County | 10.27\% | 9.41\% | 0.86\% | 85\% | 91\% | (6\%) |
| 709 | Calhoun County Appraisal District | 7.90\% | 8.50\% | (0.60\%) | 80\% | 73\% | 7\% |
| 129 | Callahan County | 6.12\% | 5.61\% | 0.51\% | 89\% | 93\% | (4\%) |
| 542 | Callahan County Appraisal District | 5.69\% | 4.58\% | 1.11\% | 93\% | 98\% | (5\%) |
| 130 | Cameron County | 8.48\% | 7.31\% | 1.17\% | 90\% | 96\% | (6\%) |
| 618 | Cameron County Appraisal District | 12.85\% | 12.11\% | 0.74\% | 83\% | 88\% | (5\%) |
| 692 | Cameron County Drainage District \#1 | 4.34\% | 4.55\% | (0.21\%) | 104\% | 98\% | 6\% |
| 664 | Cameron County Drainage District \#3 | 5.08\% | 4.54\% | 0.54\% | 91\% | 98\% | (7\%) |
| 686 | Cameron County Drainage District \#5 | 9.14\% | 8.98\% | 0.16\% | 86\% | 87\% | (1\%) |
| 462 | Cameron County Irr. Dist. \#2 | 5.55\% | 4.86\% | 0.69\% | 90\% | 95\% | (5\%) |
| 590 | Cameron County Irr. Dist. \#6 | 4.94\% | 3.31\% | 1.63\% | 97\% | 105\% | (8\%) |
| 670 | Camp Central Appraisal District | 3.79\% | 3.19\% | 0.60\% | 106\% | 115\% | (9\%) |
| 131 | Camp County | 10.90\% | 10.30\% | 0.60\% | 81\% | 87\% | (6\%) |
| 132 | Carson County | 9.03\% | 8.39\% | 0.64\% | 83\% | 89\% | (6\%) |
| 133 | Cass County | 9.15\% | 8.63\% | 0.52\% | 81\% | 87\% | (6\%) |
| 610 | Cass County Appraisal District | 9.29\% | 8.17\% | 1.12\% | 86\% | 91\% | (5\%) |
| 134 | Castro County | 9.49\% | 7.23\% | 2.26\% | 92\% | 100\% | (8\%) |
| 719 | Central Appraisal District of Bandera County | 6.97\% | 8.03\% | (1.06\%) | 80\% | 58\% | 22\% |
| 635 | Central Appraisal District of Johnson County | 11.90\% | 11.67\% | 0.23\% | 78\% | 80\% | (2\%) |
| 602 | Central Appraisal District of Taylor County | 8.04\% | 5.85\% | 2.19\% | 89\% | 96\% | (7\%) |
| 712 | Central Texas Regional Mobility Authority | 13.07\% | 12.98\% | 0.09\% | 89\% | 91\% | (2\%) |
| 648 | Central WCID - Angelina County | 7.69\% | 7.55\% | 0.14\% | 75\% | 77\% | (2\%) |
| 135 | Chambers County | 11.08\% | 9.85\% | 1.23\% | 85\% | 93\% | (8\%) |
| 531 | Chambers County Appraisal District | 5.45\% | 4.79\% | 0.66\% | 107\% | 108\% | (1\%) |
| 548 | Chambers County Public Hospital District | 5.06\% | 4.54\% | 0.52\% | 101\% | 107\% | (6\%) |
| 136 | Cherokee County | 8.60\% | 7.93\% | 0.67\% | 81\% | 89\% | (8\%) |
| 137 | Childress County | 4.26\% | 4.07\% | 0.19\% | 81\% | 86\% | (5\%) |
| 511 | Childress County Appraisal District | 5.82\% | 5.14\% | 0.68\% | 77\% | 82\% | (5\%) |
| 582 | Childress County Hospital District | 4.62\% | 3.95\% | 0.67\% | 100\% | 105\% | (5\%) |
| 138 | Clay County | 10.66\% | 10.67\% | (0.01\%) | 81\% | 84\% | (3\%) |


| Employer | Employer | Required Contribution Rate |  |  | Funded Ratio at December 31 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Name | 2010 | 2009 | Change | 2008 | 2007 | Change |
| 485 | Clay County Appraisal District | 12.22\% | 7.76\% | 4.46\% | 83\% | 101\% | (18\%) |
| 703 | Coastal Bend Groundwater Cons. District | 6.16\% | 5.92\% | 0.24\% | 93\% | 97\% | (4\%) |
| 722 | Coastal Plains Groundwater Cons. District | 5.49\% | 5.35\% | 0.14\% | 96\% | 99\% | (3\%) |
| 139 | Cochran County | 12.27\% | 12.31\% | (0.04\%) | 78\% | 82\% | (4\%) |
| 477 | Cochran County Appraisal District | 6.09\% | 4.35\% | 1.74\% | 106\% | 120\% | (14\%) |
| 140 | Coke County | 12.04\% | 12.29\% | (0.25\%) | 77\% | 85\% | (8\%) |
| 751 | Coke County Appraisal District | 7.79\% | 7.88\% | (0.09\%) | 53\% | 0\% | 53\% |
| 141 | Coleman County | 6.50\% | 4.97\% | 1.53\% | 94\% | 100\% | (6\%) |
| 142 | Collin County | 12.84\% | 12.13\% | 0.71\% | 82\% | 87\% | (5\%) |
| 457 | Collin County Central Appraisal District | 14.12\% | 13.59\% | 0.53\% | 83\% | 87\% | (4\%) |
| 143 | Collingsworth County | 11.29\% | 10.71\% | 0.58\% | 79\% | 82\% | (3\%) |
| 144 | Colorado County | 7.90\% | 7.61\% | 0.29\% | 84\% | 88\% | (4\%) |
| 623 | Comal Appraisal District | 13.88\% | 14.23\% | (0.35\%) | 75\% | 77\% | (2\%) |
| 145 | Comal County | 9.59\% | 9.13\% | 0.46\% | 83\% | 89\% | (6\%) |
| 146 | Comanche County | 8.41\% | 8.52\% | (0.11\%) | 77\% | 79\% | (2\%) |
| 762 | Combined Consumers SUD | 3.30\% | 3.36\% | (0.06\%) | 15\% | 0\% | 15\% |
| 147 | Concho County | 6.95\% | 5.57\% | 1.38\% | 101\% | 111\% | (10\%) |
| 636 | Concho County Hospital District | 4.70\% | 3.88\% | 0.82\% | 91\% | 96\% | (5\%) |
| 759 | Concho Valley Council of Governments | 8.08\% | 8.47\% | (0.39\%) | 8\% | 0\% | 8\% |
| 148 | Cooke County | 9.13\% | 8.96\% | 0.17\% | 82\% | 87\% | (5\%) |
| 487 | Cooke County Appraisal District | 9.63\% | 6.93\% | 2.70\% | 98\% | 106\% | (8\%) |
| 149 | Coryell County | 9.29\% | 8.39\% | 0.90\% | 87\% | 93\% | (6\%) |
| 150 | Cottle County | 6.10\% | 4.76\% | 1.34\% | 89\% | 97\% | (8\%) |
| 727 | Cow Creek Groundwater Cons. District | 6.39\% | 6.36\% | 0.03\% | 93\% | 91\% | 2\% |
| 151 | Crane County | 7.98\% | 5.53\% | 2.45\% | 95\% | 99\% | (4\%) |
| 757 | Crane County Hospital District | 7.20\% | 7.88\% | (0.68\%) | 20\% | 0\% | 20\% |
| 152 | Crockett County | 8.93\% | 8.05\% | 0.88\% | 82\% | 88\% | (6\%) |
| 409 | Crockett County WCID \#1 | 6.16\% | 4.44\% | 1.72\% | 95\% | 101\% | (6\%) |
| 153 | Crosby County | 10.90\% | 10.66\% | 0.24\% | 71\% | 80\% | (9\%) |
| 532 | Crosby County Appraisal District | 1.22\% | 0.00\% | 1.22\% | 163\% | 197\% | (34\%) |
| 603 | Crosby MUD | 2.81\% | 1.63\% | 1.18\% | 115\% | 124\% | (9\%) |
| 710 | Cross Roads SUD | 5.16\% | 4.93\% | 0.23\% | 83\% | 81\% | 2\% |
| 154 | Culberson County | 6.61\% | 5.39\% | 1.22\% | 95\% | 102\% | (7\%) |
| 155 | Dallam County | 10.23\% | 10.04\% | 0.19\% | 85\% | 88\% | (3\%) |
| 467 | Dallas Central Appraisal District | 12.85\% | 9.70\% | 3.15\% | 88\% | 96\% | (8\%) |
| 156 | Dallas County | 8.50\% | 8.50\% | 0.00\% | 87\% | 94\% | (7\%) |
| 430 | Dallas County Park Cities MUD | 10.89\% | 8.94\% | 1.95\% | 87\% | 94\% | (7\%) |
| 687 | Dallas County WCID \#6 | 4.71\% | 4.58\% | 0.13\% | 91\% | 92\% | (1\%) |
| 157 | Dawson County | 11.57\% | 12.60\% | (1.03\%) | 71\% | 74\% | (3\%) |
| 463 | Dawson County Central Appraisal District | 5.41\% | 1.49\% | 3.92\% | 106\% | 118\% | (12\%) |
| 158 | Deaf Smith County | 10.07\% | 9.11\% | 0.96\% | 84\% | 90\% | (6\%) |
| 578 | Deaf Smith County Hospital District | 0.65\% | 0.00\% | 0.65\% | 115\% | 124\% | (9\%) |
| 159 | Delta County | 7.91\% | 7.88\% | 0.03\% | 79\% | 81\% | (2\%) |
| 734 | Delta County MUD | 4.65\% | 4.64\% | 0.01\% | 94\% | 94\% | 0\% |
| 732 | Delta Lake Irr. Dist. | 4.03\% | 4.22\% | (0.19\%) | 69\% | 58\% | 11\% |
| 583 | Denco Area 9-1-1 District - Denton County | 11.64\% | 11.35\% | 0.29\% | 83\% | 87\% | (4\%) |
| 482 | Denton Central Appraisal District | 10.09\% | 9.97\% | 0.12\% | 93\% | 94\% | (1\%) |
| 160 | Denton County | 9.80\% | 9.01\% | 0.79\% | 84\% | 90\% | (6\%) |
| 758 | Denton County Fresh Water Supply District 1A | 8.41\% | 8.99\% | (0.58\%) | 22\% | 0\% | 22\% |
| 161 | Dewitt County | 7.40\% | 6.69\% | 0.71\% | 87\% | 92\% | (5\%) |
| 466 | DeWitt County Appraisal District | 8.21\% | 4.69\% | 3.52\% | 94\% | 102\% | (8\%) |
| 162 | Dickens County | 9.68\% | 8.42\% | 1.26\% | 83\% | 89\% | (6\%) |
| 163 | Dimmit County | 7.76\% | 6.76\% | 1.00\% | 93\% | 101\% | (8\%) |
| 164 | Donley County | 6.25\% | 5.41\% | 0.84\% | 85\% | 91\% | (6\%) |
| 165 | Duval County | 6.63\% | 6.59\% | 0.04\% | 73\% | 77\% | (4\%) |


| Employer | Employer | Required Contribution Rate |  |  | Funded Ratio at December 31 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Name | 2010 | 2009 | Change | 2008 | 2007 | Change |
| 166 | Eastland County | 10.86\% | 10.54\% | 0.32\% | 77\% | 83\% | (6\%) |
| 593 | Eastland County Appraisal District | 14.87\% | 14.15\% | 0.72\% | 82\% | 87\% | (5\%) |
| 624 | ECD of Ector County | 14.91\% | 13.45\% | 1.46\% | 87\% | 92\% | (5\%) |
| 167 | Ector County | 12.76\% | 8.44\% | 4.32\% | 90\% | 100\% | (10\%) |
| 580 | Ector County Hospital District | 9.31\% | 8.46\% | 0.85\% | 83\% | 90\% | (7\%) |
| 448 | Edwards Aquifer Authority - Bexar County | 5.32\% | 4.26\% | 1.06\% | 91\% | 98\% | (7\%) |
| 628 | Edwards Central Appraisal District | 9.56\% | 9.83\% | (0.27\%) | 100\% | 120\% | (20\%) |
| 168 | Edwards County | 10.03\% | 10.10\% | (0.07\%) | 81\% | 82\% | (1\%) |
| 170 | El Paso County | 12.33\% | 11.36\% | 0.97\% | 82\% | 89\% | (7\%) |
| 567 | El Paso County 9-1-1 District | 13.92\% | 11.94\% | 1.98\% | 84\% | 91\% | (7\%) |
| 541 | El Paso County Hospital District | 6.07\% | 5.58\% | 0.49\% | 84\% | 90\% | (6\%) |
| 169 | Ellis County | 9.84\% | 9.21\% | 0.63\% | 81\% | 88\% | (7\%) |
| 171 | Erath County | 9.95\% | 9.30\% | 0.65\% | 83\% | 89\% | (6\%) |
| 172 | Falls County | 9.74\% | 8.94\% | 0.80\% | 82\% | 88\% | (6\%) |
| 563 | Falls County Appraisal District | 0.00\% | 0.00\% | 0.00\% | 158\% | 179\% | (21\%) |
| 173 | Fannin County | 9.23\% | 8.38\% | 0.85\% | 88\% | 94\% | (6\%) |
| 644 | Fannin County Appraisal District | 0.23\% | 0.00\% | 0.23\% | 136\% | 150\% | (14\%) |
| 174 | Fayette County | 9.22\% | 8.19\% | 1.03\% | 86\% | 91\% | (5\%) |
| 175 | Fisher County | 7.80\% | 7.44\% | 0.36\% | 81\% | 86\% | (5\%) |
| 432 | Fisher County Hospital District | 3.40\% | 2.33\% | 1.07\% | 105\% | 114\% | (9\%) |
| 176 | Floyd County | 14.38\% | 14.90\% | (0.52\%) | 73\% | 76\% | (3\%) |
| 474 | Fort Bend Central Appraisal District | 11.05\% | 8.51\% | 2.54\% | 91\% | 99\% | (8\%) |
| 178 | Fort Bend County | 10.83\% | 10.22\% | 0.61\% | 82\% | 88\% | (6\%) |
| 179 | Franklin County | 10.20\% | 9.29\% | 0.91\% | 85\% | 91\% | (6\%) |
| 180 | Freestone County | 16.77\% | 18.36\% | (1.59\%) | 65\% | 68\% | (3\%) |
| 693 | Freestone County Appraisal District | 11.82\% | 11.77\% | 0.05\% | 78\% | 77\% | 1\% |
| 181 | Frio County | 6.69\% | 4.75\% | 1.94\% | 97\% | 108\% | (11\%) |
| 509 | Frio County Appraisal District | 9.23\% | 5.53\% | 3.70\% | 93\% | 101\% | (8\%) |
| 182 | Gaines County | 10.73\% | 10.85\% | (0.12\%) | 78\% | 83\% | (5\%) |
| 761 | Gaines County Appraisal District | 7.53\% | 7.95\% | (0.42\%) | 12\% | 0\% | 12\% |
| 546 | Galveston Central Appraisal District | 15.63\% | 11.86\% | 3.77\% | 88\% | 95\% | (7\%) |
| 183 | Galveston County | 9.21\% | 7.51\% | 1.70\% | 89\% | 97\% | (8\%) |
| 547 | Galveston County Consolidated Drainage District | 11.82\% | 11.28\% | 0.54\% | 86\% | 89\% | (3\%) |
| 464 | Galveston County Drainage District \#1 | 8.17\% | 6.27\% | 1.90\% | 103\% | 118\% | (15\%) |
| 433 | Galveston County Drainage District \#2 | 13.16\% | 6.68\% | 6.48\% | 94\% | 103\% | (9\%) |
| 589 | Galveston County ECD | 12.88\% | 10.62\% | 2.26\% | 90\% | 96\% | (6\%) |
| 752 | Galveston County Health District | 4.52\% | 4.83\% | (0.31\%) | 43\% | 0\% | 43\% |
| 407 | Galveston County WCID \#1 | 10.76\% | 9.18\% | 1.58\% | 86\% | 92\% | (6\%) |
| 473 | Garza Central Appraisal District | 11.09\% | 8.84\% | 2.25\% | 88\% | 94\% | (6\%) |
| 184 | Garza County | 7.78\% | 6.41\% | 1.37\% | 88\% | 97\% | (9\%) |
| 185 | Gillespie County | 11.15\% | 10.44\% | 0.71\% | 80\% | 86\% | (6\%) |
| 186 | Glasscock County | 16.38\% | 16.13\% | 0.25\% | 71\% | 80\% | (9\%) |
| 187 | Goliad County | 6.28\% | 4.92\% | 1.36\% | 95\% | 104\% | (9\%) |
| 188 | Gonzales County | 9.37\% | 9.20\% | 0.17\% | 76\% | 82\% | (6\%) |
| 498 | Gonzales County Appraisal District | 9.71\% | 7.86\% | 1.85\% | 97\% | 105\% | (8\%) |
| 189 | Gray County | 7.83\% | 6.77\% | 1.06\% | 89\% | 95\% | (6\%) |
| 518 | Gray County Appraisal District | 8.94\% | 6.16\% | 2.78\% | 98\% | 108\% | (10\%) |
| 475 | Grayson Central Appraisal District | 12.73\% | 11.77\% | 0.96\% | 85\% | 90\% | (5\%) |
| 190 | Grayson County | 12.41\% | 12.20\% | 0.21\% | 76\% | 82\% | (6\%) |
| 528 | Greater Harris County 9-1-1 Emergency Network | 12.48\% | 11.61\% | 0.87\% | 82\% | 88\% | (6\%) |
| 429 | Greenbelt M\&IWA - Donley County | 9.59\% | 7.93\% | 1.66\% | 87\% | 93\% | (6\%) |
| 191 | Gregg County | 10.10\% | 9.35\% | 0.75\% | 87\% | 92\% | (5\%) |
| 192 | Grimes County | 6.64\% | 5.90\% | 0.74\% | 99\% | 106\% | (7\%) |
| 483 | Grimes County Appraisal District | 11.49\% | 9.38\% | 2.11\% | 92\% | 96\% | (4\%) |
| 587 | Guadalupe Appraisal District | 11.62\% | 11.08\% | 0.54\% | 81\% | 85\% | (4\%) |
|  | This work product was purposes. Milliman doe receive this work. | epared so ot intend | TCDRS efit and as | may not s no duty | riate to to other | other es who | 4 |


