

5605 N. MacArthur Blvd. Suite 870 Irving, TX 75038-2631

November 12, 2014

Board of Trustees Teacher Retirement System of Texas 1000 Red River Street Austin, TX 78701

Subject: GASB 67 Reporting and Disclosure Information

Dear Board of Trustees,

This report provides information required by the Teacher Retirement System of Texas (TRS) in connection with the Governmental Accounting Standards Board (GASB) Statement No. 67 "Financial Reporting for Pension Plans." The information provided herein was prepared for the purpose of assisting TRS to comply with the financial reporting and disclosure requirements of GASB No. 67.

The calculation of the liability associated with the benefits described in this report was performed for the purpose of satisfying the requirements of GASB No. 67 and is not applicable for purposes of funding the plan. A calculation of the plan's liability for other purposes may produce significantly different results. This report may be provided to parties other than TRS only in its entirety and only with the permission of TRS.

The total pension liability, net pension liability, and certain sensitivity information shown in this report are based on an actuarial valuation performed as of August 31, 2014. The total pension liability was determined as of the end of the plan year, August 31, 2014. It is our opinion that the recommended assumptions are internally consistent, reasonable, and comply with the requirements under GASB No. 67.

This report is based upon information, furnished to us by TRS, which include benefit provisions, membership information, and financial data. We did not audit this data and information, but we did apply a number of tests and concluded that it was reasonable and consistent. GRS is not responsible for the accuracy or completeness of the information provided to us by TRS.

The final section of the report titled "Calculation of the Single Discount Rate" is not a required disclosure item for your financial statements. However, it is possible that your auditors will request this information which is why it is included in the report.

Certain tables included in the Required Supplementary Information should include a 10-year history of information. As provided for in GASB No. 67, this historical information is only presented for the years in which the information was measured in conformity with the requirements of GASB No. 67. The historical information in this report will begin with the information presented for the fiscal year ending August 31, 2014.

This report compliments the actuarial valuation report that was provided to TRS and should be considered together as a complete report for the plan year ending August 31, 2014. Please see the actuarial valuation report as August 31, 2014 for additional discussion of the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions. The actuarial cost method used to determine the GASB No. 67 net pension liability is the Individual Entry Age Normal method as prescribed in GASB No. 67. In addition, the net pension liability was determined using individual active data records rather than the celled data that is used for the funding valuation.

The projected cash flows from the employer are based on contributions for the most recent five year period, modified on consideration of subsequent events. Changes in statute in the last legislative session and new language in the budget policy memorandum for the upcoming legislative session are indicators that the legislature is committed to an increase in funding levels for the pension funds. Considering the above events, projected employer contributions are based on FY 15 funding levels.

To the best of our knowledge, the information contained with this report is accurate and fairly represents the actuarial position of the Teacher Retirement System of Texas. All calculations have been made in conformity with generally accepted actuarial principles and practices as well as with the Actuarial Standards of Practice issued by the Actuarial Standards Board. Mr. Newton is a member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

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Lewis Ward Consultant

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Joseph P. Newton, FSA, EA, MAAA Sr. Consultant

SUMMARY OF POPULATION STATISTICS

The total pension liability described in this report is based on the plan membership as of August 31, 2014:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	363,182
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	194,083
Active Plan Members	857,342
Total Plan Members	1,414,607

Measurement of the Net Pension Liability

The net pension liability is measured as the total pension liability, less the amount of the pension plan's fiduciary net position. In actuarial terms, this will be the accrued liability less the market value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations performed to determine the employer's contribution requirement).

A single discount rate of 8.000% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 8.000%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions, the employer contributions, and the state contributions will be made at the rates set by the legislature during the 2013 legislative session (please see the actuarial valuation report for a description of these rates).

Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected 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.

Below is a table providing the sensitivity of the net pension liability to changes in the discount rate. In particular, the table presents the plan's net pension liability, if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher than the single discount rate:

SENSITIVITY OF THE NET PENSION LIABILITY TO THE SINGLE DISCOUNT RATE Assumption

Current Single Discount						
1% Decrease	1% Increase					
7.00%	8.00%	9.00%				
\$47,737,071,723	\$26,716,832,801	\$10,997,609,140				

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for Year Ended August 31, 2014

