

NEW HAMPSHIRE RETIREMENT SYSTEM

**GASB STATEMENT NO. 67 PLAN REPORTING AND ACCOUNTING
SCHEDULES**

JUNE 30, 2014



November 21, 2014

Board of Trustees
New Hampshire Retirement System
54 Regional Drive
Concord, New Hampshire 03301-8509

Dear Board Members:

This report provides information for the New Hampshire Retirement System (“NHRS”) in connection with the Governmental Accounting Standards Board (GASB) Statement No. 67 “Financial Reporting for Pension Plans” as of June 30, 2014.

Our actuarial calculations for this report were prepared for the purpose of satisfying the requirements of GASB Statement No. 67. These calculations have been made on a basis that is consistent with our understanding of this accounting standard.

The total pension liability shown in this report is based on a roll-forward of the June 30, 2013 valuation. The calculation of the plan’s liability for this report is not applicable for funding purposes of the plan. A calculation of the plan’s liability for purposes other than satisfying the requirements of GASB Statement No. 67 may produce significantly different results. This report may be provided to parties other than the NHRS only in its entirety and only with the permission of the NHRS.

The valuation was based upon information, furnished by NHRS staff, concerning Retirement System benefits, financial transactions, and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the data provided by NHRS.

This report complements the actuarial valuation report that we provided to the Board and should be considered in conjunction with that report. Please see the actuarial valuation report as of June 30, 2013 for additional discussion of the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions.

This information is presented in draft form for review by the plan’s auditor. Please let us know if there are any items that the auditor changes so that we may maintain consistency with the plan’s financial statements.

To the best of our knowledge, this report is complete, accurate, and in accordance with generally recognized actuarial methods. The signing actuaries are independent of the plan sponsor. David Kausch, Randall Dziubek, and Heidi Barry are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the Academy of Actuaries to render the actuarial opinion herein.

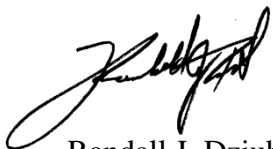
Respectfully submitted,



David T. Kausch, FSA, EA, MAAA



Heidi G. Barry, ASA, MAAA



Randall J. Dziubek, ASA, EA, MAAA

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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).

The total pension liability shown in this report is based on an actuarial valuation performed as of June 30, 2013 rolled forward to the measurement date of June 30, 2014. The roll forward procedure increases the June 30, 2013 actuarial accrued liability with normal cost and interest and decreases it with actual benefit payments and administrative expenses paid.

A single discount rate of 7.75% 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 7.75%. The projection of cash flows, shown in the Appendix, used to determine this single discount rate assumed that employer contributions will be made under the current statute RSA 100-A:16 and that plan member contributions will be made under RSA 100-A:16. Based on these assumptions, the pension plan’s fiduciary net position was projected to be sufficient to make all projected future benefit payments due to 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 calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current single discount rate:

Sensitivity of the Net Pension Liability to the Single Discount Rate Assumption

Measurement Date	1% Decrease 6.75%	Current Single Rate Assumption 7.75%	1% Increase 8.75%
2014	\$4,944,083,125	\$3,753,585,752	\$2,749,222,899
2013	\$5,517,542,052	\$4,303,784,472	\$3,283,507,050

Statement of Fiduciary Net Position as of June 30, 2014

	2014*
Assets	
Cash and Deposits	\$ 9,877,501
Receivables	
Accounts Receivable - Sale of Investments	\$ 11,922,864
Interest and Dividend Receivables	18,519,297
Contributions	63,929,060
Accounts Receivable - Other	2,585,826
Total Receivables	\$ 96,957,047
Investments	
Fixed Income	\$ 1,571,636,081
Domestic Equities	3,096,844,220
International Equities	1,500,539,222
Real Estate	655,155,375
Other	486,745,096
Total Investments	\$ 7,310,919,994
Total Assets	\$ 7,417,754,542
Liabilities	
Payables	
Accounts Payable - Purchase of Investments	\$ 18,161,041
Accrued Expenses	8,965,480
Total Liabilities	\$ 27,126,521
Net Position Restricted for Pensions	\$ 7,390,628,021

* Reported amount provided by the System as of June 30, 2014 do not include the 401(h) medical subsidy account.