| Employer | Employer | Required Contribution Rate |  |  | Funded Ratio at December 31 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Name | 2010 | 2009 | Change | 2008 | 2007 | Change |
| 193 | Guadalupe County | 9.47\% | 9.08\% | 0.39\% | 82\% | 87\% | (5\%) |
| 526 | Gulf Coast Water Authority - Galveston County | 7.09\% | 3.42\% | 3.67\% | 96\% | 104\% | (8\%) |
| 194 | Hale County | 12.77\% | 12.75\% | 0.02\% | 73\% | 79\% | (6\%) |
| 195 | Hall County | 8.54\% | 6.91\% | 1.63\% | 87\% | 95\% | (8\%) |
| 196 | Hamilton County | 6.72\% | 5.88\% | 0.84\% | 83\% | 91\% | (8\%) |
| 197 | Hansford County | 12.15\% | 12.40\% | (0.25\%) | 81\% | 83\% | (2\%) |
| 585 | Hansford County Hospital District | 3.72\% | 2.84\% | 0.88\% | 94\% | 102\% | (8\%) |
| 198 | Hardeman County | 5.63\% | 4.44\% | 1.19\% | 96\% | 103\% | (7\%) |
| 199 | Hardin County | 12.24\% | 12.23\% | 0.01\% | 77\% | 82\% | (5\%) |
| 527 | Hardin County Appraisal District | 14.53\% | 13.21\% | 1.32\% | 82\% | 88\% | (6\%) |
| 571 | Harlingen Irr. Dist. Cameron County \#1 | 4.36\% | 3.91\% | 0.45\% | 93\% | 97\% | (4\%) |
| 200 | Harris County | 11.31\% | 9.74\% | 1.57\% | 86\% | 94\% | (8\%) |
| 598 | Harris County Appraisal District | 13.18\% | 13.77\% | (0.59\%) | 83\% | 85\% | (2\%) |
| 569 | Harris County WCID \#1 | 12.26\% | 10.18\% | 2.08\% | 84\% | 92\% | (8\%) |
| 625 | Harris County WCID \#50 | 6.63\% | 5.44\% | 1.19\% | 77\% | 89\% | (12\%) |
| 201 | Harrison County | 10.27\% | 9.69\% | 0.58\% | 82\% | 88\% | (6\%) |
| 202 | Hartley County | 9.67\% | 7.66\% | 2.01\% | 90\% | 97\% | (7\%) |
| 520 | Hartley County Appraisal District | 7.00\% | 7.00\% | 0.00\% | 94\% | 106\% | (12\%) |
| 203 | Haskell County | 9.31\% | 9.07\% | 0.24\% | 76\% | 81\% | (5\%) |
| 552 | Haskell Memorial Hospital District | 5.00\% | 5.00\% | 0.00\% | 134\% | 142\% | (8\%) |
| 204 | Hays County | 10.15\% | 9.31\% | 0.84\% | 85\% | 91\% | (6\%) |
| 205 | Hemphill County | 12.47\% | 11.58\% | 0.89\% | 81\% | 86\% | (5\%) |
| 640 | Hemphill County Appraisal District | 10.27\% | 9.22\% | 1.05\% | 98\% | 104\% | (6\%) |
| 529 | Hemphill County Hospital District | 8.38\% | 6.66\% | 1.72\% | 99\% | 108\% | (9\%) |
| 206 | Henderson County | 11.46\% | 10.64\% | 0.82\% | 82\% | 89\% | (7\%) |
| 746 | Henderson County 9-1-1 Communications District | 10.91\% | 11.34\% | (0.43\%) | 91\% | 0\% | 91\% |
| 704 | Henderson County Appraisal District | 5.88\% | 6.19\% | (0.31\%) | 77\% | 76\% | 1\% |
| 414 | Hidalgo and Cameron Counties Irr. Dist. \#9 | 7.00\% | 7.00\% | 0.00\% | 105\% | 111\% | (6\%) |
| 207 | Hidalgo County | 9.52\% | 9.02\% | 0.50\% | 82\% | 88\% | (6\%) |
| 516 | Hidalgo County Appraisal District | 10.59\% | 8.14\% | 2.45\% | 89\% | 97\% | (8\%) |
| 401 | Hidalgo County Drainage District \#1 | 10.80\% | 9.86\% | 0.94\% | 87\% | 94\% | (7\%) |
| 713 | Hidalgo County Irr. Dist. \#1 | 4.28\% | 4.59\% | (0.31\%) | 75\% | 70\% | 5\% |
| 438 | Hidalgo County Irr. Dist. \#2 | 8.59\% | 6.63\% | 1.96\% | 89\% | 96\% | (7\%) |
| 486 | Hidalgo County Irr. Dist. \#6 | 7.00\% | 7.00\% | 0.00\% | 95\% | 104\% | (9\%) |
| 674 | High Plains Underground Water Cons. District \# 1 | 4.64\% | 4.51\% | 0.13\% | 92\% | 93\% | (1\%) |
| 208 | Hill County | 6.74\% | 6.53\% | 0.21\% | 82\% | 88\% | (6\%) |
| 209 | Hockley County | 11.94\% | 11.81\% | 0.13\% | 76\% | 80\% | (4\%) |
| 728 | Hockley County Appraisal District | 10.72\% | 12.02\% | (1.30\%) | 56\% | 47\% | 9\% |
| 210 | Hood County | 7.35\% | 6.80\% | 0.55\% | 86\% | 93\% | (7\%) |
| 211 | Hopkins County | 11.58\% | 11.32\% | 0.26\% | 80\% | 85\% | (5\%) |
| 661 | Hopkins County Appraisal District | 4.77\% | 4.65\% | 0.12\% | 113\% | 115\% | (2\%) |
| 212 | Houston County | 6.07\% | 5.39\% | 0.68\% | 90\% | 97\% | (7\%) |
| 694 | Houston County Appraisal District | 9.11\% | 9.86\% | (0.75\%) | 72\% | 68\% | 4\% |
| 213 | Howard County | 15.32\% | 15.47\% | (0.15\%) | 72\% | 76\% | (4\%) |
| 214 | Hudspeth County | 3.99\% | 3.26\% | 0.73\% | 101\% | 110\% | (9\%) |
| 215 | Hunt County | 9.37\% | 8.77\% | 0.60\% | 84\% | 90\% | (6\%) |
| 749 | Hunt County Appraisal District | 6.04\% | 6.45\% | (0.41\%) | 41\% | 0\% | 41\% |
| 216 | Hutchinson County | 10.88\% | 9.43\% | 1.45\% | 88\% | 94\% | (6\%) |
| 711 | Iraan General Hospital District | 7.59\% | 7.72\% | (0.13\%) | 78\% | 76\% | 2\% |
| 217 | Irion County | 9.60\% | 7.62\% | 1.98\% | 91\% | 99\% | (8\%) |
| 218 | Jack County | 9.09\% | 8.49\% | 0.60\% | 81\% | 87\% | (6\%) |
| 592 | Jack County Appraisal District | 9.24\% | 7.13\% | 2.11\% | 86\% | 92\% | (6\%) |
| 219 | Jackson County | 8.90\% | 7.65\% | 1.25\% | 87\% | 93\% | (6\%) |
| 441 | Jackson County County-Wide Drainage District | 12.32\% | 10.79\% | 1.53\% | 94\% | 98\% | (4\%) |
| 220 | Jasper County | 15.72\% | 15.58\% | 0.14\% | 67\% | 75\% | (8\%) |

This work product was prepared solely for TCDRS. It may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who

| Employer | Employer | Required Contribution Rate |  |  | Funded Ratio at December 31 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Name | 2010 | 2009 | Change | 2008 | 2007 | Change |
| 657 | Jasper County WCID \#1 | 6.90\% | 7.37\% | (0.47\%) | 89\% | 87\% | 2\% |
| 221 | Jeff Davis County | 5.10\% | 4.40\% | 0.70\% | 106\% | 110\% | (4\%) |
| 222 | Jefferson County | 14.38\% | 14.76\% | (0.38\%) | 75\% | 80\% | (5\%) |
| 404 | Jefferson County Drainage District \#3 | 9.72\% | 6.54\% | 3.18\% | 96\% | 102\% | (6\%) |
| 408 | Jefferson County Drainage District \#6 | 13.02\% | 11.43\% | 1.59\% | 80\% | 90\% | (10\%) |
| 405 | Jefferson County Drainage District \#7 | 10.94\% | 9.72\% | 1.22\% | 83\% | 90\% | (7\%) |
| 451 | Jefferson County WCID \#10 | 5.07\% | 1.68\% | 3.39\% | 108\% | 127\% | (19\%) |
| 223 | Jim Hogg County | 3.82\% | 3.10\% | 0.72\% | 94\% | 100\% | (6\%) |
| 680 | Jim Hogg County Appraisal District | 7.27\% | 6.89\% | 0.38\% | 107\% | 118\% | (11\%) |
| 656 | Jim Hogg County ESD \#1 | 0.19\% | 0.00\% | 0.19\% | 138\% | 154\% | (16\%) |
| 641 | Jim Hogg County WCID \#2 | 6.54\% | 6.33\% | 0.21\% | 86\% | 89\% | (3\%) |
| 224 | Jim Wells County | 11.13\% | 10.45\% | 0.68\% | 82\% | 88\% | (6\%) |
| 225 | Johnson County | 8.92\% | 8.11\% | 0.81\% | 88\% | 94\% | (6\%) |
| 741 | Jonah Water SUD | 2.54\% | 2.60\% | (0.06\%) | 82\% | 67\% | 15\% |
| 226 | Jones County | 13.92\% | 14.02\% | (0.10\%) | 73\% | 78\% | (5\%) |
| 496 | Jones County Appraisal District | 8.25\% | 5.68\% | 2.57\% | 90\% | 98\% | (8\%) |
| 227 | Karnes County | 12.69\% | 12.09\% | 0.60\% | 78\% | 83\% | (5\%) |
| 524 | Karnes County Appraisal District | 10.23\% | 7.87\% | 2.36\% | 87\% | 93\% | (6\%) |
| 455 | Karnes County Hospital District | 6.00\% | 6.00\% | 0.00\% | 96\% | 107\% | (11\%) |
| 228 | Kaufman County | 8.19\% | 7.51\% | 0.68\% | 86\% | 93\% | (7\%) |
| 662 | Kaufman County Appraisal District | 9.50\% | 9.53\% | (0.03\%) | 82\% | 83\% | (1\%) |
| 671 | Kendall Appraisal District | 7.04\% | 6.26\% | 0.78\% | 94\% | 101\% | (7\%) |
| 229 | Kendall County | 7.08\% | 6.59\% | 0.49\% | 86\% | 91\% | (5\%) |
| 619 | Kendall County WCID \#1 | 11.27\% | 10.60\% | 0.67\% | 74\% | 79\% | (5\%) |
| 230 | Kenedy County | 16.05\% | 17.01\% | (0.96\%) | 74\% | 76\% | (2\%) |
| 231 | Kent County | 15.06\% | 16.27\% | (1.21\%) | 72\% | 70\% | 2\% |
| 594 | Kent County Tax Appraisal District | 13.06\% | 10.76\% | 2.30\% | 83\% | 87\% | (4\%) |
| 232 | Kerr County | 10.59\% | 10.05\% | 0.54\% | 82\% | 88\% | (6\%) |
| 653 | Kerr Emergency 9-1-1 Network | 5.48\% | 2.90\% | 2.58\% | 128\% | 144\% | (16\%) |
| 233 | Kimble County | 7.72\% | 6.73\% | 0.99\% | 92\% | 102\% | (10\%) |
| 234 | King County | 12.47\% | 11.32\% | 1.15\% | 85\% | 90\% | (5\%) |
| 755 | King County Appraisal District | 11.11\% | 11.46\% | (0.35\%) | 139\% | 0\% | 139\% |
| 235 | Kinney County | 6.97\% | 5.50\% | 1.47\% | 100\% | 109\% | (9\%) |
| 579 | Kinney County Appraisal District | 11.03\% | 10.96\% | 0.07\% | 69\% | 71\% | (2\%) |
| 236 | Kleberg County | 10.31\% | 7.82\% | 2.49\% | 89\% | 99\% | (10\%) |
| 237 | Knox County | 5.81\% | 4.87\% | 0.94\% | 100\% | 107\% | (7\%) |
| 519 | Knox County Appraisal District | 8.47\% | 4.87\% | 3.60\% | 90\% | 103\% | (13\%) |
| 241 | La Salle County | 10.39\% | 8.77\% | 1.62\% | 88\% | 97\% | (9\%) |
| 540 | Laguna Madre Water District - Cameron County | 12.21\% | 11.67\% | 0.54\% | 78\% | 84\% | (6\%) |
| 514 | Lakeway MUD - Travis County | 10.62\% | 9.70\% | 0.92\% | 81\% | 86\% | (5\%) |
| 238 | Lamar County | 10.19\% | 8.99\% | 1.20\% | 86\% | 93\% | (7\%) |
| 239 | Lamb County | 10.23\% | 8.90\% | 1.33\% | 81\% | 90\% | (9\%) |
| 240 | Lampasas County | 13.28\% | 12.94\% | 0.34\% | 77\% | 81\% | (4\%) |
| 650 | Lampasas County Appraisal District | 9.92\% | 9.35\% | 0.57\% | 85\% | 88\% | (3\%) |
| 731 | LaSalle County Appraisal District | 6.71\% | 6.56\% | 0.15\% | 96\% | 96\% | 0\% |
| 439 | Lavaca - Navidad River Auth. - Jackson County | 9.87\% | 8.56\% | 1.31\% | 89\% | 95\% | (6\%) |
| 242 | Lavaca County | 14.00\% | 14.51\% | (0.51\%) | 75\% | 79\% | (4\%) |
| 243 | Lee County | 7.48\% | 6.83\% | 0.65\% | 84\% | 91\% | (7\%) |
| 244 | Leon County | 3.40\% | 2.98\% | 0.42\% | 111\% | 118\% | (7\%) |
| 468 | Leon County Central Appraisal District | 2.26\% | 0.70\% | 1.56\% | 108\% | 118\% | (10\%) |
| 245 | Liberty County | 14.24\% | 13.75\% | 0.49\% | 76\% | 82\% | (6\%) |
| 481 | Liberty County Central Appraisal District | 9.70\% | 8.54\% | 1.16\% | 97\% | 104\% | (7\%) |
| 246 | Limestone County | 5.90\% | 5.00\% | 0.90\% | 96\% | 104\% | (8\%) |
| 695 | Limestone County Appraisal District | 9.34\% | 10.39\% | (1.05\%) | 83\% | 78\% | 5\% |
| 247 | Lipscomb County | 12.47\% | 12.08\% | 0.39\% | 78\% | 84\% | (6\%) |