Contributions \$ 1,530,623,829 Employer 984,552,391 Employee 2,357,686,000 Other 163,248,236 Total Contributions \$ 5,036,110,456 Investment Income \$ 5,036,110,456 Net Appreciation in Fair Value of Investments \$ 16,443,655,756 Interest and Dividends 3,241,027,195 Less Investment Expense (250,252,917) Net Investment Income \$ 19,434,430,034 Other \$ 24,474,683,939 Deductions \$ 24,474,683,939 Deductions \$ 24,474,683,939 Deductions \$ 9,083,584,713 Net Increase in Net Position \$ 9,083,584,713 Net Increase in Net Position \$ 9,083,584,713 Net Increase in Net Position \$ 15,391,099,226	Additions	Year Ending August 31, 2014			
Employer 984,552,391 Employee 2,357,686,000 Other 163,248,236 Total Contributions \$ 5,036,110,456 Investment Income \$ 16,443,655,756 Interest and Dividends 3,241,027,195 Less Investment Expense (250,252,917) Net Investment Income \$ 19,434,430,034 Other \$ 19,434,430,034 Other \$ 4,143,449 Total Additions \$ 24,474,683,939 Deductions \$ 8,959,242,844 Pension Plan Administrative Expense 41,904,190 Other \$ 9,083,584,713 Net Increase in Net Position \$ 15,391,099,226 Net Position Restricted for Pensions \$ 117,388,143,859	Contributions				
Employee 2,357,686,000 Other 163,248,236 Total Contributions \$ 5,036,110,456 Investment Income \$ 16,443,655,756 Interest and Dividends 3,241,027,195 Less Investment Expense (250,252,917) Net Investment Income \$ 19,434,430,034 Other \$ 4,143,449 Total Additions \$ 24,474,683,939 Deductions \$ 8,959,242,844 Pension Plan Administrative Expense 41,904,190 Other \$ 9,083,584,713 Total Deductions \$ 9,083,584,713 Net Increase in Net Position \$ 15,391,099,226 Net Position Restricted for Pensions \$ 117,388,143,859	Non-Employer Contributing Entity	\$ 1,530,623,829			
Other 163,248,236 Total Contributions \$ 5,036,110,456 Investment Income \$ 16,443,655,756 Interest and Dividends 3,241,027,195 Less Investment Expense (250,252,917) Net Investment Income \$ 19,434,430,034 Other \$ 19,434,430,034 Other \$ 24,474,683,939 Deductions \$ 24,474,683,939 Deductions \$ 8,959,242,844 Pension Plan Administrative Expense 41,904,190 Other 8 2,437,679 Total Deductions \$ 9,083,584,713 Net Increase in Net Position \$ 15,391,099,226 Net Position Restricted for Pensions \$ 15,391,099,226	Employer	984,552,391			
Total Contributions\$ $5,036,110,456$ Investment IncomeNet Appreciation in Fair Value of Investments\$ $16,443,655,756$ Interest and Dividends $3,241,027,195$ Less Investment Expense $(250,252,917)$ Net Investment Income\$ $19,434,430,034$ Other\$ $4,143,449$ Total Additions\$ $24,474,683,939$ Deductions\$\$ $4,143,449$ Benefit payments, including refunds of employee contributions\$ $8,959,242,844$ Pension Plan Administrative Expense $41,904,190$ Other $82,437,679$ Total Deductions\$ $9,083,584,713$ Net Increase in Net Position\$ $15,391,099,226$ Net Position Restricted for Pensions\$ $117,388,143,859$	Employee	2,357,686,000			
Investment Income $16,443,655,756$ Interest and Dividends $3,241,027,195$ Less Investment Expense $(250,252,917)$ Net Investment Income $$19,434,430,034$ Other $$$4,143,449$ Total Additions $$$24,474,683,939$ Deductions $$$8,959,242,844$ Pension Plan Administrative Expense $41,904,190$ Other $$$24,37,679$ Total Deductions $$$9,083,584,713$ Net Increase in Net Position $$$15,391,099,226$ Net Position Restricted for Pensions $$$117,388,143,859$	Other	 163,248,236			
Net Appreciation in Fair Value of Investments\$ 16,443,655,756Interest and Dividends3,241,027,195Less Investment Expense(250,252,917)Net Investment Income\$ 19,434,430,034Other\$ 4,143,449Total Additions\$ 24,474,683,939Deductions\$ 8,959,242,844Pension Plan Administrative Expense41,904,190Other82,437,679Total Deductions\$ 9,083,584,713Net Increase in Net Position\$ 15,391,099,226Net Position Restricted for Pensions\$ 117,388,143,859	Total Contributions	\$ 5,036,110,456			
Interest and Dividends Interest and Dividends Less Investment Expense Net Investment Income 3,241,027,195 (250,252,917) \$ 19,434,430,034 Other Total Additions \$ 4,143,449 \$ 24,474,683,939 Deductions Benefit payments, including refunds of employee contributions Pension Plan Administrative Expense Other Total Deductions \$ 8,959,242,844 41,904,190 0ther Total Deductions \$ 9,083,584,713 Net Increase in Net Position \$ 15,391,099,226 Net Position Restricted for Pensions Beginning of Year <u>\$ 117,388,143,859</u>	Investment Income				
Less Investment Expense (250,252,917) Net Investment Income \$ 19,434,430,034 Other \$ 24,434,449 Total Additions \$ 24,474,683,939 Deductions \$ 24,474,683,939 Deductions \$ 8,959,242,844 Pension Plan Administrative Expense 41,904,190 Other 82,437,679 Total Deductions \$ 9,083,584,713 Net Increase in Net Position \$ 15,391,099,226 Net Position Restricted for Pensions \$ 117,388,143,859	Net Appreciation in Fair Value of Investments	\$ 16,443,655,756			
Net Investment Income\$ 19,434,430,034Other\$ 4,143,449Total Additions\$ 24,474,683,939Deductions\$ 24,474,683,939Benefit payments, including refunds of employee contributions\$ 8,959,242,844Pension Plan Administrative Expense41,904,190Other82,437,679Total Deductions\$ 9,083,584,713Net Increase in Net Position\$ 15,391,099,226Net Position Restricted for Pensions\$ 117,388,143,859Beginning of Year\$ 117,388,143,859	Interest and Dividends	3,241,027,195			
Other\$4,143,449Total Additions\$24,474,683,939Deductions\$24,474,683,939Deductions\$8,959,242,844Pension Plan Administrative Expense41,904,190Other82,437,679Total Deductions\$9,083,584,713Net Increase in Net Position\$15,391,099,226Net Position Restricted for Pensions\$117,388,143,859	Less Investment Expense	(250,252,917)			
Total Additions\$ 24,474,683,939Deductions\$ 24,474,683,939Benefit payments, including refunds of employee contributions\$ 8,959,242,844Pension Plan Administrative Expense41,904,190Other82,437,679Total Deductions\$ 9,083,584,713Net Increase in Net Position\$ 15,391,099,226Net Position Restricted for Pensions\$ 117,388,143,859	Net Investment Income	\$ 19,434,430,034			
DeductionsBenefit payments, including refunds of employee contributions\$ 8,959,242,844Pension Plan Administrative Expense41,904,190Other82,437,679Total Deductions\$ 9,083,584,713Net Increase in Net Position\$ 15,391,099,226Net Position Restricted for Pensions\$ 117,388,143,859Beginning of Year\$ 117,388,143,859	Other	\$ 4,143,449			
Benefit payments, including refunds of employee contributions\$ 8,959,242,844Pension Plan Administrative Expense41,904,190Other82,437,679Total Deductions\$ 9,083,584,713Net Increase in Net Position\$ 15,391,099,226Net Position Restricted for Pensions\$ 117,388,143,859Beginning of Year\$ 117,388,143,859	Total Additions	\$ 24,474,683,939			
Pension Plan Administrative Expense41,904,190Other82,437,679Total Deductions\$ 9,083,584,713Net Increase in Net Position\$ 15,391,099,226Net Position Restricted for Pensions\$ 117,388,143,859Beginning of Year\$ 117,388,143,859	Deductions				
Other 82,437,679 Total Deductions \$ 9,083,584,713 Net Increase in Net Position \$ 15,391,099,226 Net Position Restricted for Pensions \$ 117,388,143,859 Beginning of Year \$ 117,388,143,859	Benefit payments, including refunds of employee contributions	\$ 8,959,242,844			
Total Deductions\$ 9,083,584,713Net Increase in Net Position\$ 15,391,099,226Net Position Restricted for Pensions>Beginning of Year\$ 117,388,143,859	Pension Plan Administrative Expense	41,904,190			
Net Increase in Net Position\$ 15,391,099,226Net Position Restricted for PensionsBeginning of Year\$ 117,388,143,859	Other	 82,437,679			
Net Position Restricted for PensionsBeginning of Year\$ 117,388,143,859	Total Deductions	\$ 9,083,584,713			
Beginning of Year \$ 117,388,143,859	Net Increase in Net Position	\$ 15,391,099,226			
	Net Position Restricted for Pensions				
End of Year \$ 132,779,243,085	Beginning of Year	\$ 117,388,143,859			
	End of Year	\$ 132,779,243,085			

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION Schedule of Changes in the Employers' Net Pension Liability and Related Ratios