Statement of Changes in Fiduciary Net Position for Year Ended June 30, 2014

	Total
Additions	
Contributions	
Employer	\$ 328,444,256
Member	199,032,996
Total Contributions	\$ 527,477,252
Investment Income	
Net Appreciation in Fair Value of Investments	\$ 960,330,492
Interest and Dividends	162,450,841
Less Investment Expense	(30,196,012)
Net Investment Income	\$ 1,092,585,321
Total Additions	\$ 1,620,062,573
 Deductions	
Benefit Payments and Refunds	\$ 625,595,365
Pension Plan Administrative Expense	7,376,270
Other custodial, professional and non-investment expenses	1,446,882
Total Deductions	\$ 634,418,517
Net Increase in Net Position	\$ 985,644,056
 Net Position Restricted for Pensions	
Beginning of Year	\$ 6,404,983,965
End of Year	\$ 7,390,628,021

Schedules of Required Supplementary Information
Schedule of Changes in the Employers' Net Pension Liability and
Related Ratios
Ultimately 10 Fiscal Years will be Displayed

Fiscal Year Ending	<u>June 30, 2014</u>	<u>June 30, 2013</u>
Total Pension Liability		
Service Cost	\$ 245,827,165	\$ 255,178,452
Interest on the Total Pension Liability	815,213,536	789,791,575
Benefit Changes	-	-
Difference between expected and actual experience of the Total Pension Liability	-	(101,140,741)
Assumption Changes	-	-
Benefit Payments	(599,475,606)	(573,470,316)
Refunds	(26,119,759)	(23,190,984)
Net Change in Total Pension Liability	<u>435,445,336</u>	<u>347,167,986</u>
Total Pension Liability - Beginning	<u>10,708,768,437</u>	<u>10,361,600,451</u>
Total Pension Liability - Ending (a)	<u><u>\$ 11,144,213,773</u></u>	<u><u>\$ 10,708,768,437</u></u>
Plan Fiduciary Net Position		
Contributions - Employer	\$ 328,444,256	\$ 249,835,597
Contributions - Member	199,032,996	196,488,619
Pension Plan Net Investment Income	1,092,585,321	813,797,720
Benefit Payments	(599,475,606)	(573,470,316)
Refunds	(26,119,759)	(23,190,984)
Pension Plan Administrative Expense	(7,376,270)	(6,998,526)
Other custodial, professional and non-investment expenses	(1,446,882)	(1,804,939)
Net Change in Plan Fiduciary Net Position	<u>985,644,056</u>	<u>654,657,171</u>
Plan Fiduciary Net Position - Beginning	<u>6,404,983,965</u>	<u>5,750,326,794</u>
Plan Fiduciary Net Position - Ending (b)	<u><u>\$ 7,390,628,021</u></u>	<u><u>\$ 6,404,983,965</u></u>
Net Pension Liability - Ending (a) - (b)	3,753,585,752	4,303,784,472
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	66.32 %	59.81 %
Covered Employee Payroll	\$ 2,507,898,809 *	\$ 2,501,741,708
Net Pension Liability as a Percentage of Covered Employee Payroll	149.67 %	172.03 %

Notes to Schedule:

**Based on the June 30, 2014 census data.*

Schedules of Required Supplementary Information
Schedule of the Employers' Net Pension Liability
Ultimately 10 Fiscal Years will be Displayed

FY Ending June 30,	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a % of Total Pension Liability	Covered Payroll*	Net Pension Liability as a % of Covered Payroll
2013	\$ 10,708,768,437	\$ 6,404,983,965	\$ 4,303,784,472	59.81%	\$ 2,501,741,708	172.03%
2014	\$ 11,144,213,773	\$ 7,390,628,021	\$ 3,753,585,752	66.32%	\$ 2,507,898,809	149.67%