| Employer | Employer | Required Contribution Rate |  |  | Funded Ratio at December 31 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Name | 2010 | 2009 | Change | 2008 | 2007 | Change |
| 248 | Live Oak County | 11.89\% | 11.88\% | 0.01\% | 78\% | 82\% | (4\%) |
| 591 | Live Oak County Appraisal District | 11.90\% | 10.86\% | 1.04\% | 83\% | 84\% | (1\%) |
| 249 | Llano County | 7.96\% | 7.22\% | 0.74\% | 86\% | 93\% | (7\%) |
| 250 | Loving County | 14.87\% | 20.88\% | (6.01\%) | 73\% | 67\% | 6\% |
| 513 | Loving County Appraisal District | 11.40\% | 22.30\% | (10.90\%) | 96\% | 55\% | 41\% |
| 756 | Lower Trinity Groundwater Cons. District | 13.66\% | 13.73\% | (0.07\%) | 41\% | 0\% | 41\% |
| 714 | Lower Valley Water District | 9.09\% | 9.36\% | (0.27\%) | 83\% | 79\% | 4\% |
| 499 | Lubbock Central Appraisal District | 11.39\% | 7.73\% | 3.66\% | 91\% | 99\% | (8\%) |
| 251 | Lubbock County | 9.41\% | 8.79\% | 0.62\% | 83\% | 90\% | (7\%) |
| 425 | Lubbock County WCID \#1 | 2.30\% | 2.17\% | 0.13\% | 151\% | 170\% | (19\%) |
| 558 | Lubbock ECD | 8.70\% | 7.88\% | 0.82\% | 96\% | 99\% | (3\%) |
| 647 | Lubbock Reese Redevelopment Authority | 1.45\% | 0.34\% | 1.11\% | 127\% | 145\% | (18\%) |
| 639 | Lumberton MUD | 4.95\% | 4.33\% | 0.62\% | 92\% | 100\% | (8\%) |
| 252 | Lynn County | 1.95\% | 1.35\% | 0.60\% | 114\% | 123\% | (9\%) |
| 497 | Lynn County Appraisal District | 6.14\% | 5.19\% | 0.95\% | 89\% | 96\% | (7\%) |
| 442 | Lynn County Hospital District | 5.68\% | 4.23\% | 1.45\% | 98\% | 105\% | (7\%) |
| 630 | Macedonia - Eylau MUD - Bowie County | 7.16\% | 5.51\% | 1.65\% | 91\% | 96\% | (5\%) |
| 500 | Mackenzie MWA - Briscoe County | 0.00\% | 0.00\% | 0.00\% | 107\% | 115\% | (8\%) |
| 256 | Madison County | 5.55\% | 5.44\% | 0.11\% | 83\% | 87\% | (4\%) |
| 596 | Madison County Appraisal District | 7.51\% | 7.09\% | 0.42\% | 83\% | 88\% | (5\%) |
| 257 | Marion County | 8.99\% | 7.06\% | 1.93\% | 93\% | 102\% | (9\%) |
| 675 | Marion County Appraisal District | 2.64\% | 3.31\% | (0.67\%) | 155\% | 125\% | 30\% |
| 658 | Marshall-Harrison County Health District | 0.00\% | 0.00\% | 0.00\% | 161\% | 188\% | (27\%) |
| 258 | Martin County | 12.13\% | 11.00\% | 1.13\% | 82\% | 88\% | (6\%) |
| 595 | Martin County Appraisal District | 6.08\% | 4.65\% | 1.43\% | 92\% | 98\% | (6\%) |
| 259 | Mason County | 9.10\% | 8.13\% | 0.97\% | 86\% | 91\% | (5\%) |
| 260 | Matagorda County | 12.85\% | 12.29\% | 0.56\% | 80\% | 85\% | (5\%) |
| 678 | Matagorda County Drainage District | 10.70\% | 9.79\% | 0.91\% | 80\% | 87\% | (7\%) |
| 440 | Matagorda County Hospital District | 4.16\% | 2.34\% | 1.82\% | 103\% | 113\% | (10\%) |
| 677 | Matagorda County Navigation District \#1 | 10.07\% | 9.70\% | 0.37\% | 109\% | 109\% | 0\% |
| 261 | Maverick County | 7.33\% | 6.50\% | 0.83\% | 89\% | 97\% | (8\%) |
| 729 | Maverick County Hospital District | 9.97\% | 11.28\% | (1.31\%) | 96\% | 61\% | 35\% |
| 453 | Maverick County WCID \#1 | 3.22\% | 2.21\% | 1.01\% | 96\% | 102\% | (6\%) |
| 253 | McCulloch County | 4.08\% | 2.87\% | 1.21\% | 109\% | 118\% | (9\%) |
| 512 | McCulloch County Appraisal District | 8.29\% | 3.48\% | 4.81\% | 98\% | 110\% | (12\%) |
| 254 | McLennan County | 15.03\% | 14.52\% | 0.51\% | 77\% | 83\% | (6\%) |
| 725 | McLennan County 9-1-1 Emerg. Assist. Dist. | 12.04\% | 12.17\% | (0.13\%) | 96\% | 94\% | 2\% |
| 491 | McLennan County Appraisal District | 12.35\% | 10.04\% | 2.31\% | 82\% | 91\% | (9\%) |
| 679 | McLennan County WCID \#2 | 2.51\% | 2.23\% | 0.28\% | 119\% | 137\% | (18\%) |
| 255 | McMullen County | 9.68\% | 9.81\% | (0.13\%) | 81\% | 85\% | (4\%) |
| 262 | Medina County | 7.11\% | 5.98\% | 1.13\% | 91\% | 100\% | (9\%) |
| 705 | Medina County 911 District | 6.43\% | 6.47\% | (0.04\%) | 102\% | 98\% | 4\% |
| 535 | Medina County Appraisal District | 6.98\% | 5.78\% | 1.20\% | 91\% | 96\% | (5\%) |
| 419 | Memorial Medical Center - Calhoun County | 7.24\% | 6.00\% | 1.24\% | 93\% | 100\% | (7\%) |
| 263 | Menard County | 8.41\% | 7.37\% | 1.04\% | 90\% | 95\% | (5\%) |
| 743 | Mesa Underground Water Cons. District | 5.98\% | 5.97\% | 0.01\% | 81\% | 100\% | (19\%) |
| 669 | Middle Rio Grande Development Council | 14.70\% | 14.78\% | (0.08\%) | 77\% | 78\% | (1\%) |
| 492 | Midland Central Appraisal District | 11.03\% | 6.23\% | 4.80\% | 95\% | 103\% | (8\%) |
| 264 | Midland County | 10.27\% | 9.26\% | 1.01\% | 82\% | 88\% | (6\%) |
| 570 | Midland ECD | 14.04\% | 11.95\% | 2.09\% | 85\% | 88\% | (3\%) |
| 265 | Milam County | 8.54\% | 8.05\% | 0.49\% | 85\% | 91\% | (6\%) |
| 617 | Mills Central Appraisal District | 3.10\% | 2.64\% | 0.46\% | 117\% | 125\% | (8\%) |
| 266 | Mills County | 10.64\% | 10.24\% | 0.40\% | 77\% | 83\% | (6\%) |
| 267 | Mitchell County | 9.68\% | 9.35\% | 0.33\% | 81\% | 86\% | (5\%) |
| 484 | Mitchell County Appraisal District | 13.71\% | 10.79\% | 2.92\% | 92\% | 100\% | (8\%) |


| Employer | Employer | Required Contribution Rate |  |  | Funded Ratio at December 31 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Name | 2010 | 2009 | Change | 2008 | 2007 | Change |
| 268 | Montague County | 11.98\% | 11.51\% | 0.47\% | 78\% | 84\% | (6\%) |
| 504 | Montague County Tax Appraisal District | 17.86\% | 9.69\% | 8.17\% | 84\% | 96\% | (12\%) |
| 605 | Montgomery Central Appraisal District | 15.11\% | 14.84\% | 0.27\% | 79\% | 82\% | (3\%) |
| 269 | Montgomery County | 10.50\% | 9.69\% | 0.81\% | 83\% | 90\% | (7\%) |
| 667 | Montgomery County ECD | 13.47\% | 12.29\% | 1.18\% | 78\% | 84\% | (6\%) |
| 651 | Montgomery County ESD \#1 | 12.29\% | 11.82\% | 0.47\% | 93\% | 99\% | (6\%) |
| 696 | Montgomery County ESD No 3 | 4.51\% | 4.42\% | 0.09\% | 84\% | 84\% | 0\% |
| 270 | Moore County | 10.28\% | 9.69\% | 0.59\% | 83\% | 88\% | (5\%) |
| 733 | Moore County Appraisal District | 6.58\% | 7.17\% | (0.59\%) | 94\% | 81\% | 13\% |
| 412 | Moore County Hospital District | 4.78\% | 3.90\% | 0.88\% | 107\% | 116\% | (9\%) |
| 271 | Morris County | 11.35\% | 9.92\% | 1.43\% | 83\% | 88\% | (5\%) |
| 738 | Mustang SUD | 3.04\% | 3.19\% | (0.15\%) | 85\% | 100\% | (15\%) |
| 273 | Nacogdoches County | 8.80\% | 7.75\% | 1.05\% | 88\% | 95\% | (7\%) |
| 515 | Navarro Central Appraisal District | 11.85\% | 8.16\% | 3.69\% | 86\% | 96\% | (10\%) |
| 274 | Navarro County | 9.20\% | 8.00\% | 1.20\% | 87\% | 94\% | (7\%) |
| 572 | Newton Central Appraisal District | 13.54\% | 11.42\% | 2.12\% | 84\% | 91\% | (7\%) |
| 275 | Newton County | 7.14\% | 5.92\% | 1.22\% | 92\% | 99\% | (7\%) |
| 276 | Nolan County | 9.55\% | 8.57\% | 0.98\% | 81\% | 88\% | (7\%) |
| 556 | North Central Texas MWA | 7.00\% | 7.00\% | 0.00\% | 89\% | 95\% | (6\%) |
| 646 | North Texas Tollway Authority | 8.99\% | 8.49\% | 0.50\% | 94\% | 99\% | (5\%) |
| 562 | Northeast Texas Municipal Water District | 4.09\% | 3.51\% | 0.58\% | 98\% | 102\% | (4\%) |
| 632 | Northeast Texas Public Health District | 4.40\% | 3.98\% | 0.42\% | 109\% | 115\% | (6\%) |
| 277 | Nueces County | 9.93\% | 7.38\% | 2.55\% | 89\% | 97\% | (8\%) |
| 683 | Nueces County Appraisal District | 11.30\% | 10.93\% | 0.37\% | 78\% | 82\% | (4\%) |
| 400 | Nueces County Drainage District \#2 | 6.32\% | 4.48\% | 1.84\% | 95\% | 104\% | (9\%) |
| 416 | Nueces County WCID \#3 | 7.52\% | 7.06\% | 0.46\% | 88\% | 92\% | (4\%) |
| 450 | Nueces County WCID \#4 | 11.84\% | 7.48\% | 4.36\% | 90\% | 101\% | (11\%) |
| 278 | Ochiltree County | 9.80\% | 8.71\% | 1.09\% | 83\% | 89\% | (6\%) |
| 279 | Oldham County | 12.53\% | 11.02\% | 1.51\% | 84\% | 90\% | (6\%) |
| 517 | Oldham County Appraisal District | 0.81\% | 0.00\% | 0.81\% | 108\% | 116\% | (8\%) |
| 280 | Orange County | 11.36\% | 10.70\% | 0.66\% | 82\% | 89\% | (7\%) |
| 490 | Orange County Appraisal District | 9.67\% | 5.52\% | 4.15\% | 94\% | 106\% | (12\%) |
| 421 | Orange County Drainage District | 11.40\% | 9.90\% | 1.50\% | 86\% | 91\% | (5\%) |
| 665 | Orange County ESD \# 1 | 3.60\% | 3.15\% | 0.45\% | 92\% | 97\% | (5\%) |
| 660 | Orange County Navigation and Port District | 6.86\% | 6.63\% | 0.23\% | 86\% | 87\% | (1\%) |
| 631 | Orange County WCID \#1 | 3.31\% | 1.79\% | 1.52\% | 108\% | 119\% | (11\%) |
| 730 | Palo Duro River Authority | 7.95\% | 7.97\% | (0.02\%) | 88\% | 83\% | 5\% |
| 723 | Palo Pinto Appraisal District | 5.94\% | 6.21\% | (0.27\%) | 75\% | 70\% | 5\% |
| 281 | Palo Pinto County | 10.70\% | 10.97\% | (0.27\%) | 78\% | 82\% | (4\%) |
| 282 | Panola County | 16.02\% | 17.89\% | (1.87\%) | 75\% | 74\% | 1\% |
| 283 | Parker County | 10.79\% | 10.18\% | 0.61\% | 82\% | 88\% | (6\%) |
| 717 | Parker County Appraisal District | 11.09\% | 12.85\% | (1.76\%) | 47\% | 36\% | 11\% |
| 754 | Parker County SUD | 4.08\% | 4.09\% | (0.01\%) | 71\% | 0\% | 71\% |
| 284 | Parmer County | 8.36\% | 8.14\% | 0.22\% | 82\% | 87\% | (5\%) |
| 747 | Parmer County Appraisal District | 5.38\% | 5.67\% | (0.29\%) | 65\% | 0\% | 65\% |
| 285 | Pecos County | 8.41\% | 7.23\% | 1.18\% | 89\% | 96\% | (7\%) |
| 494 | Pecos County Appraisal District | 6.80\% | 4.77\% | 2.03\% | 100\% | 111\% | (11\%) |
| 673 | Permian Regional Medical Center | 7.97\% | 7.75\% | 0.22\% | 90\% | 93\% | (3\%) |
| 707 | Pineywoods Groundwater Cons. District | 11.29\% | 11.25\% | 0.04\% | 94\% | 92\% | 2\% |
| 697 | Polk Central Appraisal District | 11.19\% | 10.54\% | 0.65\% | 88\% | 92\% | (4\%) |
| 286 | Polk County | 10.99\% | 9.41\% | 1.58\% | 88\% | 96\% | (8\%) |
| 739 | Polk County Fresh Water Supply District \#2 | 4.58\% | 6.30\% | (1.72\%) | 141\% | 50\% | 91\% |
| 676 | Port of Bay City Authority | 9.59\% | 8.94\% | 0.65\% | 95\% | 101\% | (6\%) |
| 449 | Port of Beaumont Navigation District | 12.13\% | 11.41\% | 0.72\% | 85\% | 89\% | (4\%) |
| 620 | Port of Corpus Christi Authority | 8.10\% | 8.21\% | (0.11\%) | 77\% | 81\% | (4\%) |


| Employer | Employer | Required Contribution Rate |  |  | Funded Ratio at December 31 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Name | 2010 | 2009 | Change | 2008 | 2007 | Change |
| 622 | Port of Port Arthur Navigation District | 6.81\% | 5.88\% | 0.93\% | 90\% | 95\% | (5\%) |
| 726 | Post Oak Savannah Groundwater Cons. Dist. | 5.69\% | 5.66\% | 0.03\% | 94\% | 94\% | 0\% |
| 560 | Potter - Randall County ECD | 15.28\% | 13.86\% | 1.42\% | 84\% | 95\% | (11\%) |
| 287 | Potter County | 11.03\% | 9.95\% | 1.08\% | 84\% | 90\% | (6\%) |
| 489 | Potter County Appraisal District | 0.00\% | 0.00\% | 0.00\% | 84\% | 96\% | (12\%) |
| 626 | Presidio Appraisal District | 2.75\% | 2.45\% | 0.30\% | 94\% | 97\% | (3\%) |
| 288 | Presidio County | 5.05\% | 5.35\% | (0.30\%) | 105\% | 107\% | (2\%) |
| 289 | Rains County | 7.63\% | 6.08\% | 1.55\% | 95\% | 105\% | (10\%) |
| 537 | Rains County Appraisal District | 9.84\% | 7.65\% | 2.19\% | 96\% | 106\% | (10\%) |
| 290 | Randall County | 9.04\% | 7.98\% | 1.06\% | 89\% | 95\% | (6\%) |
| 564 | Randall County Appraisal District | 14.44\% | 10.20\% | 4.24\% | 89\% | 96\% | (7\%) |
| 406 | Rankin County Hospital District - Upton County | 6.25\% | 6.16\% | 0.09\% | 101\% | 103\% | (2\%) |
| 291 | Reagan County | 11.19\% | 10.08\% | 1.11\% | 82\% | 88\% | (6\%) |
| 445 | Reagan Hospital District | 9.65\% | 8.60\% | 1.05\% | 86\% | 93\% | (7\%) |
| 292 | Real County | 12.23\% | 8.87\% | 3.36\% | 89\% | 100\% | (11\%) |
| 505 | Red Bluff WPCD - Reeves County | 9.80\% | 9.15\% | 0.65\% | 79\% | 82\% | (3\%) |
| 435 | Red River Authority | 7.00\% | 7.00\% | 0.00\% | 118\% | 128\% | (10\%) |
| 293 | Red River County | 8.36\% | 6.56\% | 1.80\% | 92\% | 101\% | (9\%) |
| 294 | Reeves County | 6.37\% | 5.55\% | 0.82\% | 104\% | 112\% | (8\%) |
| 588 | Reeves County Hospital District | 5.33\% | 4.47\% | 0.86\% | 103\% | 113\% | (10\%) |
| 295 | Refugio County | 6.80\% | 6.04\% | 0.76\% | 88\% | 94\% | (6\%) |
| 543 | Refugio County Drainage District \#1 | 7.38\% | 5.88\% | 1.50\% | 87\% | 94\% | (7\%) |
| 736 | Refugio Groundwater Cons. District | 6.50\% | 6.47\% | 0.03\% | 93\% | 92\% | 1\% |
| 296 | Roberts County | 7.30\% | 5.69\% | 1.61\% | 92\% | 100\% | (8\%) |
| 297 | Robertson County | 7.02\% | 6.10\% | 0.92\% | 90\% | 97\% | (7\%) |
| 698 | Rockwall Central Appraisal District | 11.55\% | 12.40\% | (0.85\%) | 73\% | 68\% | 5\% |
| 298 | Rockwall County | 7.38\% | 6.36\% | 1.02\% | 93\% | 101\% | (8\%) |
| 299 | Runnels County | 8.31\% | 7.30\% | 1.01\% | 85\% | 92\% | (7\%) |
| 300 | Rusk County | 7.95\% | 7.23\% | 0.72\% | 86\% | 92\% | (6\%) |
| 612 | Rusk County Appraisal District | 8.22\% | 8.53\% | (0.31\%) | 99\% | 96\% | 3\% |
| 301 | Sabine County | 4.34\% | 2.97\% | 1.37\% | 111\% | 121\% | (10\%) |
| 568 | Sabine Pass Port Authority | 6.51\% | 6.89\% | (0.38\%) | 88\% | 89\% | (1\%) |
| 706 | Sabine-Neches Nav. Dist. of Jefferson County | 9.08\% | 8.94\% | 0.14\% | 80\% | 85\% | (5\%) |
| 302 | San Augustine County | 4.29\% | 2.97\% | 1.32\% | 106\% | 115\% | (9\%) |
| 303 | San Jacinto County | 8.18\% | 7.44\% | 0.74\% | 86\% | 92\% | (6\%) |
| 553 | San Jacinto County Central Appraisal District | 7.05\% | 5.90\% | 1.15\% | 103\% | 113\% | (10\%) |
| 304 | San Patricio County | 9.55\% | 7.81\% | 1.74\% | 87\% | 95\% | (8\%) |
| 495 | San Patricio County Appraisal District | 8.94\% | 6.34\% | 2.60\% | 93\% | 102\% | (9\%) |
| 426 | San Patricio County Drainage District | 21.55\% | 15.55\% | 6.00\% | 73\% | 84\% | (11\%) |
| 750 | San Patricio County Navigation District \#1 | 6.53\% | 7.19\% | (0.66\%) | 31\% | 0\% | 31\% |
| 422 | San Patricio Municipal Water District | 8.03\% | 7.88\% | 0.15\% | 84\% | 87\% | (3\%) |
| 305 | San Saba County | 8.47\% | 6.39\% | 2.08\% | 93\% | 100\% | (7\%) |
| 306 | Schleicher County | 10.93\% | 8.64\% | 2.29\% | 89\% | 97\% | (8\%) |
| 307 | Scurry County | 7.40\% | 4.12\% | 3.28\% | 98\% | 107\% | (9\%) |
| 760 | Scurry County Hospital District | 7.72\% | 8.41\% | (0.69\%) | 20\% | 0\% | 20\% |
| 308 | Shackelford County | 17.14\% | 18.61\% | (1.47\%) | 74\% | 74\% | 0\% |
| 470 | Shackelford County Appraisal District | 6.06\% | 2.33\% | 3.73\% | 95\% | 102\% | (7\%) |
| 309 | Shelby County | 7.63\% | 6.79\% | 0.84\% | 86\% | 92\% | (6\%) |
| 627 | Shelby County Appraisal District | 3.10\% | 2.46\% | 0.64\% | 102\% | 108\% | (6\%) |
| 310 | Sherman County | 16.86\% | 16.83\% | 0.03\% | 69\% | 77\% | (8\%) |
| 469 | Sherman County Appraisal District | 7.39\% | 5.36\% | 2.03\% | 94\% | 98\% | (4\%) |
| 311 | Smith County | 9.71\% | 9.41\% | 0.30\% | 81\% | 86\% | (5\%) |
| 555 | Smith County 9-1-1 Communications District | 3.47\% | 7.33\% | (3.86\%) | 108\% | 103\% | 5\% |
| 606 | Smith County Appraisal District | 9.13\% | 7.24\% | 1.89\% | 95\% | 101\% | (6\%) |
| 312 | Somervell County | 12.77\% | 11.23\% | 1.54\% | 84\% | 92\% | (8\%) |
| - Mill | This work product was purposes. Milliman doe receive this work. | ared solely intend to | TCDRS. it and assu | not be no duty or | other | her who |  |