Fiscal year ending August 31,	 2014
Total Pension Liability	
Service Cost	\$ 4,020,975,701
Interest on the Total Pension Liability	\$ 11,815,645,198
Benefit Changes	\$ -
Difference between Expected and Actual Experience	\$ 425,457,945
Assumption Changes	\$ 2,028,541,342
Benefit Payments	\$ (8,548,642,525)
Refunds	\$ (410,600,319)
Net Change in Total Pension Liability	\$ 9,331,377,342
Total Pension Liability - Beginning	\$ 150,164,698,544
Total Pension Liability - Ending (a)	\$ 159,496,075,886
Plan Fiduciary Net Position	
Non-Contributing Entity	\$ 1,530,623,829
Employer Contributions	\$ 984,552,391
Employee Contributions	\$ 2,357,686,000
Pension Plan Net Investment Income	\$ 19,434,430,034
Benefit Payments	\$ (8,548,642,525)
Refunds	\$ (410,600,319)
Pension Plan Administrative Expense	\$ (41,904,190)
Other	\$ 84,954,006
Net Change in Plan Fiduciary Net Position	\$ 15,391,099,226
Plan Fiduciary Net Position - Beginning	\$ 117,388,143,859
Plan Fiduciary Net Position - Ending (b)	\$ 132,779,243,085
Net Pension Liability - Ending (a) - (b)	26,716,832,801
Plan Fiduciary Net Position as a Percentage	
of Total Pension Liability	83.25 %
Covered Employee Payroll	\$ 36,654,290,800
Net Pension Liability as a Percentage	
of Covered Employee Payroll	72.89 %
Notes to Schedule:	
N/A	

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION Schedule of the Net Pension Liability (Historical)

Last 10 Fiscal Years

FY Ending August 31,	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a % of Total Pension Liability	Cowered Payroll	Net Pension Liability as a % of Covered Payroll
2005						
2006						
2007						
2008						
2009						
2010						
2011						
2012						
2013	\$ 150,164,698,544	\$ 117,388,143,859	\$ 32,776,554,685	78.17%	\$ 35,188,983,344	93.14%
2014	159,496,075,886	132,779,243,085	26,716,832,801	83.25%	36,654,290,800	72.89%

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION Schedule of Contributions

	Actuarially	Contribution	Actual Contributi				
FY Ending August 31,	Determined Contribution	Actual Contribution	Deficiency (Excess)	Covered Pavroll	as a % of Covered Pavroll		
<u> </u>			(1110055)	<u> </u>			
2014	3,177,927,012	2,515,176,220	662,750,792	36,654,290,800	6.86%		

NOTES TO SCHEDULE OF CONTRIBUTIONS

Valuation Date: Notes	Teacher Retirement System of Texas Actuarially determined contribution rates are calculated as of August 31. Members and employers contribute based on statutorily fixed rates.
Methods and Assumptions Used	to Determine Contribution Rates:
Actuarial Cost Method	For funding purposes, the Ultimate Entry Age Normal actuarial cost method is used in conjunction with a new entrant profile.
Amortization Method	Level Percentage of Payroll, Open
Remaining Amortization Period	30 years
Asset Valuation Method	5 Year smoothed market
Inflation	3.0%
Salary Increases	4.25% to 7.25% including inflation
Investment Rate of Return	8.00%
Retirement Age Mortality	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2011 valuation pursuant to an experience study of the period September 1, 2006 through August 31, 2010. Active Mortaility: 1994 Group Annuity Mortality Table set back 6 years for both males and females. Post-Retirement: Client specific tables multiplied by 80%.
Other Information: Notes	There were no benefit changes during the year.

CALCULATION OF THE SINGLE DISCOUNT RATE

GASB Statement No. 67 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the Total Pension Liability. This rate considers the ability of the fund to meet benefit obligations in the future. To make this determination, employer contributions, employee contributions, benefit payments, expenses and investment returns are projected into the future. The Plan Net Position (assets) in future years can then be determined and compared to its obligation to make benefit payments in those years. As long as assets are projected to be on hand in a future year, the assumed valuation discount rate is used. In years where assets are not projected to be sufficient to meet benefit payments, the use of a municipal bond rate is required, as described in the following paragraph.

The *single discount rate* (SDR) is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects (1) the long-term expected rate of return on pension plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating (which is published by the Federal Reserve) as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on pension plan investments is 8.000%; the municipal bond rate is 4.170%; and the resulting single discount rate is 8.000%.

The tables in this section provide background for the development of the single discount rate.

The **Projection of Contributions** table shows the development of expected contributions in future years. Normal Cost contributions for future hires are not included (nor are their liabilities).

The **Projection of Plan Fiduciary Net Position** table shows the development of expected asset levels in future years.

The **Present Values of Projected Benefit Payments** table shows the development of the Single Discount Rate (SDR). It breaks down the benefit payments into present values for funded and unfunded portions and shows the equivalent total at the SDR.

SINGLE DISCOUNT RATE DEVELOPMENT Projection of Contributions Beginning September 1, 2014