**Covered payroll shown is the amount in force on the valuation date used in the determination of the net pension liability. Actual payroll paid during the year will differ.*

Schedule of Contributions
Ultimately 10 Fiscal Years will be Displayed

FY Ending June 30,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll*	Actual Contribution as a % of Covered Payroll
2013	\$ 249,835,597	\$ 249,835,597	\$ -	\$ 2,501,741,708	9.99%
2014	\$ 328,444,256	\$ 328,444,256	\$ -	\$ 2,507,898,809	13.10%

**Covered payroll shown is the amount in force on the valuation date used in the determination of the net pension liability. Actual payroll paid during the year will differ.*

Notes to Schedule of Contributions

Valuation Date:

Notes The roll-forward of total pension liability from June 30, 2013 to June 30, 2014 reflects expected service cost and interest reduced by actual benefit payments and administrative expenses. Actuarially determined contribution rates are calculated as of June 30, 2013 for the 2016-2017 biennium. Future employer contribution rates for the purposes of the projection in this report are based on the closed statutory amortization period.

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial Cost Method	Entry-Age Normal
Amortization Method	Level Percentage-of-Payroll, Closed
Remaining Amortization Period	25 years beginning July 1, 2014
Asset Valuation Method	5-year smoothed market for funding purposes
Price Inflation	3.0% per year
Wage Inflation	3.75% per year
Salary Increases	5.8% Average, including inflation
Municipal Bond Rate	4.29% per year
Investment Rate of Return	7.75% per year
Retirement Age	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 2005 - 2010.
Mortality	RP-2000 mortality table, projected to 2020 with Scale AA. The table includes a margin of 15% for men and 17% for women for mortality improvements.

Other Information:

Notes There were no benefit changes during the year.

NOTE: A full list of actuarial assumptions and the summary of benefit provisions can be found in the June 30, 2013 valuation report.

Summary of Population Statistics as of June 30, 2013

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	29,729
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	1,261
Active Plan Members	48,688
Non-Vested Inactive Members	<u>7,273</u>
Total Plan Members	86,951

Additional information regarding the covered population as of June 30, 2013 may be found in the actuarial valuation report issued November 18, 2013.

All plan provisions, actuarial assumptions and methods are described in the June 30, 2013 actuarial valuation report.

APPENDIX

CALCULATION OF THE SINGLE DISCOUNT RATE

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 as of the measurement date (to the extent that the plan fiduciary net position is not projected to be sufficient to pay benefits).

The determination of the discount rate is done at the plan level. Our understanding is that all pension assets are available to pay the pension benefits of the four member classifications so there is one plan for the discount rate calculation. For the purpose of this valuation, the expected rate of return on pension plan investments is 7.75%; the municipal bond rate is 4.29% (based on the June 2014 Bond Buyer Index as published by the Federal Reserve); and the resulting single discount rate is 7.75%.

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. Service Cost contributions for future hires after June 30, 2014 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 after June 30, 2014.

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 JULY 1, 2014
(YEARS 1-50 ONLY)