| Employer | Employer | Required Contribution Rate |  |  | Funded Ratio at December 31 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Name | 2010 | 2009 | Change | 2008 | 2007 | Change |
| 507 | Somervell County Central Appraisal District | 7.72\% | 4.01\% | 3.71\% | 102\% | 128\% | (26\%) |
| 699 | Somervell County Water District | 12.76\% | 12.47\% | 0.29\% | 93\% | 97\% | (4\%) |
| 645 | South Texas Development Council | 9.15\% | 9.58\% | (0.43\%) | 76\% | 80\% | (4\%) |
| 313 | Starr County | 6.68\% | 6.65\% | 0.03\% | 77\% | 80\% | (3\%) |
| 536 | Starr County Appraisal District | 11.53\% | 9.13\% | 2.40\% | 89\% | 95\% | (6\%) |
| 314 | Stephens County | 9.94\% | 8.24\% | 1.70\% | 89\% | 95\% | (6\%) |
| 315 | Sterling County | 11.20\% | 11.94\% | (0.74\%) | 88\% | 86\% | 2\% |
| 316 | Stonewall County | 8.45\% | 6.45\% | 2.00\% | 90\% | 98\% | (8\%) |
| 724 | Stonewall County Appraisal District | 7.28\% | 7.16\% | 0.12\% | 93\% | 94\% | (1\%) |
| 458 | Stonewall Memorial Hospital District | 1.96\% | 0.94\% | 1.02\% | 102\% | 112\% | (10\%) |
| 539 | Stratford Hospital District - Sherman County | 3.17\% | 2.58\% | 0.59\% | 113\% | 123\% | (10\%) |
| 317 | Sutton County | 5.68\% | 4.15\% | 1.53\% | 100\% | 108\% | (8\%) |
| 573 | Sutton County Hospital District | 7.10\% | 6.24\% | 0.86\% | 94\% | 108\% | (14\%) |
| 318 | Swisher County | 9.70\% | 8.85\% | 0.85\% | 83\% | 92\% | (9\%) |
| 460 | Swisher County Appraisal District | 13.91\% | 9.58\% | 4.33\% | 88\% | 96\% | (8\%) |
| 534 | Swisher Memorial Hospital District | 2.21\% | 2.02\% | 0.19\% | 110\% | 117\% | (7\%) |
| 607 | Tarrant Appraisal District | 10.79\% | 9.89\% | 0.90\% | 83\% | 87\% | (4\%) |
| 545 | Tarrant Co 9-1-1 Emergency Assistance District | 11.83\% | 13.60\% | (1.77\%) | 84\% | 81\% | 3\% |
| 319 | Tarrant County | 11.85\% | 11.09\% | 0.76\% | 81\% | 87\% | (6\%) |
| 574 | Tax Appraisal District of Cottle County | 7.00\% | 7.00\% | 0.00\% | 97\% | 102\% | (5\%) |
| 320 | Taylor County | 9.05\% | 8.62\% | 0.43\% | 79\% | 84\% | (5\%) |
| 321 | Terrell County | 11.57\% | 13.10\% | (1.53\%) | 80\% | 75\% | 5\% |
| 753 | Terrell County WCID \#1 | 5.03\% | 7.89\% | (2.86\%) | 108\% | 0\% | 108\% |
| 322 | Terry County | 9.65\% | 9.86\% | (0.21\%) | 75\% | 79\% | (4\%) |
| 402 | Terry Memorial Hospital District | 4.04\% | 2.36\% | 1.68\% | 107\% | 118\% | (11\%) |
| 437 | Texas Association of Counties | 9.24\% | 7.73\% | 1.51\% | 93\% | 101\% | (8\%) |
| 354 | Texas County \& District Retirement System | 9.67\% | 9.26\% | 0.41\% | 86\% | 90\% | (4\%) |
| 634 | Texas Eastern 9-1-1 Network | 8.34\% | 7.09\% | 1.25\% | 98\% | 103\% | (5\%) |
| 323 | Throckmorton County | 9.59\% | 8.28\% | 1.31\% | 83\% | 90\% | (7\%) |
| 324 | Titus County | 9.54\% | 7.30\% | 2.24\% | 93\% | 104\% | (11\%) |
| 742 | Titus County Appraisal District | 4.96\% | 4.88\% | 0.08\% | 81\% | 66\% | 15\% |
| 501 | Titus County Fresh Water Supply District | 10.33\% | 7.74\% | 2.59\% | 92\% | 101\% | (9\%) |
| 325 | Tom Green County | 7.59\% | 6.95\% | 0.64\% | 86\% | 92\% | (6\%) |
| 601 | Travis Central Appraisal District | 16.68\% | 16.74\% | (0.06\%) | 73\% | 77\% | (4\%) |
| 326 | Travis County | 11.44\% | 10.29\% | 1.15\% | 85\% | 92\% | (7\%) |
| 720 | Travis County ESD \#1 NLT Fire \& Rescue | 2.32\% | 2.34\% | (0.02\%) | 104\% | 102\% | 2\% |
| 666 | Travis County WC\&ID - Point Venture | 3.50\% | 3.40\% | 0.10\% | 101\% | 104\% | (3\%) |
| 659 | Tri-County SUD | 3.84\% | 3.82\% | 0.02\% | 100\% | 99\% | 1\% |
| 633 | Trinity Bay Cons. District | 11.59\% | 12.38\% | (0.79\%) | 71\% | 74\% | (3\%) |
| 327 | Trinity County | 9.49\% | 8.85\% | 0.64\% | 80\% | 87\% | (7\%) |
| 735 | Two Way SUD | 10.37\% | 10.61\% | (0.24\%) | 84\% | 73\% | 11\% |
| 328 | Tyler County | 9.53\% | 8.47\% | 1.06\% | 89\% | 95\% | (6\%) |
| 471 | Tyler County Appraisal District | 8.03\% | 5.70\% | 2.33\% | 106\% | 118\% | (12\%) |
| 561 | United Irr. Dist. - Hidalgo County | 5.81\% | 4.23\% | 1.58\% | 99\% | 106\% | (7\%) |
| 329 | Upshur County | 9.88\% | 8.65\% | 1.23\% | 88\% | 94\% | (6\%) |
| 330 | Upton County | 6.32\% | 6.01\% | 0.31\% | 90\% | 93\% | (3\%) |
| 682 | Upton County Appraisal District | 8.25\% | 7.67\% | 0.58\% | 95\% | 99\% | (4\%) |
| 331 | Uvalde County | 8.64\% | 7.45\% | 1.19\% | 90\% | 97\% | (7\%) |
| 332 | Val Verde County | 10.40\% | 9.05\% | 1.35\% | 86\% | 93\% | (7\%) |
| 663 | Valley MUD \#2 - Cameron County | 3.06\% | 2.82\% | 0.24\% | 90\% | 93\% | (3\%) |
| 586 | Valwood Improvement Authority - Dallas County | 6.94\% | 6.07\% | 0.87\% | 85\% | 90\% | (5\%) |
| 333 | Van Zandt County | 7.53\% | 6.56\% | 0.97\% | 89\% | 95\% | (6\%) |
| 672 | Van Zandt County Appraisal District | 8.78\% | 8.31\% | 0.47\% | 88\% | 92\% | (4\%) |
| 420 | Velasco Drainage District - Brazoria County | 7.00\% | 7.00\% | 0.00\% | 91\% | 97\% | (6\%) |
| 334 | Victoria County | 11.80\% | 11.31\% | 0.49\% | 81\% | 86\% | (5\%) |


| Employer | Employer | Required Contribution Rate |  |  | Funded Ratio at December 31 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Name | 2010 | 2009 | Change | 2008 | 2007 | Change |
| 423 | Victoria County Drainage District \#3 | 12.62\% | 7.47\% | 5.15\% | 93\% | 98\% | (5\%) |
| 335 | Walker County | 10.56\% | 10.41\% | 0.15\% | 79\% | 84\% | (5\%) |
| 748 | Walker County SUD | 2.77\% | 2.95\% | (0.18\%) | 58\% | 0\% | 58\% |
| 336 | Waller County | 7.51\% | 6.21\% | 1.30\% | 89\% | 97\% | (8\%) |
| 337 | Ward County | 14.21\% | 13.24\% | 0.97\% | 78\% | 85\% | (7\%) |
| 565 | Ward County Central Appraisal District | 7.50\% | 4.98\% | 2.52\% | 94\% | 99\% | (5\%) |
| 444 | Ward Memorial Hospital | 7.79\% | 5.77\% | 2.02\% | 96\% | 104\% | (8\%) |
| 338 | Washington County | 10.75\% | 10.73\% | 0.02\% | 79\% | 83\% | (4\%) |
| 339 | Webb County | 9.51\% | 8.61\% | 0.90\% | 87\% | 93\% | (6\%) |
| 604 | Webb County Appraisal District | 6.01\% | 5.12\% | 0.89\% | 91\% | 97\% | (6\%) |
| 443 | West Central Texas Council of Governments | 10.86\% | 9.29\% | 1.57\% | 89\% | 97\% | (8\%) |
| 410 | West Central Texas Municipal Water District | 8.15\% | 6.72\% | 1.43\% | 90\% | 97\% | (7\%) |
| 454 | West Jefferson County Municipal Water District | 12.25\% | 9.84\% | 2.41\% | 86\% | 93\% | (7\%) |
| 688 | West Nueces -Las Moras S\&WCD \#236 | 5.20\% | 0.89\% | 4.31\% | 104\% | 112\% | (8\%) |
| 340 | Wharton County | 11.23\% | 10.41\% | 0.82\% | 83\% | 88\% | (5\%) |
| 621 | Wharton County WCID \#1 | 6.16\% | 4.55\% | 1.61\% | 95\% | 102\% | (7\%) |
| 341 | Wheeler County | 13.71\% | 10.55\% | 3.16\% | 72\% | 85\% | (13\%) |
| 476 | Wheeler County Appraisal District | 9.91\% | 6.77\% | 3.14\% | 89\% | 102\% | (13\%) |
| 427 | White River MWD - Dickens County | 7.00\% | 7.00\% | 0.00\% | 125\% | 139\% | (14\%) |
| 740 | Wichita Appraisal District | 9.59\% | 10.44\% | (0.85\%) | 70\% | 93\% | (23\%) |
| 342 | Wichita County | 11.37\% | 10.91\% | 0.46\% | 78\% | 85\% | (7\%) |
| 446 | Wichita County Water Improvement District \#2 | 12.52\% | 11.10\% | 1.42\% | 80\% | 84\% | (4\%) |
| 559 | Wichita-Wilbarger 9-1-1 District | 13.94\% | 11.65\% | 2.29\% | 85\% | 92\% | (7\%) |
| 655 | Wickson Creek SUD - Brazos County | 7.48\% | 9.80\% | (2.32\%) | 95\% | 84\% | 11\% |
| 343 | Wilbarger County | 11.39\% | 10.64\% | 0.75\% | 79\% | 85\% | (6\%) |
| 715 | Wilbarger County Appraisal District | 8.79\% | 8.57\% | 0.22\% | 104\% | 100\% | 4\% |
| 530 | Wilbarger County Hospital District | 1.65\% | 0.30\% | 1.35\% | 111\% | 118\% | (7\%) |
| 344 | Willacy County | 8.70\% | 7.55\% | 1.15\% | 92\% | 98\% | (6\%) |
| 575 | Willacy County Appraisal District | 16.02\% | 14.95\% | 1.07\% | 75\% | 81\% | (6\%) |
| 652 | Willacy County Housing Authority | 3.66\% | 4.37\% | (0.71\%) | 179\% | 120\% | 59\% |
| 608 | Williamson Central Appraisal District | 14.53\% | 14.05\% | 0.48\% | 81\% | 85\% | (4\%) |
| 345 | Williamson County | 11.40\% | 10.90\% | 0.50\% | 84\% | 89\% | (5\%) |
| 346 | Wilson County | 8.20\% | 7.59\% | 0.61\% | 86\% | 91\% | (5\%) |
| 479 | Wilson County Appraisal District | 8.47\% | 7.31\% | 1.16\% | 95\% | 101\% | (6\%) |
| 347 | Winkler County | 12.23\% | 12.13\% | 0.10\% | 80\% | 84\% | (4\%) |
| 533 | Winkler County Appraisal District | 10.99\% | 8.82\% | 2.17\% | 91\% | 97\% | (6\%) |
| 348 | Wise County | 9.43\% | 8.95\% | 0.48\% | 85\% | 91\% | (6\%) |
| 493 | Wise County Appraisal District | 6.46\% | 4.50\% | 1.96\% | 105\% | 118\% | (13\%) |
| 349 | Wood County | 10.34\% | 9.77\% | 0.57\% | 82\% | 88\% | (6\%) |
| 700 | Wood County Appraisal District | 8.46\% | 8.11\% | 0.35\% | 83\% | 85\% | (2\%) |
| 350 | Yoakum County | 9.26\% | 9.52\% | (0.26\%) | 75\% | 80\% | (5\%) |
| 351 | Young County | 9.35\% | 8.16\% | 1.19\% | 86\% | 92\% | (6\%) |
| 352 | Zapata County | 8.22\% | 6.93\% | 1.29\% | 97\% | 106\% | (9\%) |
| 649 | Zapata County Appraisal District | 7.60\% | 7.51\% | 0.09\% | 79\% | 84\% | (5\%) |
| 353 | Zavala County | 8.05\% | 6.47\% | 1.58\% | 100\% | 109\% | (9\%) |
| 566 | Zavala County Appraisal District | 7.00\% | 7.00\% | 0.00\% | 138\% | 151\% | (13\%) |