Year	Payroll for Current Employees	Р	ayroll for Future Employees	Total Employee Payroll	ontributions from urrent Employees	Employer ontributions for All Employees	Co	nployer Normal st Contributions clated to Payroll of Future Employees	Total Contributions
1	38,031,050,391	\$	491,156,998	\$ 38,522,207,389	\$ 2,433,987,225	\$ 2,619,510,102	\$	(19,204,239)	\$ 5,034,293,088
2	36,674,493,991	\$	3,195,990,657	39,870,484,648	2,457,191,097	3,093,949,609		(115,375,263)	5,435,765,443
3	35,591,179,822	\$	5,674,771,788	41,265,951,610	2,562,564,947	3,202,237,845		(176,485,403)	5,588,317,389
4	34,674,754,776	\$	8,035,505,140	42,710,259,917	2,669,956,118	3,314,316,170		(209,726,684)	5,774,545,604
5	33,841,728,982	\$	10,363,390,032	44,205,119,014	2,605,813,132	3,430,317,235		(270,484,480)	5,765,645,887
6	33,056,195,382	\$	12,696,102,797	45,752,298,179	2,545,327,044	3,550,378,339		(331,368,283)	5,764,337,100
7	32,309,142,110	\$	15,044,486,505	47,353,628,615	2,487,803,942	3,674,641,581		(392,661,098)	5,769,784,425
8	31,573,582,002	\$	17,437,423,615	49,011,005,617	2,431,165,814	3,803,254,036		(455,116,756)	5,779,303,094
9	30,830,105,075	\$	19,896,285,738	50,726,390,814	2,373,918,091	3,936,367,927		(519,293,058)	5,790,992,960
10	30,053,940,779	\$	22,447,873,713	52,501,814,492	2,314,153,440	4,074,140,805		(585,889,504)	5,802,404,741
11	29,225,955,853	\$	25,113,422,147	54,339,377,999	2,250,398,601	4,216,735,733		(655,460,318)	5,811,674,016
12	28,323,741,163	\$	27,917,515,066	56,241,256,229	2,180,928,070	4,364,321,483		(728,647,143)	5,816,602,410
13	27,336,626,437	\$	30,873,073,761	58,209,700,197	2,104,920,236	4,517,072,735		(805,787,225)	5,816,205,746
14	26,270,364,175	\$	33,976,675,529	60,247,039,704	2,022,818,041	4,675,170,281		(886,791,231)	5,811,197,091
15	25,134,515,265	\$	37,221,170,829	62,355,686,094	1,935,357,675	4,838,801,241		(971,472,559)	5,802,686,357
16	23,941,243,311	\$	40,596,891,796	64,538,135,107	1,843,475,735	5,008,159,284		(1,059,578,876)	5,792,056,143
17	22,702,981,627	\$	44,093,988,209	66,796,969,836	1,748,129,585	5,183,444,859		(1,150,853,092)	5,780,721,352
18	21,428,493,717	\$	47,706,370,063	69,134,863,780	1,649,994,016	5,364,865,429		(1,245,136,259)	5,769,723,186
19	20,128,160,673	\$	51,426,423,340	71,554,584,012	1,549,868,372	5,552,635,719		(1,342,229,649)	5,760,274,442
20	18,831,045,725	\$	55,227,948,728	74,058,994,453	1,449,990,521	5,746,977,970		(1,441,449,462)	5,755,519,029
21	17,560,845,797	\$	59,090,213,461	76,651,059,259	1,352,185,126	5,948,122,198		(1,542,254,571)	5,758,052,753
22	16,374,379,533	\$	62,959,466,799	79,333,846,333	1,260,827,224	6,156,306,475		(1,643,242,083)	5,773,891,616
23	15,305,106,945	\$	66,805,424,009	82,110,530,954	1,178,493,235	6,371,777,202		(1,743,621,567)	5,806,648,870
24	14,318,981,762	\$	70,665,417,775	84,984,399,538	1,102,561,596	6,594,789,404		(1,844,367,404)	5,852,983,596
25	13,388,988,463	\$	74,569,865,059	87,958,853,522	1,030,952,112	6,825,607,033		(1,946,273,478)	5,910,285,667
26	12,507,336,276	\$	78,530,077,118	91,037,413,395	963,064,893	7,064,503,279		(2,049,635,013)	5,977,933,159
27	11,653,600,874	\$	82,570,121,989	94,223,722,864	897,327,267	7,311,760,894		(2,155,080,184)	6,054,007,977
28	10,814,613,495	\$	86,706,939,669	97,521,553,164	832,725,239	7,567,672,526		(2,263,051,125)	6,137,346,640
29	9,970,759,048	\$	90,964,048,477	100,934,807,525	767,748,447	7,832,541,064		(2,374,161,665)	6,226,127,846
30	9,112,250,237	\$	95,355,275,551	104,467,525,788	701,643,268	8,106,680,001		(2,488,772,692)	6,319,550,577
31	8,232,091,930	\$	99,891,797,260	108,123,889,191	633,871,079	8,390,413,801		(2,607,175,908)	6,417,108,972
32		\$	104,535,614,701	111,908,225,312	567,691,017	8,684,078,284		(2,728,379,544)	6,523,389,757
33	6,549,845,694	\$	109,275,167,504	115,825,013,198	504,338,118	8,988,021,024		(2,852,081,872)	6,640,277,270
34	5,765,148,123	\$	114,113,740,537	119,878,888,660	443,916,405	9,302,601,760		(2,978,368,628)	6,768,149,537
35	5,013,490,932		119,061,158,831	124,074,649,763	386,038,802	9,628,192,822		(3,107,496,245)	6,906,735,379
36	4,274,119,568		124,143,142,936	128,417,262,505	329,107,207	9,965,179,570		(3,240,136,031)	7,054,150,746
37	3,567,042,805		129,344,823,887	132,911,866,693	274,662,296	10,313,960,855		(3,375,899,903)	7,212,723,248
38	2,914,398,322		134,649,383,705	137,563,782,027	224,408,671	10,674,949,485		(3,514,348,915)	7,385,009,241
39	2,338,170,355		140,040,344,042	142,378,514,398	180,039,117	11,048,572,717		(3,655,052,980)	7,573,558,854
40	1,860,467,600		145,501,294,801	147,361,762,402	143,256,005	11,435,272,762		(3,797,583,794)	7,780,944,973
41	1,478,867,774		151,040,556,312	152,519,424,086	113,872,819	11,835,507,309		(3,942,158,520)	8,007,221,608
42	1,167,180,671		156,690,423,258	157,857,603,929	89,872,912	12,249,750,065		(4,089,620,047)	8,250,002,930
43	906,236,312		162,476,383,754	163,382,620,066	69,780,196	12,678,491,317		(4,240,633,616)	8,507,637,897
44	694,638,769		168,406,373,000	169,101,011,769	53,487,185	13,122,238,513		(4,395,406,335)	8,780,319,363
45	518,339,568		174,501,207,612	175,019,547,180	39,912,147	13,581,516,861		(4,554,481,519)	9,066,947,489
46	373,936,599		180,771,294,732	181,145,231,332	28,793,118	14,056,869,951		(4,718,130,793)	9,367,532,276
47	261,651,588		187,223,662,841	187,485,314,428	20,147,172	14,548,860,400		(4,886,537,600)	9,682,469,972
48	173,006,970		193,874,293,463	194,047,300,433	13,321,537	15,058,070,514		(5,060,119,059)	10,011,272,992
49	106,254,631		200,732,701,318	200,838,955,948	8,181,607	15,585,102,982		(5,239,123,504)	10,354,161,085
50	57,623,446		207,810,695,961	207,868,319,407	4,437,005	16,130,581,586		(5,423,859,165)	10,711,159,426
50	07,020,170	Ŷ	010,000,000	,,	.,,	,		(2, .20,007,100)	

SINGLE DISCOUNT RATE DEVELOPMENT Projection of Contributions Beginning September 1, 2014 (continued)