Year	Payroll for Current Employees	Contributions from Current Employees*	Employer Service Cost and Expense Contributions*	UAL Contributions	Total Contributions
0	\$ 2,507,898,809				
1	2,493,527,042	\$ 183,135,611	\$ 57,644,223	\$ 265,818,404	\$ 506,598,237
2	2,395,785,437	175,991,258	53,862,770	296,383,653	526,237,681
3	2,302,329,007	169,137,174	50,122,204	307,498,040	526,757,419
4	2,210,384,787	162,391,555	46,409,285	254,062,014	462,862,854
5	2,119,375,349	155,685,021	42,787,935	263,589,339	462,062,295
6	2,027,850,321	148,906,235	39,235,250	273,473,940	461,615,424
7	1,936,023,372	142,059,552	35,721,231	283,729,212	461,509,995
8	1,843,397,498	135,153,562	32,288,545	294,369,058	461,811,164
9	1,751,209,457	128,315,107	29,038,876	305,407,897	462,761,881
10	1,660,168,570	121,550,894	25,978,318	316,860,694	464,389,906
11	1,569,792,094	114,832,401	23,092,930	328,742,970	466,668,300
12	1,480,825,336	108,239,414	20,397,111	341,070,831	469,707,356
13	1,392,859,333	101,718,906	17,883,371	353,860,987	473,463,264
14	1,305,805,186	95,270,281	15,545,279	367,130,774	477,946,334
15	1,220,643,165	88,983,129	13,403,098	380,898,178	483,284,405
16	1,135,719,525	82,697,312	11,399,545	395,181,860	489,278,717
17	1,051,751,897	76,461,359	9,534,616	410,001,180	495,997,155
18	970,500,362	70,429,453	7,874,991	425,376,224	503,680,668
19	891,244,153	64,536,954	6,391,692	441,327,832	512,256,479
20	812,652,826	58,692,070	5,052,855	457,877,626	521,622,551
21	736,501,377	53,014,655	3,891,231	475,048,037	531,953,923
22	663,109,390	47,551,260	2,902,650	492,862,338	543,316,248
23	592,063,289	42,257,936	2,071,836	511,344,676	555,674,448
24	523,080,908	37,085,444	1,377,267	530,520,101	568,982,812
25	458,243,354	32,246,783	828,144	550,414,605	583,489,533
26	397,401,060	27,764,082	395,594	-	28,159,676
27	340,943,975	23,619,488	98,458	-	23,717,946
28	289,673,693	19,716,582	83,582	-	19,800,164
29	244,161,327	16,355,767	70,598	-	16,426,365
30	204,764,020	13,515,981	59,288	-	13,575,268
31	170,844,904	11,117,073	51,137	-	11,168,210
32	141,592,373	9,082,277	43,321	-	9,125,599
33	116,463,885	7,365,049	36,713	-	7,401,763
34	94,382,298	5,885,034	31,235	-	5,916,269
35	75,082,691	4,619,161	25,450	-	4,644,611
36	58,637,394	3,563,387	21,365	-	3,584,752
37	44,850,920	2,691,812	17,403	-	2,709,215
38	33,585,666	1,990,752	14,031	-	2,004,782
39	24,234,789	1,420,335	11,144	-	1,431,479
40	16,698,725	968,461	8,866	-	977,327
41	10,945,095	627,617	6,829	-	634,446
42	6,878,911	388,551	4,825	-	393,376
43	4,187,709	230,919	3,318	-	234,237
44	2,472,486	133,432	2,254	-	135,686
45	1,351,276	71,441	1,497	-	72,937
46	679,658	35,488	896	-	36,384
47	319,423	16,393	429	-	16,822
48	148,797	7,350	238	-	7,588
49	56,926	2,681	111	-	2,792
50	16,180	742	39	-	781