## Texas County \& District Retirement System Actuarial Valuation

December 31, 2008

Appendix E - Optional Group Term Life Fund Contribution Rates for 2010

| Employer Number | EmployerName | Contribution Rate |  |
| :---: | :---: | :---: | :---: |
|  |  | Actives Only | Actives and Retirees |
| 638 | Acton Municipal Utility District | 0.35\% | 0.38\% |
| 615 | Alamo Area Council of Governments | 0.30\% | 0.34\% |
| 721 | Alamo Regional Mobility Authority | 0.32\% | 0.33\% |
| 100 | Anderson County | 0.34\% | 0.53\% |
| 691 | Anderson County Central Appraisal District | 0.46\% | 0.46\% |
| 101 | Andrews County | 0.33\% | 0.65\% |
| 684 | Angelina and Nacogdoches Counties WC \& ID \#1 | 0.34\% | 0.34\% |
| 102 | Angelina County | 0.30\% | 0.45\% |
| 502 | Angelina County Appraisal District | 0.42\% | 0.49\% |
| 576 | Angleton Drainage District | 0.38\% | 0.40\% |
| 614 | Aquilla Water Supply District - Hill County | 0.85\% | 1.13\% |
| 103 | Aransas County | 0.35\% | 0.48\% |
| 459 | Aransas County Appraisal District | 0.23\% | 0.27\% |
| 668 | Aransas County Navigation District \#1 | 0.26\% | 0.26\% |
| 104 | Archer County | 0.42\% | 0.77\% |
| 503 | Archer County Appraisal District | 0.07\% | 0.61\% |
| 105 | Armstrong County | 0.48\% | 0.74\% |
| 106 | Atascosa County | 0.32\% | 0.46\% |
| 551 | Atascosa County Appraisal District | 0.07\% | 0.21\% |
| 107 | Austin County | 0.30\% | 0.46\% |
| 461 | Austin County Appraisal District | 0.14\% | 0.19\% |
| 597 | Bacliff Municipal Utility District | 0.37\% | 0.37\% |
| 108 | Bailey County | 0.39\% | 0.69\% |
| 109 | Bandera County | 0.32\% | 0.52\% |
| 110 | Bastrop County | 0.27\% | 0.36\% |
| 111 | Baylor County | 0.49\% | 0.95\% |
| 685 | Baylor County Appraisal District | 0.65\% | 0.65\% |
| 613 | Bayview Irrigation District \#11 | 0.24\% | 0.91\% |
| 690 | Bayview Municipal Utility District | 0.24\% | 0.24\% |
| 112 | Bee County | 0.32\% | 0.44\% |
| 113 | Bell County | 0.28\% | 0.38\% |
| 506 | Bell County Appraisal District | 0.23\% | 0.35\% |
| 418 | Bell County Water Control and Improvement District \#1 | 0.32\% | 0.43\% |
| 708 | Benbrook Water Authority | 0.28\% | 0.29\% |


| Employer Number | EmployerName | Contribution Rate |  |
| :---: | :---: | :---: | :---: |
|  |  | Actives Only | Actives and Retirees |
| 472 | Bexar Appraisal District | 0.26\% | 0.33\% |
| 114 | Bexar County | 0.23\% | 0.29\% |
| 544 | Bexar County Water Control and Improvement District \#1 | 0.50\% | 0.70\% |
| 716 | Bexar Metro 9-1-1 Network District | 0.63\% | 0.63\% |
| 737 | Bexar-Medina-Atascosa WCID \#1 | 0.24\% | 0.27\% |
| 616 | Bistone Municipal Water Supply District - Limestone Cour | 0.26\% | 0.34\% |
| 115 | Blanco County | 0.62\% | 0.85\% |
| 116 | Borden County | 0.48\% | 0.91\% |
| 525 | Borden County Appraisal District | 0.45\% | 1.25\% |
| 117 | Bosque County | 0.45\% | 0.75\% |
| 521 | Bosque County Central Appraisal District | 0.53\% | 0.53\% |
| 118 | Bowie County | 0.38\% | 0.54\% |
| 119 | Brazoria County | 0.30\% | 0.41\% |
| 508 | Brazoria County Appraisal District | 0.25\% | 0.35\% |
| 413 | Brazoria County Conservation and Reclamation District \# | 0.23\% | 0.48\% |
| 424 | Brazoria County Drainage District \#4 | 0.28\% | 0.36\% |
| 681 | Brazoria County Drainage District \#5 | 0.36\% | 0.36\% |
| 120 | Brazos County | 0.27\% | 0.33\% |
| 689 | Brazos County Appraisal District | 0.27\% | 0.28\% |
| 600 | Brazos County Emergency Communications District | 0.09\% | 0.09\% |
| 744 | Brazos River Authority | 0.40\% | 0.40\% |
| 121 | Brewster County | 0.39\% | 0.57\% |
| 581 | Brewster County Appraisal District | 0.07\% | 0.09\% |
| 745 | Bright Star-Salem Special Utility District | 0.09\% | 0.09\% |
| 122 | Briscoe County | 0.55\% | 1.16\% |
| 123 | Brooks County | 0.42\% | 0.72\% |
| 554 | Brookshire - Katy Drainage District | 0.63\% | 0.77\% |
| 522 | Brookshire Municipal Water District | 0.21\% | 0.30\% |
| 124 | Brown County | 0.35\% | 0.49\% |
| 702 | Brownsville Irrigation District | 0.43\% | 0.47\% |
| 642 | Brushy Creek Municipal Utility District - Williamson Count | 0.17\% | 0.18\% |
| 125 | Burleson County | 0.40\% | 0.68\% |
| 609 | Burnet Central Appraisal District | 0.29\% | 0.34\% |
| 126 | Burnet County | 0.33\% | 0.46\% |
| 127 | Caldwell County | 0.34\% | 0.52\% |
| 718 | Caldwell County Appraisal District | 0.14\% | 0.16\% |
| 128 | Calhoun County | 0.36\% | 0.49\% |
| 709 | Calhoun County Appraisal District | 0.14\% | 0.14\% |
| 129 | Callahan County | 0.55\% | 0.93\% |
| 542 | Callahan County Appraisal District | 0.49\% | 0.55\% |


| Employer <br> Number | EmployerName | Contribution Rate |  |
| :---: | :---: | :---: | :---: |
|  |  | Actives Only | Actives and Retirees |
| 130 | Cameron County | 0.21\% | 0.28\% |
| 618 | Cameron County Appraisal District | 0.26\% | 0.30\% |
| 692 | Cameron County Drainage District \#1 | 0.55\% | 0.55\% |
| 664 | Cameron County Drainage District \#3 | 0.64\% | 0.66\% |
| 686 | Cameron County Drainage District \#5 | 0.21\% | 0.21\% |
| 462 | Cameron County Irrigation District \#2 | 0.22\% | 0.75\% |
| 590 | Cameron County Irrigation District \#6 | 0.67\% | 1.18\% |
| 670 | Camp Central Appraisal District | 0.15\% | 0.15\% |
| 131 | Camp County | 0.57\% | 0.97\% |
| 132 | Carson County | 0.45\% | 0.79\% |
| 133 | Cass County | 0.41\% | 0.68\% |
| 610 | Cass County Appraisal District | 0.23\% | 0.33\% |
| 134 | Castro County | 0.57\% | 0.92\% |
| 719 | Central Appraisal District of Bandera County | 0.32\% | 0.32\% |
| 635 | Central Appraisal District of Johnson County | 0.22\% | 0.26\% |
| 602 | Central Appraisal District of Taylor County | 0.34\% | 0.41\% |
| 712 | Central Texas Regional Mobility Authority | 0.36\% | 0.36\% |
| 648 | Central Water Control and Improvement District - Angelin | 0.18\% | 0.26\% |
| 135 | Chambers County | 0.32\% | 0.51\% |
| 531 | Chambers County Appraisal District | 0.11\% | 0.17\% |
| 548 | Chambers County Public Hospital District | 0.23\% | 0.27\% |
| 136 | Cherokee County | 0.38\% | 0.60\% |
| 137 | Childress County | 0.44\% | 0.55\% |
| 511 | Childress County Appraisal District | 0.14\% | 0.98\% |
| 582 | Childress County Hospital District | 0.17\% | 0.21\% |
| 138 | Clay County | 0.46\% | 0.90\% |
| 485 | Clay County Appraisal District | 0.68\% | 0.95\% |
| 703 | Coastal Bend Groundwater Conservation District | 0.06\% | 0.06\% |
| 722 | Coastal Plains Groundwater Conservation District | 0.10\% | 0.10\% |
| 139 | Cochran County | 0.48\% | 0.96\% |
| 477 | Cochran County Appraisal District | 0.15\% | 0.96\% |
| 140 | Coke County | 0.55\% | 1.27\% |
| 751 | Coke County Appraisal District | 0.25\% | 0.25\% |
| 141 | Coleman County | 0.56\% | 1.04\% |
| 142 | Collin County | 0.27\% | 0.30\% |
| 457 | Collin County Central Appraisal District | 0.33\% | 0.36\% |
| 143 | Collingsworth County | 0.50\% | 0.82\% |
| 144 | Colorado County | 0.41\% | 0.56\% |
| 623 | Comal Appraisal District | 0.32\% | 0.39\% |
| 145 | Comal County | 0.28\% | 0.38\% |

[^2]| Employer Number | EmployerName | Contribution Rate |  |
| :---: | :---: | :---: | :---: |
|  |  | Actives Only | Actives and Retirees |
| 146 | Comanche County | 0.45\% | 0.65\% |
| 762 | Combined Consumers Special Utility District | 0.11\% | 0.11\% |
| 147 | Concho County | 0.45\% | 0.72\% |
| 636 | Concho County Hospital District | 0.32\% | 0.38\% |
| 759 | Concho Valley Council of Governments | 0.33\% | 0.33\% |
| 148 | Cooke County | 0.31\% | 0.41\% |
| 487 | Cooke County Appraisal District | 0.28\% | 0.60\% |
| 149 | Coryell County | 0.33\% | 0.50\% |
| 150 | Cottle County | 0.89\% | 1.49\% |
| 727 | Cow Creek Groundwater Conservation District | 0.10\% | 0.10\% |
| 151 | Crane County | 0.30\% | 0.86\% |
| 757 | Crane County Hospital District | 0.17\% | 0.17\% |
| 152 | Crockett County | 0.45\% | 0.61\% |
| 409 | Crockett County Water Control and Improvement District | 0.39\% | 0.52\% |
| 153 | Crosby County | 0.54\% | 0.94\% |
| 532 | Crosby County Appraisal District | 0.19\% | 0.31\% |
| 603 | Crosby Municipal Utility District | 0.14\% | 0.15\% |
| 710 | Cross Roads Special Utility District | 0.78\% | 0.78\% |
| 154 | Culberson County | 0.38\% | 0.53\% |
| 155 | Dallam County | 0.43\% | 0.55\% |
| 467 | Dallas Central Appraisal District | 0.25\% | 0.30\% |
| 156 | Dallas County | 0.23\% | 0.31\% |
| 430 | Dallas County Park Cities Municipal Utility District | 0.50\% | 0.55\% |
| 687 | Dallas County Water Control \& Improvement District \#6 | 0.30\% | 0.30\% |
| 157 | Dawson County | 0.34\% | 0.58\% |
| 463 | Dawson County Central Appraisal District | 0.11\% | 0.44\% |
| 158 | Deaf Smith County | 0.28\% | 0.47\% |
| 578 | Deaf Smith County Hospital District | 0.18\% | 0.25\% |
| 159 | Delta County | 0.60\% | 0.95\% |
| 734 | Delta County Municipal Utility District | 0.17\% | 0.17\% |
| 732 | Delta Lake Irrigation District | 0.48\% | 0.51\% |
| 583 | Denco Area 9-1-1 District - Denton County | 0.26\% | 0.26\% |
| 482 | Denton Central Appraisal District | 0.21\% | 0.25\% |
| 160 | Denton County | 0.27\% | 0.31\% |
| 758 | Denton County Fresh Water Supply District 1A | 0.15\% | 0.15\% |
| 161 | Dewitt County | 0.49\% | 0.88\% |
| 466 | DeWitt County Appraisal District | 0.17\% | 0.20\% |
| 162 | Dickens County | 0.46\% | 1.00\% |
| 163 | Dimmit County | 0.23\% | 0.33\% |
| 164 | Donley County | 0.65\% | 0.99\% |

[^3]| Employer Number | EmployerName | Contribution Rate |  |
| :---: | :---: | :---: | :---: |
|  |  | Actives Only | Actives and Retirees |
| 165 | Duval County | 0.67\% | 0.87\% |
| 166 | Eastland County | 0.37\% | 0.66\% |
| 593 | Eastland County Appraisal District | 0.57\% | 0.60\% |
| 167 | Ector County | 0.29\% | 0.65\% |
| 580 | Ector County Hospital District | 0.19\% | 0.22\% |
| 448 | Edwards Aquifer Authority - Bexar County | 0.25\% | 0.25\% |
| 628 | Edwards Central Appraisal District | 0.21\% | 0.21\% |
| 168 | Edwards County | 0.50\% | 0.68\% |
| 170 | El Paso County | 0.22\% | 0.27\% |
| 567 | El Paso County 9-1-1 District | 0.46\% | 0.51\% |
| 541 | El Paso County Hospital District | 0.18\% | 0.22\% |
| 169 | Ellis County | 0.32\% | 0.39\% |
| 624 | Emergency Communication District of Ector County | 0.36\% | 0.39\% |
| 171 | Erath County | 0.33\% | 0.44\% |
| 172 | Falls County | 0.32\% | 0.62\% |
| 563 | Falls County Appraisal District | 0.22\% | 0.77\% |
| 173 | Fannin County | 0.35\% | 0.51\% |
| 644 | Fannin County Appraisal District | 0.24\% | 0.24\% |
| 174 | Fayette County | 0.29\% | 0.45\% |
| 175 | Fisher County | 0.75\% | 1.42\% |
| 432 | Fisher County Hospital District | 0.26\% | 0.37\% |
| 176 | Floyd County | 0.32\% | 0.86\% |
| 474 | Fort Bend Central Appraisal District | 0.31\% | 0.38\% |
| 178 | Fort Bend County | 0.26\% | 0.31\% |
| 179 | Franklin County | 0.51\% | 0.70\% |
| 180 | Freestone County | 0.45\% | 0.61\% |
| 693 | Freestone County Appraisal District | 0.22\% | 0.24\% |
| 181 | Frio County | 0.30\% | 0.52\% |
| 509 | Frio County Appraisal District | 0.38\% | 0.40\% |
| 182 | Gaines County | 0.39\% | 0.72\% |
| 761 | Gaines County Appraisal District | 0.47\% | 0.47\% |
| 546 | Galveston Central Appraisal District | 0.44\% | 0.55\% |
| 183 | Galveston County | 0.27\% | 0.39\% |
| 547 | Galveston County Consolidated Drainage District | 0.22\% | 0.38\% |
| 464 | Galveston County Drainage District \#1 | 0.38\% | 0.60\% |
| 433 | Galveston County Drainage District \#2 | 0.28\% | 0.88\% |
| 589 | Galveston County Emergency Communication Dist | 0.38\% | 0.38\% |
| 752 | Galveston County Health District | 0.21\% | 0.21\% |
| 407 | Galveston County Water Control and Improvement Distris | 0.19\% | 0.29\% |
| 473 | Garza Central Appraisal District | 0.31\% | 0.84\% | receive this work.


| Employer Number | EmployerName | Contribution Rate |  |
| :---: | :---: | :---: | :---: |
|  |  | Actives Only | Actives and Retirees |
| 184 | Garza County | 0.39\% | 0.58\% |
| 185 | Gillespie County | 0.39\% | 0.58\% |
| 186 | Glasscock County | 0.59\% | 1.02\% |
| 187 | Goliad County | 0.28\% | 0.68\% |
| 188 | Gonzales County | 0.40\% | 0.61\% |
| 498 | Gonzales County Appraisal District | 0.33\% | 0.33\% |
| 189 | Gray County | 0.44\% | 0.80\% |
| 518 | Gray County Appraisal District | 0.58\% | 0.63\% |
| 475 | Grayson Central Appraisal District | 0.18\% | 0.33\% |
| 190 | Grayson County | 0.28\% | 0.45\% |
| 528 | Greater Harris County 9-1-1 Emergency Network | 0.19\% | 0.21\% |
| 429 | Greenbelt Municipal \& Industrial Water Authority - Donley | 0.39\% | 0.54\% |
| 191 | Gregg County | 0.28\% | 0.41\% |
| 192 | Grimes County | 0.44\% | 0.62\% |
| 483 | Grimes County Appraisal District | 0.46\% | 0.53\% |
| 587 | Guadalupe Appraisal District | 0.26\% | 0.27\% |
| 193 | Guadalupe County | 0.28\% | 0.37\% |
| 526 | Gulf Coast Water Authority - Galveston County | 0.50\% | 0.67\% |
| 194 | Hale County | 0.37\% | 0.64\% |
| 195 | Hall County | 0.80\% | 1.37\% |
| 196 | Hamilton County | 0.32\% | 0.56\% |
| 197 | Hansford County | 0.45\% | 0.81\% |
| 585 | Hansford County Hospital District | 0.17\% | 0.23\% |
| 198 | Hardeman County | 0.38\% | 0.59\% |
| 199 | Hardin County | 0.38\% | 0.57\% |
| 527 | Hardin County Appraisal District | 0.48\% | 0.59\% |
| 571 | Harlingen Irrigation District Cameron County \#1 | 0.47\% | 0.65\% |
| 200 | Harris County | 0.26\% | 0.32\% |
| 598 | Harris County Appraisal District | 0.31\% | 0.35\% |
| 569 | Harris County Water Control and Improvement District \#1 | 0.35\% | 0.39\% |
| 625 | Harris County Water Control and Improvement District \#5 | 0.31\% | 0.39\% |
| 201 | Harrison County | 0.30\% | 0.44\% |
| 202 | Hartley County | 0.31\% | 0.62\% |
| 520 | Hartley County Appraisal District | 0.17\% | 0.33\% |
| 203 | Haskell County | 0.45\% | 0.87\% |
| 552 | Haskell Memorial Hospital District | 0.44\% | 0.60\% |
| 204 | Hays County | 0.26\% | 0.30\% |
| 205 | Hemphill County | 0.45\% | 0.73\% |
| 640 | Hemphill County Appraisal District | 0.40\% | 0.40\% |
| 529 | Hemphill County Hospital District | 0.20\% | 0.26\% | receive this work.


