

**DUNCANVILLE INDEPENDENT SCHOOL DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEAR ENDED JUNE 30, 2016**

NOTE 12. DEFINED BENEFIT PENSION PLAN

Plan Description. Duncanville Independent School District participates in a cost-sharing multiple-employer defined benefit pension that has a special funding situation. The plan is administered by the Teacher Retirement System of Texas (TRS). TRS's defined benefit pension plan is established and administered in accordance with the Texas Constitution, Article XVI, Section 67 and Texas Government Code, Title 8, Subtitle C. The pension trust fund is a qualified pension trust under Section 401(a) of the Internal Revenue Code. The Texas Legislature establishes benefits and contribution rates within the guidelines of the Texas Constitution. The pension's Board of Trustees does not have the authority to establish or amend benefit terms.

All employees of public, state-supported educational institutions in Texas who are employed for one-half or more of the standard work load and who are not exempted from membership under Texas Government Code, Title 8, Section 822.002 are covered by the system.

Pension Plan Fiduciary Net Position. Detailed information about the Teacher Retirement System's fiduciary net position is available in a separately-issued Comprehensive Annual Financial Report that includes financial statements and required supplementary information. That report may be obtained on the Internet at <http://www.trs.state.tx.us/about/documents/cafr.pdf#CAFR>; by writing to TRS at 1000 Red River Street, Austin, TX, 78701-2698; or by calling (512) 542-6592. The information provided in the Notes to the Financial Statements in the 2015 Comprehensive Annual Financial Report for TRS provides the following information regarding the Pension Plan fiduciary net position as of August 31, 2015.

<u>Net Pension Liability</u>	<u>Total</u>
Total Pension Liability	\$163,887,375,172
Less: Plan Fiduciary Net Position	<u>(128,538,706,212)</u>
Net Pension Liability	<u>\$ 35,348,668,960</u>
 Net Position as percentage of Total Pension Liability	 78.43%

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NOTE 12. DEFINED BENEFIT PENSION PLAN - continued

Benefits Provided. TRS provides service and disability retirement, as well as death and survivor benefits, to eligible employees (and their beneficiaries) of public and higher education in Texas. The pension formula is calculated using 2.3 percent (multiplier) times the average of the five highest annual creditable salaries times years of credited service to arrive at the annual standard annuity except for members who are grandfathered, the three highest annual salaries are used. The normal service retirement is at age 65 with 5 years of credited service or when the sum of the member's age and years of credited service equals 80 or more years. Early retirement is at age 55 with 5 years of service credit or earlier than 55 with 30 years of service credit. There are additional provisions for early retirement if the sum of the member's age and years of service credit total at least 80, but the member is less than age 60 or 62 depending on date of employment, or if the member was grandfathered in under a previous rule. There are no automatic post-employment benefit changes; including automatic COLAs. Ad hoc post-employment benefit changes, including ad hoc COLAs can be granted by the Texas Legislature as noted in the Plan description above.

Contributions. Contribution requirements are established or amended pursuant to Article 16, section 67 of the Texas Constitution which requires the Texas legislature to establish a member contribution rate of not less than 6% of the member's annual compensation and a state contribution rate of not less than 6% and not more than 10% of the aggregate annual compensation paid to members of the system during the fiscal year. Texas Government Code section 821.006 prohibits benefit improvements, if as a result of the particular action, the time required to amortize TRS' unfunded actuarial liabilities would be increased to a period that exceeds 31 years, or, if the amortization period already exceeds 31 years, the period would be increased by such action.

Employee contribution rates are set in state statute, Texas Government Code 825.402. Senate Bill 1458 of the 83rd Texas Legislature amended Texas Government Code 825.402 for member contributions and established employee contribution rates for fiscal years 2015 thru 2017. It also added a 1.5% contribution for employers not paying Old Age Survivor and Disability Insurance (OASDI) on certain employees effective for fiscal year 2015 as discussed in Note 1 of the TRS 2014 CAFR. The 83rd Texas Legislature, General Appropriations Act (GAA) established the employer contribution rates for fiscal years 2015 and 2016.