**SINGLE DISCOUNT RATE DEVELOPMENT
PROJECTION OF PLAN FIDUCIARY NET POSITION BEGINNING JULY 1, 2014
(YEARS 1-50)**

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 7.75%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
1	\$ 7,390,628,021	\$ 506,598,237	\$ 684,645,043	\$ 8,727,345	\$ 565,671,216	\$ 7,769,525,086
2	7,769,525,086	526,237,681	720,804,166	8,385,249	594,420,554	8,160,993,907
3	8,160,993,907	526,757,419	758,459,869	8,058,152	623,359,657	8,544,592,962
4	8,544,592,962	462,862,854	796,096,482	7,736,347	649,239,898	8,852,862,884
5	8,852,862,884	462,062,295	835,592,832	7,417,814	671,610,560	9,143,525,094
6	9,143,525,094	461,615,424	875,200,985	7,097,476	692,625,892	9,415,467,949
7	9,415,467,949	461,509,995	914,891,840	6,776,082	712,200,352	9,667,510,374
8	9,667,510,374	461,811,164	953,445,586	6,451,891	730,291,338	9,899,715,400
9	9,899,715,400	462,761,881	991,432,042	6,129,233	746,891,141	10,111,807,146
10	10,111,807,146	464,389,906	1,029,369,737	5,810,590	761,959,621	10,302,976,347
11	10,302,976,347	466,668,300	1,064,654,509	5,494,272	775,532,130	10,475,027,996
12	10,475,027,996	469,707,356	1,098,242,927	5,182,889	787,716,274	10,629,025,810
13	10,629,025,810	473,463,264	1,130,030,571	4,875,008	798,596,850	10,766,180,345
14	10,766,180,345	477,946,334	1,159,503,914	4,570,318	808,287,609	10,888,340,056
15	10,888,340,056	483,284,405	1,186,260,258	4,272,251	816,951,849	10,998,043,801
16	10,998,043,801	489,278,717	1,212,366,351	3,975,018	824,700,402	11,095,681,550
17	11,095,681,550	495,997,155	1,236,779,389	3,681,132	831,605,631	11,182,823,815
18	11,182,823,815	503,680,668	1,257,934,792	3,396,751	837,857,675	11,263,030,615
19	11,263,030,615	512,256,479	1,276,217,530	3,119,355	843,715,126	11,339,665,334
20	11,339,665,334	521,622,551	1,291,766,316	2,844,285	849,429,666	11,416,106,950
21	11,416,106,950	531,953,923	1,303,391,176	2,577,755	855,314,840	11,497,406,782
22	11,497,406,782	543,316,248	1,310,822,529	2,320,883	861,774,828	11,589,354,445
23	11,589,354,445	555,674,448	1,314,560,813	2,072,222	869,238,017	11,697,633,875
24	11,697,633,875	568,982,812	1,315,387,250	1,830,783	878,113,504	11,827,512,158
25	11,827,512,158	583,489,533	1,311,595,983	1,603,852	888,883,517	11,986,685,373
26	11,986,685,373	28,159,676	1,303,345,437	1,390,904	880,423,768	11,590,532,476
27	11,590,532,476	23,717,946	1,291,191,952	1,193,304	850,022,687	11,171,887,854
28	11,171,887,854	19,800,164	1,274,332,070	1,013,858	818,076,702	10,734,418,791
29	10,734,418,791	16,426,365	1,252,933,988	854,565	784,864,316	10,281,920,919
30	10,281,920,919	13,575,268	1,226,762,467	716,674	750,687,779	9,818,704,826
31	9,818,704,826	11,168,210	1,196,835,565	597,957	715,839,543	9,348,279,057
32	9,348,279,057	9,125,599	1,163,453,627	495,573	680,577,179	8,874,032,634
33	8,874,032,634	7,401,763	1,126,847,148	407,624	645,152,907	8,399,332,532
34	8,399,332,532	5,916,269	1,087,741,258	330,338	609,797,178	7,926,974,383
35	7,926,974,383	4,644,611	1,046,518,658	262,789	574,711,204	7,459,548,751
36	7,459,548,751	3,584,752	1,003,889,696	205,231	540,068,653	6,999,107,230
37	6,999,107,230	2,709,215	960,241,023	156,978	506,012,803	6,547,431,247
38	6,547,431,247	2,004,782	916,017,674	117,550	472,664,307	6,105,965,112
39	6,105,965,112	1,431,479	872,140,908	84,822	440,098,625	5,675,269,486
40	5,675,269,486	977,327	828,476,949	58,446	408,363,856	5,256,075,273
41	5,256,075,273	634,446	784,374,092	38,308	377,541,129	4,849,838,449
42	4,849,838,449	393,376	739,253,042	24,076	347,764,966	4,458,719,673
43	4,458,719,673	234,237	693,787,013	14,657	319,176,503	4,084,328,743
44	4,084,328,743	135,686	648,825,257	8,654	291,867,447	3,727,497,965
45	3,727,497,965	72,937	604,714,512	4,729	265,888,223	3,388,739,885
46	3,388,739,885	36,384	561,520,957	2,379	241,275,691	3,068,528,623
47	3,068,528,623	16,822	519,513,480	1,118	218,056,040	2,767,086,887
48	2,767,086,887	7,588	478,896,420	521	196,238,521	2,484,436,055
49	2,484,436,055	2,792	439,809,900	199	175,819,253	2,220,448,001
50	2,220,448,001	781	402,330,630	57	156,785,331	1,974,903,426