| Employer Number | EmployerName | Contribution Rate |  |
| :---: | :---: | :---: | :---: |
|  |  | Actives Only | Actives and Retirees |
| 206 | Henderson County | 0.28\% | 0.44\% |
| 746 | Henderson County 9-1-1 Communications District | 0.45\% | 0.45\% |
| 704 | Henderson County Appraisal District | 0.25\% | 0.26\% |
| 414 | Hidalgo and Cameron Counties Irrigation District \#9 | 0.67\% | 0.94\% |
| 207 | Hidalgo County | 0.20\% | 0.25\% |
| 516 | Hidalgo County Appraisal District | 0.24\% | 0.31\% |
| 401 | Hidalgo County Drainage District \#1 | 0.42\% | 0.56\% |
| 713 | Hidalgo County Irrigation District \#1 | 0.54\% | 0.54\% |
| 438 | Hidalgo County Irrigation District \#2 | 0.39\% | 0.54\% |
| 486 | Hidalgo County Irrigation District \#6 | 0.43\% | 0.65\% |
| 674 | High Plains Underground Water Conservation District \# 1 | 0.71\% | 0.71\% |
| 208 | Hill County | 0.32\% | 0.46\% |
| 209 | Hockley County | 0.35\% | 0.70\% |
| 728 | Hockley County Appraisal District | 0.19\% | 0.22\% |
| 210 | Hood County | 0.35\% | 0.41\% |
| 211 | Hopkins County | 0.39\% | 0.52\% |
| 661 | Hopkins County Appraisal District | 0.12\% | 0.21\% |
| 212 | Houston County | 0.46\% | 0.74\% |
| 694 | Houston County Appraisal District | 0.24\% | 0.24\% |
| 213 | Howard County | 0.35\% | 0.65\% |
| 214 | Hudspeth County | 0.39\% | 0.60\% |
| 215 | Hunt County | 0.29\% | 0.39\% |
| 749 | Hunt County Appraisal District | 0.26\% | 0.26\% |
| 216 | Hutchinson County | 0.41\% | 0.66\% |
| 711 | Iraan General Hospital District | 0.15\% | 0.15\% |
| 217 | Irion County | 0.29\% | 0.49\% |
| 218 | Jack County | 0.42\% | 0.59\% |
| 592 | Jack County Appraisal District | 0.18\% | 0.42\% |
| 219 | Jackson County | 0.36\% | 0.58\% |
| 441 | Jackson County County-Wide Drainage District | 0.47\% | 0.61\% |
| 220 | Jasper County | 0.33\% | 0.56\% |
| 657 | Jasper County Water Control and Improvement District \# | 0.31\% | 0.31\% |
| 221 | Jeff Davis County | 0.67\% | 1.05\% |
| 222 | Jefferson County | 0.29\% | 0.42\% |
| 404 | Jefferson County Drainage District \#3 | 0.55\% | 1.35\% |
| 408 | Jefferson County Drainage District \#6 | 0.37\% | 0.42\% |
| 405 | Jefferson County Drainage District \#7 | 0.31\% | 0.43\% |
| 451 | Jefferson County Water Control and Improvement Distric | 0.17\% | 0.29\% |
| 223 | Jim Hogg County | 0.37\% | 0.61\% |
| 680 | Jim Hogg County Appraisal District | 0.33\% | 0.33\% | receive this work.


| Employer Number | EmployerName | Contribution Rate |  |
| :---: | :---: | :---: | :---: |
|  |  | Actives Only | Actives and Retirees |
| 656 | Jim Hogg County Emergency Services District \#1 | 0.20\% | 0.20\% |
| 641 | Jim Hogg County Water Control and Improvement Distric | 0.51\% | 0.53\% |
| 224 | Jim Wells County | 0.34\% | 0.51\% |
| 225 | Johnson County | 0.32\% | 0.46\% |
| 741 | Jonah Water Special Utility District | 0.20\% | 0.20\% |
| 226 | Jones County | 0.36\% | 0.77\% |
| 496 | Jones County Appraisal District | 0.15\% | 0.44\% |
| 227 | Karnes County | 0.43\% | 0.75\% |
| 524 | Karnes County Appraisal District | 0.16\% | 0.43\% |
| 455 | Karnes County Hospital District | 0.20\% | 0.26\% |
| 228 | Kaufman County | 0.35\% | 0.40\% |
| 662 | Kaufman County Appraisal District | 0.32\% | 0.36\% |
| 671 | Kendall Appraisal District | 0.52\% | 0.54\% |
| 229 | Kendall County | 0.38\% | 0.47\% |
| 619 | Kendall County Water Control and Improvement District $\#$ | 0.15\% | 0.22\% |
| 230 | Kenedy County | 0.34\% | 0.42\% |
| 231 | Kent County | 0.40\% | 0.67\% |
| 594 | Kent County Tax Appraisal District | 0.35\% | 1.38\% |
| 232 | Kerr County | 0.32\% | 0.44\% |
| 653 | Kerr Emergency 9-1-1 Network | 0.36\% | 0.36\% |
| 233 | Kimble County | 0.36\% | 0.59\% |
| 234 | King County | 0.54\% | 1.05\% |
| 755 | King County Appraisal District | 0.21\% | 0.21\% |
| 235 | Kinney County | 0.46\% | 0.61\% |
| 579 | Kinney County Appraisal District | 0.83\% | 1.15\% |
| 236 | Kleberg County | 0.32\% | 0.56\% |
| 237 | Knox County | 0.44\% | 0.86\% |
| 519 | Knox County Appraisal District | 0.18\% | 1.46\% |
| 241 | La Salle County | 0.24\% | 0.36\% |
| 540 | Laguna Madre Water District - Cameron County | 0.32\% | 0.47\% |
| 514 | Lakeway Municipal Utility District - Travis County | 0.25\% | 0.34\% |
| 238 | Lamar County | 0.32\% | 0.46\% |
| 239 | Lamb County | 0.28\% | 0.55\% |
| 240 | Lampasas County | 0.44\% | 0.59\% |
| 650 | Lampasas County Appraisal District | 0.19\% | 0.19\% |
| 731 | LaSalle County Appraisal District | 0.20\% | 0.20\% |
| 439 | Lavaca - Navidad River Authority - Jackson County | 0.35\% | 0.40\% |
| 242 | Lavaca County | 0.33\% | 0.46\% |
| 243 | Lee County | 0.36\% | 0.54\% |
| 244 | Leon County | 0.55\% | 0.69\% |


| Employer <br> Number | EmployerName | Contribution Rate |  |
| :---: | :---: | :---: | :---: |
|  |  | Actives Only | Actives and Retirees |
| 468 | Leon County Central Appraisal District | 0.42\% | 0.42\% |
| 245 | Liberty County | 0.41\% | 0.53\% |
| 481 | Liberty County Central Appraisal District | 0.28\% | 0.34\% |
| 246 | Limestone County | 0.32\% | 0.48\% |
| 695 | Limestone County Appraisal District | 0.33\% | 0.33\% |
| 247 | Lipscomb County | 0.40\% | 0.74\% |
| 248 | Live Oak County | 0.40\% | 0.78\% |
| 591 | Live Oak County Appraisal District | 0.22\% | 0.48\% |
| 249 | Llano County | 0.40\% | 0.60\% |
| 250 | Loving County | 0.48\% | 0.83\% |
| 513 | Loving County Appraisal District | 0.18\% | 0.51\% |
| 756 | Lower Trinity Groundwater Conservation District | 0.67\% | 0.67\% |
| 714 | Lower Valley Water District | 0.31\% | 0.31\% |
| 499 | Lubbock Central Appraisal District | 0.25\% | 0.31\% |
| 251 | Lubbock County | 0.24\% | 0.34\% |
| 425 | Lubbock County Water Control and Improvement District | 0.46\% | 0.57\% |
| 558 | Lubbock Emergency Communication District | 0.31\% | 0.31\% |
| 647 | Lubbock Reese Redevelopment Authority | 0.62\% | 0.63\% |
| 639 | Lumberton Municipal Utility District | 0.15\% | 0.16\% |
| 252 | Lynn County | 0.44\% | 0.66\% |
| 497 | Lynn County Appraisal District | 0.14\% | 0.87\% |
| 442 | Lynn County Hospital District | 0.16\% | 0.28\% |
| 630 | Macedonia - Eylau Municipal Utility District - Bowie Count | 0.39\% | 0.39\% |
| 500 | Mackenzie Municipal Water Authority - Briscoe County | 1.22\% | 1.48\% |
| 256 | Madison County | 0.76\% | 0.96\% |
| 596 | Madison County Appraisal District | 0.59\% | 0.62\% |
| 257 | Marion County | 0.48\% | 0.71\% |
| 675 | Marion County Appraisal District | 0.15\% | 0.18\% |
| 658 | Marshall-Harrison County Health District | 0.31\% | 0.71\% |
| 258 | Martin County | 0.55\% | 0.82\% |
| 595 | Martin County Appraisal District | 0.27\% | 0.37\% |
| 259 | Mason County | 0.58\% | 0.84\% |
| 260 | Matagorda County | 0.31\% | 0.60\% |
| 678 | Matagorda County Drainage District | 0.40\% | 0.48\% |
| 440 | Matagorda County Hospital District | 0.20\% | 0.35\% |
| 677 | Matagorda County Navigation District \#1 | 0.53\% | 0.78\% |
| 261 | Maverick County | 0.30\% | 0.36\% |
| 729 | Maverick County Hospital District | 0.42\% | 0.42\% |
| 453 | Maverick County Water Control and Improvement District | 0.49\% | 0.69\% |
| 253 | McCulloch County | 0.49\% | 0.72\% | receive this work.


| Employer Number | EmployerName | Contribution Rate |  |
| :---: | :---: | :---: | :---: |
|  |  | Actives Only | Actives and Retirees |
| 512 | McCulloch County Appraisal District | 0.07\% | 0.08\% |
| 254 | McLennan County | 0.27\% | 0.39\% |
| 725 | McLennan County 9-1-1 Emergency Assistance District | 0.39\% | 0.39\% |
| 491 | McLennan County Appraisal District | 0.29\% | 0.49\% |
| 679 | McLennan County Water Control and Improvement Distri | 0.47\% | 0.47\% |
| 255 | McMullen County | 0.68\% | 0.97\% |
| 262 | Medina County | 0.37\% | 0.53\% |
| 705 | Medina County 911 District | 0.27\% | 0.27\% |
| 535 | Medina County Appraisal District | 0.32\% | 0.33\% |
| 419 | Memorial Medical Center - Calhoun County | 0.20\% | 0.29\% |
| 263 | Menard County | 0.44\% | 0.65\% |
| 743 | Mesa Underground Water Conservation District | 1.02\% | 1.02\% |
| 669 | Middle Rio Grande Development Council | 0.30\% | 0.31\% |
| 492 | Midland Central Appraisal District | 0.45\% | 0.52\% |
| 264 | Midland County | 0.31\% | 0.43\% |
| 570 | Midland Emergency Communication District | 0.19\% | 0.19\% |
| 265 | Milam County | 0.40\% | 0.59\% |
| 617 | Mills Central Appraisal District | 0.68\% | 0.68\% |
| 266 | Mills County | 0.53\% | 1.04\% |
| 267 | Mitchell County | 0.42\% | 0.66\% |
| 484 | Mitchell County Appraisal District | 0.43\% | 1.08\% |
| 268 | Montague County | 0.40\% | 0.69\% |
| 504 | Montague County Tax Appraisal District | 0.16\% | 0.40\% |
| 605 | Montgomery Central Appraisal District | 0.26\% | 0.34\% |
| 269 | Montgomery County | 0.27\% | 0.32\% |
| 667 | Montgomery County Emergency Communication District | 0.65\% | 0.66\% |
| 696 | Montgomery County Emergency Service District No 3 | 0.11\% | 0.11\% |
| 651 | Montgomery County Emergency Services District \#1 | 0.12\% | 0.12\% |
| 270 | Moore County | 0.29\% | 0.44\% |
| 733 | Moore County Appraisal District | 0.24\% | 0.24\% |
| 412 | Moore County Hospital District | 0.15\% | 0.21\% |
| 271 | Morris County | 0.64\% | 0.96\% |
| 738 | Mustang Special Utility District | 0.11\% | 0.11\% |
| 273 | Nacogdoches County | 0.27\% | 0.42\% |
| 515 | Navarro Central Appraisal District | 0.30\% | 0.48\% |
| 274 | Navarro County | 0.33\% | 0.46\% |
| 572 | Newton Central Appraisal District | 0.19\% | 0.25\% |
| 275 | Newton County | 0.45\% | 0.73\% |
| 276 | Nolan County | 0.37\% | 0.63\% |
| 556 | North Central Texas Municipal Water Authority | 0.22\% | 0.30\% | receive this work.


| Employer <br> Number | Employer Name | Contribution Rate |  |
| :---: | :---: | :---: | :---: |
|  |  | Actives Only | Actives and Retirees |
| 646 | North Texas Tollway Authority | 0.27\% | 0.28\% |
| 562 | Northeast Texas Municipal Water District | 0.38\% | 0.45\% |
| 632 | Northeast Texas Public Health District | 0.33\% | 0.38\% |
| 277 | Nueces County | 0.28\% | 0.42\% |
| 683 | Nueces County Appraisal District | 0.37\% | 0.39\% |
| 400 | Nueces County Drainage District \#2 | 0.40\% | 0.55\% |
| 416 | Nueces County Water Control and Improvement District $\ddagger$ | 0.34\% | 0.48\% |
| 450 | Nueces County Water Control and Improvement District $\ddagger$ | 0.18\% | 0.27\% |
| 278 | Ochiltree County | 0.50\% | 0.73\% |
| 279 | Oldham County | 0.36\% | 0.81\% |
| 517 | Oldham County Appraisal District | 0.34\% | 0.43\% |
| 280 | Orange County | 0.28\% | 0.38\% |
| 490 | Orange County Appraisal District | 0.28\% | 0.40\% |
| 421 | Orange County Drainage District | 0.40\% | 0.48\% |
| 665 | Orange County Emergency Services District \# 1 | 0.17\% | 0.17\% |
| 660 | Orange County Navigation and Port District | 0.55\% | 0.55\% |
| 631 | Orange County Water Control and Improvement District $\ddagger$ | 0.31\% | 0.36\% |
| 730 | Palo Duro River Authority | 0.31\% | 0.31\% |
| 723 | Palo Pinto Appraisal District | 0.13\% | 0.13\% |
| 281 | Palo Pinto County | 0.33\% | 0.43\% |
| 282 | Panola County | 0.38\% | 0.62\% |
| 283 | Parker County | 0.37\% | 0.42\% |
| 717 | Parker County Appraisal District | 0.32\% | 0.32\% |
| 754 | Parker County Special Utility District | 0.21\% | 0.21\% |
| 284 | Parmer County | 0.45\% | 0.80\% |
| 747 | Parmer County Appraisal District | 0.12\% | 0.12\% |
| 285 | Pecos County | 0.26\% | 0.44\% |
| 494 | Pecos County Appraisal District | 0.14\% | 0.48\% |
| 673 | Permian Regional Medical Center | 0.23\% | 0.23\% |
| 707 | Pineywoods Groundwater Conservation District | 0.73\% | 0.73\% |
| 697 | Polk Central Appraisal District | 0.24\% | 0.25\% |
| 286 | Polk County | 0.34\% | 0.44\% |
| 739 | Polk County Fresh Water Supply District \#2 | 0.23\% | 0.23\% |
| 676 | Port of Bay City Authority | 0.10\% | 0.10\% |
| 449 | Port of Beaumont Navigation District | 0.37\% | 0.50\% |
| 620 | Port of Corpus Christi Authority | 0.46\% | 0.56\% |
| 622 | Port of Port Arthur Navigation District | 0.58\% | 0.62\% |
| 726 | Post Oak Savannah Groundwater Conservation District | 0.24\% | 0.24\% |
| 560 | Potter - Randall County Emergency Communication Distr | 0.84\% | 0.88\% |
| 287 | Potter County | 0.24\% | 0.34\% | receive this work.