Year C	Payroll for urrent Employees	Р	Payroll for Future Employees	Total Employee Payroll	Contributions from Current Employees	Employer Contributions for All Employees	Employer Normal Cost Contributions Related to Payroll of Future Employees	Total Contributions
51	26,082,488	\$	215,117,628,098	215,143,710,586	2,008,352	16,695,151,941	(5,614,570,093)	11,082,590,200
52	10,096,459	\$	222,663,643,997	222,673,740,456	777,427	17,279,482,259	(5,811,521,108)	11,468,738,578
53	4,453,538	\$	230,462,867,835	230,467,321,372	342,922	17,884,264,138	(6,015,080,850)	11,869,526,210
54	2,230,670	\$	238,531,446,950	238,533,677,620	171,762	18,510,213,383	(6,225,670,765)	12,284,714,380
55	815,803	\$	246,881,540,534	246,882,356,337	62,817	19,158,070,852	(6,443,608,208)	12,714,525,461
56	397,154	\$	255,522,841,655	255,523,238,809	30,581	19,828,603,332	(6,669,146,167)	13,159,487,746
57	162,568	\$	264,466,389,599	264,466,552,167	12,518	20,522,604,448	(6,902,572,769)	13,620,044,197
58	-	\$	273,722,881,493	273,722,881,493	-	21,240,895,604	(7,144,167,207)	14,096,728,397
59	-	\$	283,303,182,345	283,303,182,345	-	21,984,326,950	(7,394,213,059)	14,590,113,891
60	-	\$	293,218,793,727	293,218,793,727	-	22,753,778,393	(7,653,010,516)	15,100,767,877
61	-	\$	303,481,451,508	303,481,451,508	-	23,550,160,637	(7,920,865,884)	15,629,294,753
62	-	\$	314,103,302,311	314,103,302,311	-	24,374,416,259	(8,198,096,190)	16,176,320,069
63	-	\$	325,096,917,892	325,096,917,892	-	25,227,520,828	(8,485,029,557)	16,742,491,271
64	-	\$	336,475,310,018	336,475,310,018	-	26,110,484,057	(8,782,005,591)	17,328,478,466
65	-	\$	348,251,945,868	348,251,945,868	-	27,024,350,999	(9,089,375,787)	17,934,975,212
66	-	\$	360,440,763,974	360,440,763,974	-	27,970,203,284	(9,407,503,940)	18,562,699,344
67	-	\$	373,056,190,713	373,056,190,713	-	28,949,160,399	(9,736,766,578)	19,212,393,821
68	-	\$	386,113,157,388	386,113,157,388	-	29,962,381,013	(10,077,553,408)	19,884,827,605
69	-	\$	399,627,117,896	399,627,117,896	-	31,011,064,349	(10,430,267,777)	20,580,796,572
70	-	\$	413,614,067,023	413,614,067,023	-	32,096,451,601	(10,795,327,149)	21,301,124,452
71	-	\$	428,090,559,369	428,090,559,369	-	33,219,827,407	(11,173,163,600)	22,046,663,807
72	-	\$	443,073,728,946	443,073,728,946	-	34,382,521,366	(11,564,224,326)	22,818,297,040
73	-	\$	458,581,309,460	458,581,309,460	-	35,585,909,614	(11,968,972,177)	23,616,937,437
74	-	\$	474,631,655,291	474,631,655,291	-	36,831,416,451	(12,387,886,203)	24,443,530,248
75	-	\$	491,243,763,226	491,243,763,226	-	38,120,516,026	(12,821,462,220)	25,299,053,806
76	-	\$	508,437,294,939	508,437,294,939	-	39,454,734,087	(13,270,213,398)	26,184,520,689
77	-	\$	526,232,600,262	526,232,600,262	-	40,835,649,780	(13,734,670,867)	27,100,978,913
78	-	\$	544,650,741,271	544,650,741,271	-	42,264,897,523	(14,215,384,347)	28,049,513,176
79	-	\$	563,713,517,215	563,713,517,215	-	43,744,168,936	(14,712,922,799)	29,031,246,137
80	-	\$	583,443,490,318	583,443,490,318	-	45,275,214,849	(15,227,875,097)	30,047,339,752
81	-	\$	603,864,012,479	603,864,012,479	-	46,859,847,368	(15,760,850,726)	31,098,996,642
82	-	\$	624,999,252,916	624,999,252,916	-	48,499,942,026	(16,312,480,501)	32,187,461,525
83	-	\$	646,874,226,768	646,874,226,768	-	50,197,439,997	(16,883,417,319)	33,314,022,678
84	-	\$	669,514,824,705	669,514,824,705	-	51,954,350,397	(17,474,336,925)	34,480,013,472
85	-	\$	692,947,843,569	692,947,843,569	-	53,772,752,661	(18,085,938,717)	35,686,813,944
86	-	\$	717,201,018,094	717,201,018,094	-	55,654,799,004	(18,718,946,572)	36,935,852,432
87	-	\$	742,303,053,727	742,303,053,727	-	57,602,716,969	(19,374,109,702)	38,228,607,267
88	-	\$	768,283,660,608	768,283,660,608	-	59,618,812,063	(20,052,203,542)	39,566,608,521
89	-	\$	795,173,588,729	795,173,588,729	-	61,705,470,485	(20,754,030,666)	40,951,439,819
90	-	\$	823,004,664,335	823,004,664,335	-	63,865,161,952	(21,480,421,739)	42,384,740,213
91	-	\$	851,809,827,586	851,809,827,586	-	66,100,442,621	(22,232,236,500)	43,868,206,121
92	-	\$	881,623,171,552	881,623,171,552	-	68,413,958,112	(23,010,364,778)	45,403,593,334
93	-	\$	912,479,982,556	912,479,982,556	-	70,808,446,646	(23,815,727,545)	46,992,719,101
94	-	\$	944,416,781,946	944,416,781,946	-	73,286,742,279	(24,649,278,009)	48,637,464,270
95	-	\$	977,471,369,314	977,471,369,314	-	75,851,778,259	(25,512,002,739)	50,339,775,520
96	-	\$	1,011,682,867,240	1,011,682,867,240	-	78,506,590,498	(26,404,922,835)	52,101,667,663
97	-	\$	1,047,091,767,593	1,047,091,767,593	-	81,254,321,165	(27,329,095,134)	53,925,226,031
98	-	\$	1,083,739,979,459	1,083,739,979,459	-	84,098,222,406	(28,285,613,464)	55,812,608,942
99	-	\$	1,121,670,878,740	1,121,670,878,740	-	87,041,660,190	(29,275,609,935)	57,766,050,255
100	-	\$	1,160,929,359,496	1,160,929,359,496	-	90,088,118,297	(30,300,256,283)	59,787,862,014