SINGLE DISCOUNT RATE DEVELOPMENT
PROJECTION OF PLAN FIDUCIARY NET POSITION BEGINNING JULY 1, 2014
(YEARS 51-100)

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 7.75%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
51	\$ 1,974,903,426	\$ 151	\$ 366,516,509	\$ 11	\$ 139,117,507	\$ 1,747,504,564
52	1,747,504,564	27	332,415,688	2	122,790,842	1,537,879,742
53	1,537,879,742	-	300,062,791	-	107,775,200	1,345,592,151
54	1,345,592,151	-	269,483,700	-	94,035,742	1,170,144,192
55	1,170,144,192	-	240,701,378	-	81,533,030	1,010,975,844
56	1,010,975,844	-	213,733,202	-	70,223,001	867,465,643
57	867,465,643	-	188,591,318	-	60,057,030	738,931,355
58	738,931,355	-	165,280,203	-	50,982,074	624,633,227
59	624,633,227	-	143,796,662	-	42,940,923	523,777,487
60	523,777,487	-	124,131,856	-	35,872,396	435,518,027
61	435,518,027	-	106,267,578	-	29,711,613	358,962,062
62	358,962,062	-	90,173,489	-	24,390,535	293,179,108
63	293,179,108	-	75,806,691	-	19,838,682	237,211,099
64	237,211,099	-	63,109,616	-	15,983,992	190,085,476
65	190,085,476	-	52,008,103	-	12,753,914	150,831,286
66	150,831,286	-	42,412,155	-	10,076,619	118,495,750
67	118,495,750	-	34,216,980	-	7,882,252	92,161,023
68	92,161,023	-	27,305,552	-	6,104,132	70,959,602
69	70,959,602	-	21,551,814	-	4,679,819	54,087,608
70	54,087,608	-	16,824,339	-	3,552,011	40,815,280
71	40,815,280	-	12,991,231	-	2,669,167	30,493,215
72	30,493,215	-	9,923,727	-	1,985,855	22,555,343
73	22,555,343	-	7,499,953	-	1,462,839	16,518,229
74	16,518,229	-	5,608,779	-	1,066,878	11,976,328
75	11,976,328	-	4,151,120	-	770,311	8,595,519
76	8,595,519	-	3,040,588	-	550,528	6,105,460
77	6,105,460	-	2,203,847	-	389,367	4,290,980
78	4,290,980	-	1,580,330	-	272,456	2,983,106
79	2,983,106	-	1,120,982	-	188,563	2,050,687
80	2,050,687	-	786,359	-	129,025	1,393,353
81	1,393,353	-	545,258	-	87,250	935,345
82	935,345	-	373,545	-	58,284	620,085
83	620,085	-	252,727	-	38,446	405,804
84	405,804	-	168,782	-	25,032	262,053
85	262,053	-	111,211	-	16,080	166,923
86	166,923	-	72,279	-	10,188	104,832
87	104,832	-	46,329	-	6,363	64,866
88	64,866	-	29,279	-	3,914	39,500
89	39,500	-	18,229	-	2,368	23,640
90	23,640	-	11,176	-	1,407	13,871
91	13,871	-	6,738	-	819	7,952
92	7,952	-	3,979	-	465	4,438
93	4,438	-	2,294	-	257	2,401
94	2,401	-	1,288	-	137	1,249
95	1,249	-	697	-	70	623
96	623	-	362	-	35	296
97	296	-	183	-	16	129
98	129	-	89	-	7	46
99	46	-	48	-	2	0
100	0	-	-	-	0	0

SINGLE DISCOUNT RATE DEVELOPMENT
PRESENT VALUES OF PROJECTED BENEFIT PAYMENTS BEGINNING JULY 1, 2014
(YEARS 1-50)