| Employer Number | EmployerName | Contribution Rate |  |
| :---: | :---: | :---: | :---: |
|  |  | Actives Only | Actives and Retirees |
| 626 | Presidio Appraisal District | 0.07\% | 0.07\% |
| 288 | Presidio County | 0.26\% | 0.52\% |
| 289 | Rains County | 0.53\% | 0.72\% |
| 537 | Rains County Appraisal District | 0.28\% | 0.36\% |
| 290 | Randall County | 0.25\% | 0.32\% |
| 564 | Randall County Appraisal District | 0.30\% | 0.40\% |
| 406 | Rankin County Hospital District - Upton County | 0.16\% | 0.48\% |
| 291 | Reagan County | 0.25\% | 0.39\% |
| 445 | Reagan Hospital District | 0.21\% | 0.42\% |
| 292 | Real County | 0.46\% | 0.87\% |
| 505 | Red Bluff Water Power Control District - Reeves County | 0.81\% | 1.81\% |
| 435 | Red River Authority | 0.29\% | 0.35\% |
| 293 | Red River County | 0.42\% | 0.66\% |
| 294 | Reeves County | 0.36\% | 0.41\% |
| 588 | Reeves County Hospital District | 0.21\% | 0.24\% |
| 295 | Refugio County | 0.32\% | 0.69\% |
| 543 | Refugio County Drainage District \#1 | 0.51\% | 1.75\% |
| 736 | Refugio Groundwater Conservation District | 0.09\% | 0.09\% |
| 296 | Roberts County | 0.52\% | 0.74\% |
| 297 | Robertson County | 0.29\% | 0.45\% |
| 698 | Rockwall Central Appraisal District | 0.34\% | 0.34\% |
| 298 | Rockwall County | 0.31\% | 0.37\% |
| 299 | Runnels County | 0.47\% | 0.88\% |
| 300 | Rusk County | 0.39\% | 0.59\% |
| 612 | Rusk County Appraisal District | 0.41\% | 0.46\% |
| 301 | Sabine County | 0.60\% | 0.76\% |
| 568 | Sabine Pass Port Authority | 0.33\% | 0.53\% |
| 706 | Sabine-Neches Navigation District of Jefferson County T $\epsilon$ | 0.48\% | 0.50\% |
| 302 | San Augustine County | 0.49\% | 0.73\% |
| 303 | San Jacinto County | 0.36\% | 0.55\% |
| 553 | San Jacinto County Central Appraisal District | 0.22\% | 0.29\% |
| 304 | San Patricio County | 0.31\% | 0.46\% |
| 495 | San Patricio County Appraisal District | 0.31\% | 0.44\% |
| 426 | San Patricio County Drainage District | 0.49\% | 0.64\% |
| 750 | San Patricio County Navigation District \#1 | 0.09\% | 0.09\% |
| 422 | San Patricio Municipal Water District | 0.50\% | 0.67\% |
| 305 | San Saba County | 0.55\% | 1.04\% |
| 306 | Schleicher County | 0.45\% | 0.73\% |
| 307 | Scurry County | 0.42\% | 1.04\% |
| 760 | Scurry County Hospital District | 0.22\% | 0.22\% | receive this work.


| Employer Number | EmployerName | Contribution Rate |  |
| :---: | :---: | :---: | :---: |
|  |  | Actives Only | Actives and Retirees |
| 308 | Shackelford County | 0.37\% | 0.52\% |
| 470 | Shackelford County Appraisal District | 0.13\% | 0.35\% |
| 309 | Shelby County | 0.48\% | 0.70\% |
| 627 | Shelby County Appraisal District | 0.32\% | 0.60\% |
| 310 | Sherman County | 0.43\% | 0.81\% |
| 469 | Sherman County Appraisal District | 0.33\% | 0.54\% |
| 311 | Smith County | 0.25\% | 0.34\% |
| 555 | Smith County 9-1-1 Communications District | 0.21\% | 0.22\% |
| 606 | Smith County Appraisal District | 0.29\% | 0.30\% |
| 312 | Somervell County | 0.37\% | 0.48\% |
| 507 | Somervell County Central Appraisal District | 0.11\% | 0.20\% |
| 699 | Somervell County Water District | 0.52\% | 0.52\% |
| 645 | South Texas Development Council | 0.63\% | 0.66\% |
| 313 | Starr County | 0.29\% | 0.44\% |
| 536 | Starr County Appraisal District | 0.16\% | 0.26\% |
| 314 | Stephens County | 0.51\% | 0.77\% |
| 315 | Sterling County | 0.38\% | 0.71\% |
| 316 | Stonewall County | 0.60\% | 1.12\% |
| 724 | Stonewall County Appraisal District | 0.46\% | 0.46\% |
| 458 | Stonewall Memorial Hospital District | 0.24\% | 0.37\% |
| 539 | Stratford Hospital District - Sherman County | 0.27\% | 0.29\% |
| 317 | Sutton County | 0.33\% | 0.46\% |
| 573 | Sutton County Hospital District | 0.14\% | 0.19\% |
| 318 | Swisher County | 0.45\% | 0.84\% |
| 460 | Swisher County Appraisal District | 0.23\% | 0.59\% |
| 534 | Swisher Memorial Hospital District | 0.21\% | 0.31\% |
| 607 | Tarrant Appraisal District | 0.37\% | 0.43\% |
| 545 | Tarrant Co 9-1-1 Emergency Assistance District | 0.34\% | 0.34\% |
| 319 | Tarrant County | 0.29\% | 0.36\% |
| 574 | Tax Appraisal District of Cottle County | 0.31\% | 0.31\% |
| 320 | Taylor County | 0.28\% | 0.42\% |
| 321 | Terrell County | 0.33\% | 0.51\% |
| 753 | Terrell County Water Control \& Improvement District \#1 | 0.44\% | 0.44\% |
| 322 | Terry County | 0.36\% | 0.62\% |
| 402 | Terry Memorial Hospital District | 0.18\% | 0.34\% |
| 437 | Texas Association of Counties | 0.48\% | 0.49\% |
| 354 | Texas County \& District Retirement System | 0.24\% | 0.25\% |
| 634 | Texas Eastern 9-1-1 Network | 0.31\% | 0.31\% |
| 323 | Throckmorton County | 0.52\% | 1.06\% |
| 324 | Titus County | 0.32\% | 0.43\% | receive this work.


| Employer Number | EmployerName | Contribution Rate |  |
| :---: | :---: | :---: | :---: |
|  |  | Actives Only | Actives and Retirees |
| 742 | Titus County Appraisal District | 0.36\% | 0.36\% |
| 501 | Titus County Fresh Water Supply District | 0.61\% | 0.74\% |
| 325 | Tom Green County | 0.28\% | 0.41\% |
| 601 | Travis Central Appraisal District | 0.32\% | 0.39\% |
| 326 | Travis County | 0.23\% | 0.27\% |
| 720 | Travis County Emergency Services District \#1 NLT Fire \& | 0.20\% | 0.20\% |
| 666 | Travis County Water Control and Improvement Dist - Poir | 0.10\% | 0.18\% |
| 659 | Tri-County Special Utility District | 0.26\% | 0.26\% |
| 633 | Trinity Bay Conservation District | 0.47\% | 0.52\% |
| 327 | Trinity County | 0.63\% | 0.90\% |
| 735 | Two Way Special Utility District | 0.22\% | 0.22\% |
| 328 | Tyler County | 0.34\% | 0.63\% |
| 471 | Tyler County Appraisal District | 0.40\% | 0.46\% |
| 561 | United Irrigation District - Hidalgo County | 0.39\% | 0.70\% |
| 329 | Upshur County | 0.37\% | 0.55\% |
| 330 | Upton County | 0.35\% | 0.57\% |
| 682 | Upton County Appraisal District | 0.51\% | 0.51\% |
| 331 | Uvalde County | 0.33\% | 0.44\% |
| 332 | Val Verde County | 0.38\% | 0.53\% |
| 663 | Valley Municipal Utility District \#2 - Cameron County | 0.37\% | 0.39\% |
| 586 | Valwood Improvement Authority - Dallas County | 0.30\% | 0.30\% |
| 333 | Van Zandt County | 0.40\% | 0.61\% |
| 672 | Van Zandt County Appraisal District | 0.47\% | 0.49\% |
| 420 | Velasco Drainage District - Brazoria County | 0.37\% | 0.43\% |
| 334 | Victoria County | 0.23\% | 0.30\% |
| 423 | Victoria County Drainage District \#3 | 1.31\% | 1.50\% |
| 335 | Walker County | 0.29\% | 0.40\% |
| 748 | Walker County Special Utility District | 0.24\% | 0.24\% |
| 336 | Waller County | 0.34\% | 0.56\% |
| 337 | Ward County | 0.32\% | 0.72\% |
| 565 | Ward County Central Appraisal District | 0.46\% | 0.46\% |
| 444 | Ward Memorial Hospital | 0.17\% | 0.31\% |
| 338 | Washington County | 0.27\% | 0.38\% |
| 339 | Webb County | 0.23\% | 0.29\% |
| 604 | Webb County Appraisal District | 0.20\% | 0.23\% |
| 443 | West Central Texas Council of Governments | 0.25\% | 0.33\% |
| 410 | West Central Texas Municipal Water District | 0.50\% | 0.66\% |
| 454 | West Jefferson County Municipal Water District | 0.23\% | 0.50\% |
| 688 | West Nueces -Las Moras Soil and Water Conservation D | 0.05\% | 0.05\% |
| 340 | Wharton County | 0.34\% | 0.56\% |


| Employer Number | Employer Name | Contribution Rate |  |
| :---: | :---: | :---: | :---: |
|  |  | Actives Only | Actives and Retirees |
| 621 | Wharton County Water Control and Improvement District | 1.29\% | 1.29\% |
| 341 | Wheeler County | 0.41\% | 0.63\% |
| 476 | Wheeler County Appraisal District | 0.14\% | 0.51\% |
| 427 | White River Municipal Water District - Dickens County | 0.36\% | 0.64\% |
| 740 | Wichita Appraisal District | 0.29\% | 0.29\% |
| 342 | Wichita County | 0.31\% | 0.44\% |
| 446 | Wichita County Water Improvement District \#2 | 0.31\% | 0.75\% |
| 559 | Wichita-Wilbarger 9-1-1 District | 0.51\% | 0.80\% |
| 655 | Wickson Creek Special Utility District - Brazos County | 0.24\% | 0.24\% |
| 343 | Wilbarger County | 0.44\% | 0.66\% |
| 715 | Wilbarger County Appraisal District | 0.22\% | 0.22\% |
| 530 | Wilbarger County Hospital District | 0.20\% | 0.27\% |
| 344 | Willacy County | 0.31\% | 0.63\% |
| 575 | Willacy County Appraisal District | 0.14\% | 0.17\% |
| 652 | Willacy County Housing Authority | 0.12\% | 0.28\% |
| 608 | Williamson Central Appraisal District | 0.29\% | 0.35\% |
| 345 | Williamson County | 0.24\% | 0.27\% |
| 346 | Wilson County | 0.38\% | 0.59\% |
| 479 | Wilson County Appraisal District | 0.21\% | 0.35\% |
| 347 | Winkler County | 0.33\% | 0.62\% |
| 533 | Winkler County Appraisal District | 0.23\% | 0.36\% |
| 348 | Wise County | 0.29\% | 0.33\% |
| 493 | Wise County Appraisal District | 0.16\% | 0.41\% |
| 349 | Wood County | 0.32\% | 0.53\% |
| 700 | Wood County Appraisal District | 0.20\% | 0.20\% |
| 350 | Yoakum County | 0.25\% | 0.38\% |
| 351 | Young County | 0.37\% | 0.59\% |
| 352 | Zapata County | 0.28\% | 0.34\% |
| 649 | Zapata County Appraisal District | 0.14\% | 0.14\% |
| 353 | Zavala County | 0.24\% | 0.39\% |
| 566 | Zavala County Appraisal District | 0.19\% | 0.33\% |

## Texas County \& District Retirement System <br> Actuarial Valuation

December 31, 2008

## Appendix F - Actuarial Assumptions and Methods

I. Economic assumptions
A. General wage increases
4.00\%
B. Aggregate Investment Return
8.00
C. Growth in membership
0.00
D. Payroll Growth
4.00 or less
E. Implied price inflation assumption
3.50
II. Demographic assumptions
A. Merit salary increases

Table F-1
B. Service retirement
C. Disablement
D. Mortality among contributing members

Basis - Custom table based on TCDRS experience
E. Mortality among inactive vested members, service retired members, and beneficiaries

Table F-2
Table F-3
Table F-4

Basis - 1994 UP Mortality Table for respective gender, as adjusted:

| Status of Members |  | Adjustmen |
| :--- | :--- | :--- |
| Inactive \& Retired Members - men |  | +0 years |
|  | - women | +0 years |
| Beneficiaries | - men | +0 years |
|  | - women | +0 years |

E. Mortality among disabled members

RP-2000 Disabled Mortality Table for Males +2 years
RP-2000 Disabled Mortality Table for Females +2 years
F. Other terminations of employment
G. Retaining vested account upon termination of employment
H. Miscellaneous Assumptions

- Death Benefit - If the member was at least age 45 and had enough service for retirement at age 60, it is assumed there is an eligible beneficiary who will elect an Option 1 ( $100 \%$ continuance) annuity benefit. Otherwise, the beneficiary is assumed to elect a refund of contributions.
- Retirement Age for Inactive Members - Inactive members are assumed to retire the later of age 60 and age first eligible of service retirement. Inactive members who do not have enough service to be eligible for service retirement are assumed to take an immediate refund of their contributions with interest. receive this work.


## Texas County \& District Retirement System Actuarial Valuation

December 31, 2008

# Annual Increase in Salary Due to Promotion and Longevity 

Table F-1: Merit Salary Increases*

| Years of Service | Entry Age |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Before 30 | Ages 30-39 | Ages 40-49 | 50 \& Later |
| 0 | 5.25\% | 4.75\% | 4.25\% | 3.75\% |
| 1 | 4.50 | 4.00 | 3.50 | 3.00 |
| 2 | 4.00 | 3.50 | 3.00 | 2.50 |
| 3 | 3.50 | 3.00 | 2.50 | 2.00 |
| 4 | 3.00 | 2.50 | 2.00 | 1.50 |
| 5 | 2.65 | 2.15 | 1.65 | 1.15 |
| 6 | 2.40 | 1.90 | 1.40 | 0.90 |
| 7 | 2.20 | 1.70 | 1.20 | 0.70 |
| 8 | 2.05 | 1.55 | 1.05 | 0.55 |
| 9 | 1.95 | 1.45 | 0.95 | 0.45 |
| 10 | 1.85 | 1.35 | 0.85 | 0.35 |
| 11 | 1.75 | 1.25 | 0.75 | 0.25 |
| 12 | 1.65 | 1.15 | 0.65 | 0.25 |
| 13 | 1.55 | 1.05 | 0.55 | 0.25 |
| 14 | 1.45 | 0.95 | 0.45 | 0.25 |
| 15 | 1.35 | 0.85 | 0.35 | 0.25 |
| 16 | 1.25 | 0.75 | 0.25 | 0.25 |
| 17 | 1.15 | 0.65 | 0.25 | 0.25 |
| 18 | 1.05 | 0.55 | 0.25 | 0.25 |
| 19 | 0.95 | 0.45 | 0.25 | 0.25 |
| 20 | 0.85 | 0.35 | 0.25 | 0.25 |
| 21 | 0.80 | 0.30 | 0.25 | 0.25 |
| 22 | 0.75 | 0.25 | 0.25 | 0.25 |
| 23 | 0.70 | 0.25 | 0.25 | 0.25 |
| 24 | 0.65 | 0.25 | 0.25 | 0.25 |
| 25 | 0.60 | 0.25 | 0.25 | 0.25 |
| 26 | 0.55 | 0.25 | 0.25 | 0.25 |
| 27 | 0.50 | 0.25 | 0.25 | 0.25 |
| 28 | 0.45 | 0.25 | 0.25 | 0.25 |
| 29 | 0.40 | 0.25 | 0.25 | 0.25 |
| 30 \& Up | 0.35 | 0.25 | 0.25 | 0.25 |

* These rates do not include the wage inflation rate of $4 \%$ per year. For example, a male member who entered the sytem at age 20 and is in his first year of service is assumed to receive a 9.46\% total annual increase in his salary. The $9.46 \%$ is a combination of the $5.25 \%$ merit increase and the $4.0 \%$ wage inflation. Note that the two components are compounded, so it is a slightly different result than just adding the two percentages.


## Texas County \& District Retirement System Actuarial Valuation

December 31, 2008

## Annual Probability of Retirement

Table F-2: Service Retirement from Active Status

| Age |  | Male |  | Female |
| :---: | :---: | :---: | :---: | :---: |
|  | 40-44 |  | $5.0 \%$ |  |
| $45-49$ |  | 10.0 |  | $5.0 \%$ |
|  |  |  | 10.0 |  |
| 50 |  | 14.0 |  | 16.0 |
| 51 |  | 14.0 |  | 16.0 |
| 52 |  | 14.0 |  | 16.0 |
| 53 |  | 14.0 |  | 16.0 |
| 54 |  | 14.0 |  | 16.0 |
|  |  |  |  |  |
| 55 |  | 14.0 |  | 16.0 |
| 56 |  | 14.0 |  | 16.0 |
| 57 |  | 14.0 |  | 16.0 |
| 58 |  | 14.0 |  | 16.0 |
| 59 |  | 14.0 |  | 16.0 |
| 60 |  | 14.0 |  | 16.0 |
| 61 |  | 14.0 |  | 16.0 |
| 62 |  | 32.0 |  | 32.0 |
| 63 |  | 18.0 |  | 18.0 |
| 64 |  | 18.0 |  | 18.0 |
| 65 |  | 35.0 |  | 35.0 |
| 66 |  | 25.0 |  | 25.0 |
| 67 |  | 25.0 |  | 25.0 |
| 68 |  | 25.0 |  | 25.0 |
| 69 |  | 25.0 |  | 25.0 |
| 70 |  | 25.0 |  | 25.0 |
| 71 |  | 25.0 |  | 25.0 |
| 72 |  | 25.0 |  | 25.0 |
| 73 |  | 25.0 |  | 25.0 |
| $74 *$ |  | 25.0 |  | 25.0 |

*For all eligible members ages 75 \& later, retirement is assumed to occur immediately. receive this work.