Contribution Rates

	<u>2015</u>	<u>2016</u>
Member	6.7%	7.2%
Non-Employer Contributing Entity (State)	6.8%	6.8%
Employers	6.8%	6.8%

Duncanville ISD FY2016 Employer Contributions	\$ 2,363,167
Duncanville ISD FY2016 Member Contributions	\$ 5,547,640
Duncanville ISD 2015 NECE On-Behalf Contributions	\$ 3,665,288

Contributors to the plan include members, employers and the State of Texas as the only non-employer contributing entity. The State contributes to the plan in accordance with state statutes and the General Appropriations Act (GAA).

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As the non-employer contributing entity for public education, the State of Texas contributes to the retirement system an amount equal to the current employer contribution rate times the aggregate annual compensation of all participating members of the pension trust fund during the fiscal year reduced by the amounts described below which are paid by the employers. Employers including public schools are required to pay the employer contribution rate in the following instances:

- On the portion of the member's salary that exceeds the statutory minimum for members entitled to the statutory minimum under Section 21.402 of the Texas Education Code.
- During a new member's first 90 days of employment.
- When any part or all of an employee's salary is paid by federal funding source or a privately sponsored source.

In addition to the employer contributions listed above, there are two additional surcharges an employer is subject to.

- When employing a retiree of the Teacher Retirement System the employer shall pay both the member contribution and the state contribution as an employment after retirement surcharge.
- When a school district does not contribute to the Federal Old-Age, Survivors and Disability Insurance (OASDI) Program for certain employees, they must contribute 1.5% of the state contribution rate for certain instructional or administrative employees; and 100% of the state contribution rate for all other employees.

Actuarial Assumptions. The total pension liability in the August 31, 2015 actuarial valuation was determined using the following actuarial assumptions:

Valuation Date	August 31, 2015
Actuarial Cost Method	Individual Entry Age Normal
Asset Valuation Method	Market Value
Single Discount Rate	8.00%
Long-term expected Investment Rate of Return	8.00%
Inflation	2.50%
Salary Increases Including Inflation	3.50% to 9.50%
Payroll Growth Rate	2.50%
Benefit Changes During the Year	None
Ad hoc Post Employment Benefit Changes	None

The actuarial methods and assumptions are primarily based on a study of actual experience for the four year period ending August 31, 2014 and adopted on September 24, 2015.

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Discount Rate. The single discount rate used to measure the total pension liability was 8.0%. There was no change in the discount rate since the previous year. The projection of cash flows used to determine the discount rate assumed that contributions from plan members and those of the contributing employers and the non-employer contributing entity are made at the statutorily required rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability. The long-term rate of return on pension plan investments is 8%. The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric real rates of return for each major asset class included in the Systems target asset allocation as of August 31, 2015 are summarized below.

Asset Class	Target Allocation	Real Return Geometric Basis	Long-Term Expected Portfolio Real Rate of Return*
Global Equity			
U.S.	18%	4.6%	1.0%
Non-U.S. Developed	13%	5.1%	0.8%
Emerging Markets	9%	5.9%	0.7%
Directional Hedge Funds	4%	3.2%	0.1%
Private Equity	13%	7.0%	1.1%
Stable Value			
U.S. Treasuries	11%	0.7%	0.1%
Absolute Return	0%	1.8%	0.0%
Stable Value Hedge Funds	4%	3.0%	0.1%
Cash	1%	-0.2%	0.0%
Real Return			
Global Inflation Linked Bonds	3%	0.9%	0.0%
Real Assets	16%	5.1%	1.1%
Energy and Natural Resources	3%	6.6%	0.2%
Commodities	0%	1.2%	0.0%
Risk Parity			
Risk Parity	5%	6.7%	0.3%
Inflation Expectation			2.2%
Alpha	0%		1.0%
Total	<u>100%</u>		<u>8.7%</u>

* *The Expected Contribution to Returns incorporates the volatility drag resulting from the conversion between Arithmetic and Geometric mean returns.*

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Discount Rate Sensitivity Analysis. The following schedule shows the impact of the Net Pension Liability if the discount rate used was 1% less than and 1% greater than the discount rate that was used (8%) in measuring the 2015 Net Pension Liability.