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded 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 ((a)-.5)	(g)=(e)*vf ^a ((a)-.5)	(h)=(c)/((1+sdr) ^a (a-.5)
1	\$ 7,390,628,021	\$ 684,645,043	\$ 684,645,043	\$ -	\$ 659,563,826	\$ -	\$ 659,563,826
2	7,769,525,086	720,804,166	720,804,166	-	644,453,178	-	644,453,178
3	8,160,993,907	758,459,869	758,459,869	-	629,345,903	-	629,345,903
4	8,544,592,962	796,096,482	796,096,482	-	613,063,174	-	613,063,174
5	8,852,862,884	835,592,832	835,592,832	-	597,196,084	-	597,196,084
6	9,143,525,094	875,200,985	875,200,985	-	580,514,089	-	580,514,089
7	9,415,467,949	914,891,840	914,891,840	-	563,193,251	-	563,193,251
8	9,667,510,374	953,445,586	953,445,586	-	544,711,220	-	544,711,220
9	9,899,715,400	991,432,042	991,432,042	-	525,673,496	-	525,673,496
10	10,111,807,146	1,029,369,737	1,029,369,737	-	506,532,420	-	506,532,420
11	10,302,976,347	1,064,654,509	1,064,654,509	-	486,213,788	-	486,213,788
12	10,475,027,996	1,098,242,927	1,098,242,927	-	465,478,588	-	465,478,588
13	10,629,025,810	1,130,030,571	1,130,030,571	-	444,502,499	-	444,502,499
14	10,766,180,345	1,159,503,914	1,159,503,914	-	423,290,922	-	423,290,922
15	10,888,340,056	1,186,260,258	1,186,260,258	-	401,910,579	-	401,910,579
16	10,998,043,801	1,212,366,351	1,212,366,351	-	381,211,552	-	381,211,552
17	11,095,681,550	1,236,779,389	1,236,779,389	-	360,916,833	-	360,916,833
18	11,182,823,815	1,257,934,792	1,257,934,792	-	340,687,147	-	340,687,147
19	11,263,030,615	1,276,217,530	1,276,217,530	-	320,778,349	-	320,778,349
20	11,339,665,334	1,291,766,316	1,291,766,316	-	301,333,224	-	301,333,224
21	11,416,106,950	1,303,391,176	1,303,391,176	-	282,176,317	-	282,176,317
22	11,497,406,782	1,310,822,529	1,310,822,529	-	263,373,698	-	263,373,698
23	11,589,354,445	1,314,560,813	1,314,560,813	-	245,127,428	-	245,127,428
24	11,697,633,875	1,315,387,250	1,315,387,250	-	227,639,475	-	227,639,475
25	11,827,512,158	1,311,595,983	1,311,595,983	-	210,657,413	-	210,657,413
26	11,986,685,373	1,303,345,437	1,303,345,437	-	194,275,898	-	194,275,898
27	11,590,532,476	1,291,191,952	1,291,191,952	-	178,621,167	-	178,621,167
28	11,171,887,854	1,274,332,070	1,274,332,070	-	163,609,096	-	163,609,096
29	10,734,418,791	1,252,933,988	1,252,933,988	-	149,291,728	-	149,291,728
30	10,281,920,919	1,226,762,467	1,226,762,467	-	135,659,670	-	135,659,670
31	9,818,704,826	1,196,835,565	1,196,835,565	-	122,830,857	-	122,830,857
32	9,348,279,057	1,163,453,627	1,163,453,627	-	110,816,593	-	110,816,593
33	8,874,032,634	1,126,847,148	1,126,847,148	-	99,610,116	-	99,610,116
34	8,399,332,532	1,087,741,258	1,087,741,258	-	89,237,370	-	89,237,370
35	7,926,974,383	1,046,518,658	1,046,518,658	-	79,680,281	-	79,680,281
36	7,459,548,751	1,003,889,696	1,003,889,696	-	70,936,964	-	70,936,964
37	6,999,107,230	960,241,023	960,241,023	-	62,972,303	-	62,972,303
38	6,547,431,247	916,017,674	916,017,674	-	55,751,415	-	55,751,415
39	6,105,965,112	872,140,908	872,140,908	-	49,263,064	-	49,263,064
40	5,675,269,486	828,476,949	828,476,949	-	43,430,809	-	43,430,809
41	5,256,075,273	784,374,092	784,374,092	-	38,161,325	-	38,161,325
42	4,849,838,449	739,253,042	739,253,042	-	33,379,210	-	33,379,210
43	4,458,719,673	693,787,013	693,787,013	-	29,073,132	-	29,073,132
44	4,084,328,743	648,825,257	648,825,257	-	25,233,420	-	25,233,420
45	3,727,497,965	604,714,512	604,714,512	-	21,826,368	-	21,826,368
46	3,388,739,885	561,520,957	561,520,957	-	18,809,610	-	18,809,610
47	3,068,528,623	519,513,480	519,513,480	-	16,150,775	-	16,150,775
48	2,767,086,887	478,896,420	478,896,420	-	13,817,226	-	13,817,226
49	2,484,436,055	439,809,900	439,809,900	-	11,776,791	-	11,776,791
50	2,220,448,001	402,330,630	402,330,630	-	9,998,338	-	9,998,338