## Texas County \& District Retirement System Actuarial Valuation

December 31, 2008
Annual Probability of Disablement
Table F-3: Disability*

| Age | Occupational | All Other Causes |
| :---: | :---: | :---: |
| Less than 25 | 0.000\% | 0.000\% |
| 25 | 0.000 | 0.000 |
| 26 | 0.000 | 0.000 |
| 27 | 0.000 | 0.000 |
| 28 | 0.000 | 0.020 |
| 29 | 0.000 | 0.022 |
| 30 | 0.000 | 0.023 |
| 31 | 0.000 | 0.024 |
| 32 | 0.000 | 0.026 |
| 33 | 0.000 | 0.029 |
| 34 | 0.001 | 0.037 |
| 35 | 0.002 | 0.047 |
| 36 | 0.003 | 0.059 |
| 37 | 0.004 | 0.072 |
| 38 | 0.005 | 0.086 |
| 39 | 0.006 | 0.099 |
| 40 | 0.008 | 0.111 |
| 41 | 0.010 | 0.124 |
| 42 | 0.012 | 0.137 |
| 43 | 0.013 | 0.150 |
| 44 | 0.014 | 0.165 |
| 45 | 0.016 | 0.180 |
| 46 | 0.017 | 0.197 |
| 47 | 0.019 | 0.219 |
| 48 | 0.020 | 0.248 |
| 49 | 0.022 | 0.283 |
| 50 | 0.024 | 0.325 |
| 51 | 0.026 | 0.371 |
| 52 | 0.028 | 0.422 |
| 53 | 0.030 | 0.475 |
| 54 | 0.033 | 0.528 |
| 55 | 0.038 | 0.577 |
| 56 | 0.044 | 0.617 |
| 57 | 0.050 | 0.648 |
| 58 | 0.060 | 0.674 |
| 59 | 0.066 | 0.699 |
| 60 \& Above** | 0.066 | 0.000 |

[^4][^5]
## Texas County \& District Retirement System Actuarial Valuation

December 31, 2008
Annual Probability of Mortality for Active Members
Table F-4: Active Death

| Age | Male | Female |
| :---: | :---: | :---: |
| 25 | 0.079\% | 0.032\% |
| 26 | 0.074 | 0.032 |
| 27 | 0.071 | 0.032 |
| 28 | 0.070 | 0.033 |
| 29 | 0.071 | 0.033 |
| 30 | 0.073 | 0.034 |
| 31 | 0.075 | 0.035 |
| 32 | 0.078 | 0.036 |
| 33 | 0.082 | 0.038 |
| 34 | 0.086 | 0.039 |
| 35 | 0.091 | 0.042 |
| 36 | 0.095 | 0.044 |
| 37 | 0.099 | 0.048 |
| 38 | 0.102 | 0.052 |
| 39 | 0.108 | 0.057 |
| 40 | 0.116 | 0.063 |
| 41 | 0.126 | 0.069 |
| 42 | 0.138 | 0.075 |
| 43 | 0.151 | 0.083 |
| 44 | 0.166 | 0.091 |
| 45 | 0.181 | 0.100 |
| 46 | 0.196 | 0.110 |
| 47 | 0.212 | 0.120 |
| 48 | 0.229 | 0.132 |
| 49 | 0.248 | 0.144 |
| 50 | 0.270 | 0.157 |
| 51 | 0.297 | 0.171 |
| 52 | 0.330 | 0.186 |
| 53 | 0.370 | 0.202 |
| 54 | 0.417 | 0.219 |
| 55 | 0.473 | 0.236 |
| 56 | 0.542 | 0.255 |
| 57 | 0.624 | 0.275 |
| 58 | 0.714 | 0.297 |
| 59 | 0.806 | 0.320 |
| 60 | 0.901 | 0.344 |
| 61 | 1.001 | 0.371 |
| 62 | 1.110 | 0.400 |
| 63 | 1.227 | 0.432 |
| 64 | 1.342 | 0.467 |
| 65 | 1.452 | 0.506 |
| 66 | 1.566 | 0.548 |
| 67 | 1.676 | 0.594 |
| 68 | 1.775 | 0.643 |
| 69 | 1.859 | 0.694 |
| 70 | 1.931 | 0.747 |
| 71 | 2.135 | 0.819 |
| 72 | 2.336 | 0.929 |
| 73 | 2.552 | 1.042 |
| 74 | 2.791 | 1.157 |
| 75 | 3.063 | 1.265 |
| 76 | 3.355 | 1.367 |
| 77 | 3.661 | 1.476 |
| 78 | 4.001 | 1.608 |
| 79 | 4.393 | 1.775 |

* Rates are non-zero for ages 75-79 only if the member is not eligible for service retirement.

[^6]
# Texas County \& District Retirement System Actuarial Valuation 

## December 31, 2008

## Annual Mortality Probabilities for Inactive Members, Service Retirees, and Disabled Retirees

Table F-5: Mortality(1)

|  | Inactive Mortality ${ }^{(2)}$ |  | Disabled Mortality ${ }^{(3)}$ |  | Age | Inactive Mortality ${ }^{(2)}$ |  | Disabled Mortality ${ }^{(3)}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Male | Female | Male | Female |  | Male | Female | Male | Female |
| 20 | 0.055\% | 0.031\% | 2.257\% | 0.745\% | 60 | 0.858\% | 0.477\% | 4.498\% | 2.408\% |
| 21 | 0.057 | 0.031 | 2.257 | 0.745 | 61 | 0.966 | 0.548 | 4.658 | 2.529 |
| 22 | 0.060 | 0.031 | 2.257 | 0.745 | 62 | 1.091 | 0.627 | 4.831 | 2.660 |
| 23 | 0.063 | 0.031 | 2.257 | 0.745 | 63 | 1.234 | 0.718 | 5.017 | 2.803 |
| 24 | 0.067 | 0.031 | 2.257 | 0.745 | 64 | 1.391 | 0.819 | 5.221 | 2.959 |
| 25 | 0.071 | 0.031 | 2.257 | 0.745 | 65 | 1.563 | 0.929 | 5.445 | 3.133 |
| 26 | 0.075 | 0.032 | 2.257 | 0.745 | 66 | 1.746 | 1.042 | 5.691 | 3.323 |
| 27 | 0.078 | 0.032 | 2.257 | 0.745 | 67 | 1.939 | 1.157 | 5.961 | 3.534 |
| 28 | 0.081 | 0.034 | 2.257 | 0.745 | 68 | 2.135 | 1.265 | 6.258 | 3.764 |
| 29 | 0.084 | 0.036 | 2.257 | 0.745 | 69 | 2.336 | 1.367 | 6.584 | 4.014 |
| 30 | 0.086 | 0.038 | 2.257 | 0.745 | 70 | 2.552 | 1.476 | 6.941 | 4.285 |
| 31 | 0.088 | 0.040 | 2.257 | 0.745 | 71 | 2.791 | 1.608 | 7.329 | 4.577 |
| 32 | 0.090 | 0.043 | 2.257 | 0.745 | 72 | 3.063 | 1.775 | 7.751 | 4.890 |
| 33 | 0.091 | 0.045 | 2.257 | 0.745 | 73 | 3.355 | 1.972 | 8.207 | 5.223 |
| 34 | 0.091 | 0.048 | 2.257 | 0.745 | 74 | 3.661 | 2.192 | 8.695 | 5.578 |
| 35 | 0.092 | 0.051 | 2.257 | 0.745 | 75 | 4.001 | 2.439 | 9.215 | 5.955 |
| 36 | 0.093 | 0.055 | 2.257 | 0.745 | 76 | 4.393 | 2.723 | 9.764 | 6.355 |
| 37 | 0.096 | 0.059 | 2.257 | 0.745 | 77 | 4.857 | 3.050 | 10.339 | 6.779 |
| 38 | 0.101 | 0.064 | 2.257 | 0.745 | 78 | 5.399 | 3.412 | 10.937 | 7.231 |
| 39 | 0.108 | 0.070 | 2.257 | 0.745 | 79 | 6.007 | 3.802 | 11.554 | 7.714 |
| 40 | 0.115 | 0.076 | 2.257 | 0.745 | 80 | 6.670 | 4.236 | 12.188 | 8.230 |
| 41 | 0.124 | 0.083 | 2.257 | 0.745 | 81 | 7.378 | 4.726 | 12.834 | 8.784 |
| 42 | 0.135 | 0.089 | 2.257 | 0.745 | 82 | 8.122 | 5.285 | 13.492 | 9.379 |
| 43 | 0.145 | 0.094 | 2.257 | 0.745 | 83 | 8.872 | 5.899 | 14.160 | 10.020 |
| 44 | 0.157 | 0.099 | 2.385 | 0.818 | 84 | 9.636 | 6.557 | 14.837 | 10.710 |
| 45 | 0.170 | 0.105 | 2.512 | 0.896 | 85 | 10.456 | 7.284 | 15.524 | 11.451 |
| 46 | 0.185 | 0.111 | 2.640 | 0.978 | 86 | 11.376 | 8.102 | 16.219 | 12.246 |
| 47 | 0.204 | 0.120 | 2.769 | 1.063 | 87 | 12.438 | 9.035 | 16.923 | 13.097 |
| 48 | 0.226 | 0.130 | 2.898 | 1.154 | 88 | 13.654 | 10.088 | 18.341 | 14.005 |
| 49 | 0.250 | 0.141 | 3.027 | 1.248 | 89 | 14.995 | 11.247 | 19.977 | 14.970 |
| 50 | 0.277 | 0.154 | 3.156 | 1.346 | 90 | 16.444 | 12.502 | 21.661 | 15.992 |
| 51 | 0.309 | 0.169 | 3.286 | 1.447 | 91 | 17.985 | 13.844 | 23.366 | 17.043 |
| 52 | 0.346 | 0.186 | 3.415 | 1.550 | 92 | 19.600 | 15.266 | 25.069 | 18.280 |
| 53 | 0.385 | 0.205 | 3.544 | 1.654 | 93 | 21.333 | 16.767 | 26.749 | 19.451 |
| 54 | 0.428 | 0.224 | 3.673 | 1.760 | 94 | 23.194 | 18.352 | 28.391 | 20.538 |
| 55 | 0.476 | 0.247 | 3.803 | 1.865 | 95 | 25.119 | 20.023 | 29.985 | 21.524 |
| 56 | 0.532 | 0.276 | 3.933 | 1.971 | 96 | 27.044 | 21.778 | 31.530 | 22.395 |
| 57 | 0.600 | 0.314 | 4.067 | 2.077 | 97 | 28.905 | 23.619 | 33.021 | 23.139 |
| 58 | 0.677 | 0.361 | 4.204 | 2.184 | 98 | 30.675 | 25.561 | 34.456 | 23.747 |
| 59 | 0.762 | 0.415 | 4.347 | 2.294 | 99 | 32.398 | 27.604 | 35.863 | 24.483 |
| Similarly, female beneficiaries have the same inactive mortality assumptions as female retirees. |  |  |  |  |  |  |  |  |  |
| ${ }^{(2)}$ The inactive mortality rates are the UP-94 Male Table for males and |  |  |  |  |  |  |  |  |  |
| ${ }^{(3)}$ Disabled mortality rates are based on the RP-2000 Disabled Mortality Tables for males and females, both with a 2-year set-forward. |  |  |  |  |  |  |  |  |  |

## Texas County \& District Retirement System Actuarial Valuation

December 31, 2008
Probability of Terminating Employment Middle Termination Group

Table F-6: Termination*

| Years of Service | Entry Age 20 |  | Entry Age 30 |  | Entry Age 40 |  | Entry Age 50 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female | Male | Female | Male | Female |
| 0 | 33.1\% | 35.9\% | 27.4\% | 29.6\% | 24.5\% | 26.5\% | 21.6\% | 23.4\% |
| 1 | 22.1 | 23.9 | 18.2 | 19.8 | 16.3 | 17.7 | 14.4 | 15.6 |
| 2 | 16.6 | 17.9 | 13.7 | 14.8 | 12.2 | 13.3 | 10.8 | 11.7 |
| 3 | 13.3 | 14.4 | 10.9 | 11.9 | 9.8 | 10.6 | 8.6 | 9.4 |
| 4 | 11.0 | 12.0 | 9.1 | 9.9 | 8.2 | 8.8 | 7.2 | 7.8 |
| 5 | 9.4 | 10.2 | 7.8 | 8.4 | 6.9 | 7.5 | 6.1 | 6.6 |
| 6 | 7.7 | 8.4 | 6.4 | 6.9 | 5.7 | 6.2 | 5.0 | 5.5 |
| 7 | 6.6 | 7.2 | 5.5 | 5.9 | 4.9 | 5.3 | 4.3 | 4.7 |
| 8 | 6.1 | 6.6 | 5.0 | 5.4 | 4.5 | 4.9 | 4.0 | 4.3 |
| 9 | 5.5 | 6.0 | 4.6 | 4.9 | 4.1 | 4.4 | 3.6 | 3.9 |
| 10 | 5.0 | 5.4 | 4.1 | 4.5 | 3.7 | 4.0 | 3.2 | 3.5 |
| 11 | 4.4 | 4.8 | 3.7 | 4.0 | 3.3 | 3.5 | 2.9 | 3.1 |
| 12 | 4.0 | 4.3 | 3.3 | 3.6 | 2.9 | 3.2 | 2.6 | 2.8 |
| 13 | 3.5 | 3.8 | 2.9 | 3.2 | 2.6 | 2.8 | 2.3 | 2.5 |
| 14 | 3.1 | 3.4 | 2.6 | 2.8 | 2.3 | 2.5 | 2.0 | 2.2 |
| 15 | 2.7 | 2.9 | 2.2 | 2.4 | 2.0 | 2.1 | 1.7 | 1.9 |
| 16 | 2.3 | 2.5 | 1.9 | 2.1 | 1.7 | 1.9 | 1.5 | 1.6 |
| 17 | 2.0 | 2.2 | 1.6 | 1.8 | 1.5 | 1.6 | 1.3 | 1.4 |
| 18 | 1.8 | 1.9 | 1.5 | 1.6 | 1.3 | 1.4 | 1.2 | 1.3 |
| 19 | 1.7 | 1.8 | 1.4 | 1.5 | 1.2 | 1.3 | 1.1 | 1.2 |
| 20 | 1.7 | 1.8 | 1.4 | 1.5 | 1.2 | 1.3 | 1.1 | 1.2 |
| 21 | 1.5 | 1.6 | 1.2 | 1.3 | 1.1 | 1.2 | 1.0 | 1.1 |
| 22 | 1.3 | 1.4 | 1.1 | 1.2 | 1.0 | 1.1 | 0.9 | 0.9 |
| 23 | 1.2 | 1.3 | 1.0 | 1.0 | 0.9 | 0.9 | 0.8 | 0.8 |
| 24 | 1.0 | 1.1 | 0.8 | 0.9 | 0.7 | 0.8 | 0.7 | 0.7 |
| 25 | 0.9 | 1.0 | 0.7 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 |
| 26 | 0.8 | 0.8 | 0.6 | 0.7 | 0.6 | 0.6 | 0.5 | 0.6 |
| 27 | 0.7 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 |
| 28 | 0.6 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 |
| 29 | 0.4 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 |
| 30 \& Later | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*The above tables are adjusted based on termination group by multiplying by the following factors.

| Zero | $0 \%$ | Middle | $100 \%$ |
| :--- | ---: | :--- | :--- |
| Extra-Low | $70 \%$ | Mid-High | $110 \%$ |
| Low | $80 \%$ | High | $120 \%$ |
| Mid-Low | $90 \%$ |  |  |

## Texas County \& District Retirement System Actuarial Valuation

December 31, 2008
Probability of Retaining Vested Account
Upon Termination of Employment
Table F-7: Vesting

| Years of Service | 5-Year Vesting | 8-Year Vesting | 10-Year Vesting | 12-Year Vesting |
| :---: | :---: | :---: | :---: | :---: |
| 0 | 0\% | 0\% | 0\% | 0\% |
| 1 | 0 | 0 | 0 | 0 |
| 2 | 0 | 0 | 0 | 0 |
| 3 | 0 | 0 | 0 | 0 |
| 4 | 18 | 18 | 18 | 0 |
| 5 | 35 | 20 | 20 | 0 |
| 6 | 35 | 22 | 22 | 0 |
| 7 | 35 | 25 | 25 | 0 |
| 8 | 35 | 35 | 25 | 0 |
| 9 | 35 | 35 | 25 | 0 |
| 10 | 45 | 45 | 45 | 0 |
| 11 | 45 | 45 | 45 | 0 |
| 12 | 50 | 50 | 50 | 50 |
| 13 | 50 | 50 | 50 | 50 |
| 14 | 50 | 50 | 50 | 50 |
| 15 | 55 | 55 | 55 | 55 |
| 16 | 55 | 55 | 55 | 55 |
| 17 | 55 | 55 | 55 | 55 |
| 18 | 55 | 55 | 55 | 55 |
| 19 | 55 | 55 | 55 | 55 |
| 20 | 70 | 70 | 70 | 70 |
| 21 | 70 | 70 | 70 | 70 |
| 22 | 70 | 70 | 70 | 70 |
| 23 | 70 | 70 | 70 | 70 |
| 24* | 70 | 70 | 70 | 70 |

*Members with more than 24 years of service are not assumed to refund. receive this work.


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    E-3 receive this work.

[^3]:    Milliman receive this work.

[^4]:    * The probability of disablement from all other causes is applicable for members who are vested but not eligible for service retirement. Before a member is vested, only the occupational disability probabilities are applicable.
    ** Rates are non-zero for ages 75-79 only if the member is not eligible for service retirement.

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