	1% Decrease in Discount Rate (7.0%)	Discount Rate (8.0%)	1% Increase in Discount Rate (9.0%)
Duncanville ISD's proportionate share of the net pension liability:	\$45,457,157	\$29,012,526	\$15,315,167

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions. At June 30, 2016, Duncanville Independent School District reported a liability of \$29,012,526 for its proportionate share of the TRS's net pension liability. This liability reflects a reduction for State pension support provided to Duncanville Independent School District. The amount recognized by Duncanville Independent School District as its proportionate share of the net pension liability, the related State support, and the total portion of the net pension liability that was associated with Duncanville Independent School District were as follows:

District's Proportionate share of the collective net pension liability	\$29,012,526
State's proportionate share that is associated with the District	<u>43,742,911</u>
Total	<u>\$72,755,437</u>

The net pension liability was measured as of August 31, 2015 and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The employer's proportion of the net pension liability was based on the employer's contributions to the pension plan relative to the contributions of all employers to the plan for the period September 1, 2014 thru August 31, 2015.

At August 31, 2015 the employer's proportion of the collective net pension liability was .0820753%, an increase of 43.2% from its proportionate share of .0573142% at August 31, 2014.

Changes Since the Prior Actuarial Valuation – The following are changes to the actuarial assumptions or other inputs that affected measurement of the total pension liability since the prior measurement period:

Economic Assumptions

1. The inflation assumption was decreased from 3.00% to 2.50%.
2. The ultimate merit assumption for long-service employees was decreased from 1.25% to 1.00%.
3. In accordance with the observed experience, there were small adjustments in the service-based promotional/longevity component of the salary scale.
4. The payroll growth assumption was lowered from 3.50% to 2.50%.

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Mortality Assumptions

5. The post-retirement mortality tables for non-disabled retirees were updated to reflect recent TRS member experience. Mortality rates will be assumed to continue to improve in the future using a fully generational approach and Scale BB.
6. The post-retirement mortality tables for disabled retirees were updated to reflect recent TRS member experience. Mortality rates will be assumed to continue to improve in the future using a fully generational approach and Scale BB.
7. The pre-retirement mortality tables for active employees were updated to use 90% of the recently published RP-2014 mortality table for active employees. Mortality rates will be assumed to continue to improve in the future using a fully generational approach and Scale BB.

Other Demographic Assumptions

8. Previously, it was assumed 10% of all members who had contributed in the past 5 years to be an active member. This was an implicit rehire assumption because teachers have historically had a high incidence of terminating employment for a time and then returning to the workforce at a later date. This methodology was modified to add a more explicit valuation of the rehire incidence in the termination liabilities, and therefore these 10% are no longer being counted as active members.
9. There were adjustments to the termination patterns for members consistent with experience and future expectations. The termination patterns were adjusted to reflect the rehire assumption. The timing of the termination decrement was also changed from the middle of the year to the beginning to match the actual pattern in the data.
10. Small adjustments were made to the retirement patterns for members consistent with experience and future expectations.
11. Small adjustments to the disability patterns were made for members consistent with experience and future expectations. Two separate patterns were created based on whether the member has 10 years of service or more.
12. For members that become disabled in the future, it is assumed 20% of them will choose a 100% joint and survivor annuity option.

Actuarial Methods and Policies

13. The method of using celled data in the valuation process was changed to now using individual data records to allow for better reporting of some items, such as actuarial gains and losses by source.

There were no changes of benefit terms that affected measurement of the total pension liability during the measurement period.

For the year ended June 30, 2016, Duncanville Independent School District recognized pension expense of \$6,232,661 and revenue of \$6,232,661 for support provided by the State.

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NOTE 12. DEFINED BENEFIT PENSION PLAN – continued

At June 30, 2016, Duncanville Independent School District reported its proportionate share of the TRS's deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual economic experience	\$ 196,910	\$1,114,977
Changes in actuarial assumptions	827,616	1,035,040
Difference between projected and actual investment earnings	3,635,752	-
Changes in proportion and difference between the employer's contributions and the proportionate share of contributions	5,659,705	9,242
Contributions paid to TRS subsequent to the measurement date	1,991,245	-
Total	\$12,311,228	\$2,159,259

\$1,991,245 reported as deferred outflows of resources resulting from District contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2017. Other amounts reported as deferred outflows and inflows of resources related to pensions will be recognized in pension expense as follows:

Year ended June 30:	Pension Expense Amount
2017	\$ 1,416,752
2018	1,416,752
2019	1,416,753
2020	2,586,547
2021	787,992
2022	535,928