SINGLE DISCOUNT RATE DEVELOPMENT

Projection of Plan Fiduciary Net Position Beginning September 1, 2014

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 8.00%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
1	\$ 132,779,243,085	\$ 5,034,293,088	\$ 9,291,724,697	\$ 43,370,837	\$ 10,453,616,883	\$ 138,932,057,522
2	138,932,057,522	5,435,765,443	9,848,820,467	40,373,741	10,939,854,433	145,418,483,191
3	145,418,483,191	5,588,317,389	10,376,148,598	38,149,063	11,444,153,111	152,036,656,029
4	152,036,656,029	5,774,545,604	10,914,401,080	36,324,944	11,959,868,416	158,820,344,025
5	158,820,344,025	5,765,645,887	11,452,977,103	34,748,223	12,481,147,573	165,579,412,160
6	165,579,412,160	5,764,337,100	11,933,469,047	33,334,095	13,003,027,225	172,379,973,344
7	172,379,973,344	5,769,784,425	12,504,559,319	32,039,971	13,524,932,442	179,138,090,921
8	179,138,090,921	5,779,303,094	13,088,629,037	30,826,703	14,043,089,529	185,841,027,804
9	185,841,027,804	5,790,992,960	13,685,041,157	29,659,848	14,556,431,318	192,473,751,077
10	192,473,751,077	5,802,404,741	14,303,480,735	28,517,343	15,063,280,007	199,007,437,747
11	199,007,437,747	5,811,674,016	14,665,985,472	27,383,937	15,572,161,806	205,697,904,161
12	205,697,904,161	5,816,602,410	15,335,603,124	26,224,844	16,081,368,509	212,234,047,112
13	212,234,047,112	5,816,205,746	16,028,255,880	25,023,351	16,577,118,416	218,574,092,042
14	218,574,092,042	5,811,197,091	16,746,326,770	23,781,177	17,056,003,980	224,671,185,167
15	224,671,185,167	5,802,686,357	17,488,551,365	22,510,697	17,514,369,561	230,477,179,024
16	230,477,179,024	5,792,056,143	18,242,625,017	21,223,435	17,948,899,867	235,954,286,581
17	235,954,286,581	5,780,721,352	19,000,011,761	19,932,483	18,356,961,798	241,072,025,487
18	241,072,025,487	5,769,723,186	19,747,174,400	18,644,175	18,736,688,435	245,812,618,534
19	245,812,618,534	5,760,274,442	20,479,210,762	17,369,629	19,086,897,060	250,163,209,644
20	250,163,209,644	5,755,519,029	21,176,823,669	16,127,378	19,407,438,833	254,133,216,460
21	254,133,216,460	5,758,052,753	21,832,002,531	14,935,430	19,699,482,554	257,743,813,807
22	257,743,813,807	5,773,891,616	22,406,140,380	13,834,174	19,966,471,205	261,064,202,074
23	261,064,202,074	5,806,648,870	22,875,298,259	12,841,891	20,215,020,986	264,197,731,780
24	264,197,731,780	5,852,983,596	23,254,079,624	11,933,011	20,452,696,976	267,237,399,716
25	267,237,399,716	5,910,285,667	23,562,472,390	11,086,284	20,686,053,219	270,260,179,927
26	270,260,179,927	5,977,933,159	23,810,148,560	10,291,072	20,920,844,220	273,338,517,674
20	273,338,517,674	6,054,007,977	24,014,101,287	9,530,253	21,162,124,374	276,531,018,485
28	276,531,018,485	6,137,346,640	24,187,628,997	8,792,639	21,414,015,216	279,885,958,705
20 29	279,885,958,705	6,226,127,846	24,350,000,573	8,062,311	21,679,552,099	283,433,575,766
30	283,433,575,766	6,319,550,577	24,513,388,864	7,332,671	21,960,645,305	287,193,050,113
31	287,193,050,113	6,417,108,972	24,683,870,702	6,600,275	22,258,571,163	291,178,259,271
32	291,178,259,271	6,523,389,757	24,810,566,499	5,893,746	22,576,614,723	295,461,803,506
33	295,461,803,506	6,640,277,270	24,869,275,366	5,222,182	22,921,606,984	300,149,190,212
34	300,149,190,212	6,768,149,537	24,862,410,405	4,586,099	23,301,908,681	305,352,251,926
35	305,352,251,926	6,906,735,379	24,807,387,689	3,980,751	23,725,772,724	311,173,391,588
36	311,173,391,588	7,054,150,746	24,726,967,213	3,392,923	24,200,425,068	317,697,607,266
37	317,697,607,266	7,212,723,248	24,594,133,720	2,834,429	24,200,425,008	325,047,178,595
37	325,047,178,595	7,385,009,241	24,394,133,720 24,380,962,919	2,320,632	25,336,923,750	333,385,828,035
38 39	333,385,828,035	7,573,558,854	24,060,050,508	1,865,604	26,024,019,998	342,921,490,776
40	342,921,490,776	7,780,944,973				353,909,032,469
		8,007,221,608	23,604,802,331	1,484,385	26,812,883,437	
41	353,909,032,469		23,027,404,042	1,176,776 925,069	27,723,427,397	366,611,100,656
42	366,611,100,656	8,250,002,930	22,366,881,948	,	28,775,039,757	381,268,336,326
43	381,268,336,326	8,507,637,897 8,780,310,363	21,638,532,873	714,405	29,986,307,507	398,123,034,452
44 45	398,123,034,452	8,780,319,363	20,840,044,904	547,127	31,376,712,416	417,439,474,200
45 46	417,439,474,200	9,066,947,489	19,993,385,914	409,767	32,966,492,387	439,479,118,395
46 47	439,479,118,395	9,367,532,276	19,106,251,986	298,310	34,776,263,076	464,516,363,451
47	464,516,363,451	9,682,469,972	18,180,674,612	211,634	36,827,912,088	492,845,859,266
48	492,845,859,266	10,011,272,992	17,230,417,044	143,285	39,144,452,601	524,771,024,529
49 50	524,771,024,529	10,354,161,085	16,260,479,334	91,285	41,749,970,654	560,614,585,650
50	560,614,585,650	10,711,159,426	15,278,347,430	53,058	44,669,991,772	600,717,336,360

SINGLE DISCOUNT RATE DEVELOPMENT Projection of Plan Fiduciary Net Position Beginning September 1, 2014 (continued)

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Adminis trative Expenses	Projected Investment Earnings at 8.50%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
51	600,717,336,360	11,082,590,200	14,198,664,639	27,267	47,935,140,729	645,536,375,383
52	645,536,375,383	11,468,738,578	13,217,808,746	12,883	51,574,292,655	695,361,584,987
53	695,361,584,987	11,869,526,210	12,242,454,213	6,414	55,614,296,401	750,602,946,972
54	750,602,946,972	12,284,714,380	11,284,154,670	3,128	60,087,488,077	811,690,991,631
55	811,690,991,631	12,714,525,461	10,349,643,431	970	65,028,054,760	879,083,927,452
56	879,083,927,452	13,159,487,746	9,442,472,738	371	70,472,534,481	953,273,476,570
57	953,273,476,570	13,620,044,197	8,567,281,126	136	76,460,100,464	1,034,786,339,969
58	1,034,786,339,969	14,096,728,397	7,727,802,027	-	83,032,763,265	1,124,188,029,604
59	1,124,188,029,604	14,590,113,891	6,927,418,420	-	90,235,653,625	1,222,086,378,700
60	1,222,086,378,700	15,100,767,877	6,169,587,069	-	98,117,284,847	1,329,134,844,355
61	1,329,134,844,355	15,629,294,753	5,457,210,019	-	106,729,843,361	1,446,036,772,450
62	1,446,036,772,450	16,176,320,069	4,792,745,272	-	116,129,524,951	1,573,549,872,197
63	1,573,549,872,197	16,742,491,271	4,178,135,861	-	126,376,895,526	1,712,491,123,134
64	1,712,491,123,134	17,328,478,466	3,614,631,884	-	137,537,290,697	1,863,742,260,413
65	1,863,742,260,413		3,102,745,834	-	149,681,256,378	2,028,255,746,170
66	2,028,255,746,170		2,642,232,234	-	162,885,027,332	2,207,061,240,613
67	2,207,061,240,613		2,232,095,700	-	177,231,044,572	2,401,272,583,306
68	2,401,272,583,306		1,870,587,115	-	192,808,514,048	2,612,095,337,844
69	2,612,095,337,844		1,555,189,807	-	209,714,010,800	2,840,834,955,409
70	2,840,834,955,409		1,282,707,774	-	228,052,128,619	3,088,905,500,705
71	3,088,905,500,705		1,049,505,472	-	247,936,168,752	3,357,838,827,792
72	3,357,838,827,792		851,769,194	_	269,488,863,754	3,649,294,219,393
72	3,649,294,219,393		685,640,275	_	292,843,143,450	3,965,068,660,005
74	3,965,068,660,005		547,337,007	_	318,142,952,040	4,307,107,805,286
75	4,307,107,805,286		433,234,208	-	345,544,122,574	4,677,517,747,459
75 76			339,949,360	_	375,215,314,853	5,078,577,633,640
70	5,078,577,633,640		264,376,515	_	407,339,023,607	5,512,753,259,644
78	5,512,753,259,644		203,720,857	_	442,112,664,697	5,982,711,716,660
70 79	5,982,711,716,660		155,481,456	_	479,749,747,573	6,491,337,228,914
80	6,491,337,228,914		117,465,261	_	520,481,141,792	7,041,748,245,197
81	7,041,748,245,197		87,792,619	_	564,556,444,176	7,637,315,893,396
82	7,637,315,893,396		64,880,460	-	612,245,455,892	8,281,683,930,353
83	8,281,683,930,353		47,390,725		663,839,780,519	8,978,790,342,825
83 84	8,978,790,342,825		34,203,105	-	719,654,553,257	9,732,890,706,449
85	9,732,890,706,449		24,386,557	-	780,030,310,822	10,548,583,444,658
85 86	10,548,583,444,658		17,175,607	-	845,335,013,153	11,430,837,134,635
	11,430,837,134,635		11,944,575	-	915,966,228,966	12,385,020,026,293
8/				-		
88	12,385,020,026,293 13,416,931,929,159		8,203,168	-	992,353,497,513	13,416,931,929,159
89			5,557,922	-	1,074,960,881,120 1,164,289,723,688	14,532,838,692,176
90 01			3,710,941	-		15,739,509,445,136
91	15,739,509,445,136 17,044,256,850,893		2,431,565	-	1,260,881,631,201	17,044,256,850,893
92			1,558,429	-	1,365,321,691,900	18,454,980,577,698
93 04	18,454,980,577,698		972,732	-	1,478,241,955,195	19,980,214,279,263
94	19,980,214,279,263		582,410	-	1,600,325,190,783	21,629,176,351,906
95 06	21,629,176,351,906		328,777	-	1,732,308,949,040	23,411,824,747,688
96 07			167,474	-	1,874,989,946,913	25,338,916,194,790
97	25,338,916,194,790		73,900	-	2,029,228,805,430	27,422,070,152,351
98	27,422,070,152,351		30,258	-	2,195,955,166,693	29,673,837,897,729
99	29,673,837,897,729		14,613	-	2,376,173,221,387	32,107,777,154,758
100	32,107,777,154,758	59,787,862,014	12,030	-	2,570,967,678,705	34,738,532,683,448

SINGLE DISCOUNT RATE DEVELOPMENT

Present Values of Projected Benefits Beginning September 1, 2014

Year	jected Beginning lan Net Position	P	rojected Benefit Payments	nded Portion of nefit Payments	τ	infunded Portion of Benefit Payments	Fund Payme Expect	nt Value of ed Benefit ents using ted Return ate (v)	Unfu Payı Mur	ent Value of nded Benefit ments using nicipal Bond Rate (vf)	Pa	esent Value of Benefit yments using ngle Discount Rate (sdr)
(a)	(b)		(c)	(d)		(e)	(f)=(d))*v^((a)5)	(g)=(e)*vf ^((a)5)	(h)=((c)/(1+sdr)^(a5)
1	\$ 132,779,243,085	\$	9,291,724,697	\$ 9,291,724,697	\$	-	\$8,	940,966,258	\$	-	\$	8,940,966,258
2	138,932,057,522		9,848,820,467	9,848,820,467		-	8,	775,029,549		-		8,775,029,549
3	145,418,483,191		10,376,148,598	10,376,148,598		-	8,	560,059,708		-		8,560,059,708
4	152,036,656,029		10,914,401,080	10,914,401,080		-	8,	337,133,675		-		8,337,133,675
5	158,820,344,025		11,452,977,103	11,452,977,103		-	8,	100,493,778		-		8,100,493,778
6	165,579,412,160		11,933,469,047	11,933,469,047		-	7,	815,127,285		-		7,815,127,285
7	172,379,973,344		12,504,559,319	12,504,559,319		-	7,	582,527,262		-		7,582,527,262
8	179,138,090,921		13,088,629,037	13,088,629,037		-	7,	348,792,634		-		7,348,792,634
9	185,841,027,804		13,685,041,157	13,685,041,157		-	7,	114,496,765		-		7,114,496,765
10	192,473,751,077		14,303,480,735	14,303,480,735		-	6,	885,192,044		-		6,885,192,044
11	199,007,437,747		14,665,985,472	14,665,985,472		-	6,	536,749,131		-		6,536,749,131
12	205,697,904,161		15,335,603,124	15,335,603,124		-	6,	328,891,825		-		6,328,891,825
13	212,234,047,112		16,028,255,880	16,028,255,880		-	6,	124,763,497		-		6,124,763,497
14	218,574,092,042		16,746,326,770	16,746,326,770		-	5,	925,143,354		-		5,925,143,354
15	224,671,185,167		17,488,551,365	17,488,551,365		-	5,	729,403,148		-		5,729,403,148
16	230,477,179,024		18,242,625,017	18,242,625,017		-	5,	533,744,727		-		5,533,744,727
17	235,954,286,581		19,000,011,761	19,000,011,761		-	5,	336,566,237		-		5,336,566,237
18	241,072,025,487		19,747,174,400	19,747,174,400		-	5,	135,576,947		-		5,135,576,947
19	245,812,618,534		20,479,210,762	20,479,210,762		-	4,	931,439,836		-		4,931,439,836
20	250,163,209,644		21,176,823,669	21,176,823,669		-	4,	721,691,284		-		4,721,691,284
21	254,133,216,460		21,832,002,531	21,832,002,531		-	4,	507,197,466		-		4,507,197,466
22	257,743,813,807		22,406,140,380	22,406,140,380		-	4,	283,081,217		-		4,283,081,217
23	261,064,202,074		22,875,298,259	22,875,298,259		-	4,	048,855,401		-		4,048,855,401
24	264,197,731,780		23,254,079,624	23,254,079,624		-	3,	811,017,133		-		3,811,017,133
25	267,237,399,716		23,562,472,390	23,562,472,390		-	3,	575,517,016		-		3,575,517,016
26	270,260,179,927		23,810,148,560	23,810,148,560		-	3,	345,463,841		-		3,345,463,841
27	273,338,517,674		24,014,101,287	24,014,101,287		-	3,	124,185,538		-		3,124,185,538
28	276,531,018,485		24,187,628,997	24,187,628,997		-	2,	913,667,721		-		2,913,667,721
29	279,885,958,705		24,350,000,573	24,350,000,573		-	2,	715,951,088		-		2,715,951,088
30	283,433,575,766		24,513,388,864	24,513,388,864		-	2,	531,643,607		-		2,531,643,607
31	287,193,050,113		24,683,870,702	24,683,870,702		-	2,	360,416,928		-		2,360,416,928
32	291,178,259,271		24,810,566,499	24,810,566,499		-	2,	196,789,190		-		2,196,789,190
33	295,461,803,506		24,869,275,366	24,869,275,366		-	2,	038,877,240		-		2,038,877,240
34	300,149,190,212		24,862,410,405	24,862,410,405		-	1,	887,328,170		-		1,887,328,170
35	305,352,251,926		24,807,387,689	24,807,387,689		-	1,	743,658,654		-		1,743,658,654
36	311,173,391,588		24,726,967,213	24,726,967,213		-	1,	609,264,879		-		1,609,264,879
37	317,697,607,266		24,594,133,720	24,594,133,720		-	1,	482,055,457		-		1,482,055,457
38	325,047,178,595		24,380,962,919	24,380,962,919		-	1,	360,379,326		-		1,360,379,326
39	333,385,828,035		24,060,050,508	24,060,050,508		-	1,	243,030,968		-		1,243,030,968
40	342,921,490,776		23,604,802,331	23,604,802,331		-	1,	129,177,007		-		1,129,177,007
41	353,909,032,469		23,027,404,042	23,027,404,042		-	1,	019,959,398		-		1,019,959,398
42	366,611,100,656		22,366,881,948	22,366,881,948		-		917,317,318		-		917,317,318
43	381,268,336,326		21,638,532,873	21,638,532,873		-		821,709,302		-		821,709,302
44	398,123,034,452		20,840,044,904	20,840,044,904		-		732,765,961		-		732,765,961
45	417,439,474,200		19,993,385,914	19,993,385,914		-		650,922,419		-		650,922,419
46	439,479,118,395		19,106,251,986	19,106,251,986		-		575,963,055		-		575,963,055
47	464,516,363,451		18,180,674,612	18,180,674,612		-		507,464,147		-		507,464,147
48	492,845,859,266		17,230,417,044	17,230,417,044		-		445,315,081		-		445,315,081
49	524,771,024,529		16,260,479,334	16,260,479,334		-		389,117,894		-		389,117,894
50	560,614,585,650		15,278,347,430	15,278,347,430		-		338,532,591		-		338,532,591

SINGLE DISCOUNT RATE DEVELOPMENT PVs of Projected Benefits Beginning September 1, 2014 (continued)

Year		ojected Beginning lan Net Position	P	Projected Benefit Payments		unded Portion of cenefit Payments	U	Infunded Portion of Benefit Payments		Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of Benefit Payments using Single Discount Rate (sdr)
(a)	-	(b)		(c)	-	(d)		(e)		(f)=(d)*v^((a)5)		(h)=((c)/(1+sdr)^(a5)
51	\$	600,717,336,360	\$		\$	14,198,664,639	\$	-	9		\$ -	\$ 291,304,940
52	Ψ	645,536,375,383	Ψ	13,217,808,746	Ψ	13,217,808,746	Ψ	-	4	251,093,839	÷ _	251,093,839
53		695,361,584,987		12,242,454,213		12,242,454,213		-		215,338,322		215,338,322
54		750,602,946,972		11,284,154,670		11,284,154,670		-		183,779,943	_	183,779,943
55		811,690,991,631		10,349,643,431		10,349,643,431				156,074,055	-	156,074,055
56		879,083,927,452		9,442,472,738		9,442,472,738		-		131,846,107	_	131,846,107
57		953,273,476,570		8,567,281,126		8,567,281,126		-		110,764,562		110,764,562
58		1,034,786,339,969		7,727,802,027		7,727,802,027		-		92,510,291	-	92,510,291
59		1,124,188,029,604		6,927,418,420		6,927,418,420		-		76,785,943	-	76,785,943
60		1,222,086,378,700		6,169,587,069		6,169,587,069		-		63,320,254	_	63,320,254
61		1,329,134,844,355		5,457,210,019		5,457,210,019		-		51,860,113	-	51,860,113
62		1,446,036,772,450		4,792,745,272		4,792,745,272		-		42,171,921	-	42,171,921
63		1,573,549,872,197		4,178,135,861		4,178,135,861		-		34,040,650	-	34,040,650
64		1,712,491,123,134		3,614,631,884		3,614,631,884		-		27,268,145	-	27,268,145
65		1,863,742,260,413		3,102,745,834		3,102,745,834		-		21,672,748	-	21,672,748
66		2,028,255,746,170		2,642,232,234		2,642,232,234		-		17,088,935	-	17,088,935
67		2,207,061,240,613		2,232,095,700		2,232,095,700		-		13,366,973	-	13,366,973
68		2,401,272,583,306		1,870,587,115		1,870,587,115		-		10,372,285	-	10,372,285
69		2,612,095,337,844		1,555,189,807		1,555,189,807		-		7,984,655	-	7,984,655
70		2,840,834,955,409		1,282,707,774		1,282,707,774		-		6,097,850	-	6,097,850
71		3,088,905,500,705		1,049,505,472		1,049,505,472		-		4,619,659	-	4,619,659
72		3,357,838,827,792		851,769,194		851,769,194		-		3,471,550	-	3,471,550
73		3,649,294,219,393		685,640,275		685,640,275		-		2,587,462	-	2,587,462
74		3,965,068,660,005		547,337,007		547,337,007		-		1,912,532	-	1,912,532
75		4,307,107,805,286		433,234,208		433,234,208		-		1,401,693	-	1,401,693
76		4,677,517,747,459		339,949,360		339,949,360		-		1,018,405	-	1,018,405
77		5,078,577,633,640		264,376,515		264,376,515		-		733,340	-	733,340
78		5,512,753,259,644		203,720,857		203,720,857		-		523,232	-	523,232
79		5,982,711,716,660		155,481,456		155,481,456		-		369,755	-	369,755
80		6,491,337,228,914		117,465,261		117,465,261		-		258,655	-	258,655
81		7,041,748,245,197		87,792,619		87,792,619		-		178,997	-	178,997
82		7,637,315,893,396		64,880,460		64,880,460		-		122,484	-	122,484
83		8,281,683,930,353		47,390,725		47,390,725		-		82,839	-	82,839
84		8,978,790,342,825		34,203,105		34,203,105		-		55,358	-	55,358
85		9,732,890,706,449		24,386,557		24,386,557		-		36,546	-	36,546
86		10,548,583,444,658		17,175,607		17,175,607		-		23,833	-	23,833
87		11,430,837,134,635		11,944,575		11,944,575		-		15,347	-	15,347
88		12,385,020,026,293		8,203,168		8,203,168		-		9,759	-	9,759
89		13,416,931,929,159		5,557,922		5,557,922		-		6,122	-	6,122
90		14,532,838,692,176		3,710,941		3,710,941		-		3,785	-	3,785
91		15,739,509,445,136		2,431,565		2,431,565		-		2,296	-	2,296
92		17,044,256,850,893		1,558,429		1,558,429		-		1,363	-	1,363
93		18,454,980,577,698		972,732		972,732		-		788	-	788
94		19,980,214,279,263		582,410		582,410		-		437	-	437
95		21,629,176,351,906		328,777		328,777		-		228	-	228
96		23,411,824,747,688		167,474		167,474		-		108	-	108
97		25,338,916,194,790		73,900		73,900		-		44	-	44
98		27,422,070,152,351		30,258		30,258		-		17	-	17
99		29,673,837,897,729		14,613		14,613		-		7	-	7
100		32,107,777,154,758		12,030		12,030		-		6	-	6
								Totals	9	5 195,892,593,135	\$ -	\$ 195,892,593,135