SINGLE DISCOUNT RATE DEVELOPMENT
PRESENT VALUES OF PROJECTED BENEFIT PAYMENTS BEGINNING JULY 1, 2014
(CONCLUDED)
(YEARS 51-100)

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded 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}	(g)=(e)*vf ^{(a)-.5}	(h)=(c)/(1+sdr) ^{(a)-.5}
51	\$ 1,974,903,426	\$ 366,516,509	\$ 366,516,509	\$ -	\$ 8,453,196	\$ -	\$ 8,453,196
52	1,747,504,564	332,415,688	332,415,688	-	7,115,274	-	7,115,274
53	1,537,879,742	300,062,791	300,062,791	-	5,960,806	-	5,960,806
54	1,345,592,151	269,483,700	269,483,700	-	4,968,303	-	4,968,303
55	1,170,144,192	240,701,378	240,701,378	-	4,118,479	-	4,118,479
56	1,010,975,844	213,733,202	213,733,202	-	3,394,009	-	3,394,009
57	867,465,643	188,591,318	188,591,318	-	2,779,364	-	2,779,364
58	738,931,355	165,280,203	165,280,203	-	2,260,619	-	2,260,619
59	624,633,227	143,796,662	143,796,662	-	1,825,316	-	1,825,316
60	523,777,487	124,131,856	124,131,856	-	1,462,363	-	1,462,363
61	435,518,027	106,267,578	106,267,578	-	1,161,864	-	1,161,864
62	358,962,062	90,173,489	90,173,489	-	914,990	-	914,990
63	293,179,108	75,806,691	75,806,691	-	713,884	-	713,884
64	237,211,099	63,109,616	63,109,616	-	551,567	-	551,567
65	190,085,476	52,008,103	52,008,103	-	421,849	-	421,849
66	150,831,286	42,412,155	42,412,155	-	319,270	-	319,270
67	118,495,750	34,216,980	34,216,980	-	239,052	-	239,052
68	92,161,023	27,305,552	27,305,552	-	177,045	-	177,045
69	70,959,602	21,551,814	21,551,814	-	129,688	-	129,688
70	54,087,608	16,824,339	16,824,339	-	93,959	-	93,959
71	40,815,280	12,991,231	12,991,231	-	67,334	-	67,334
72	30,493,215	9,923,727	9,923,727	-	47,735	-	47,735
73	22,555,343	7,499,953	7,499,953	-	33,482	-	33,482
74	16,518,229	5,608,779	5,608,779	-	23,238	-	23,238
75	11,976,328	4,151,120	4,151,120	-	15,962	-	15,962
76	8,595,519	3,040,588	3,040,588	-	10,851	-	10,851
77	6,105,460	2,203,847	2,203,847	-	7,299	-	7,299
78	4,290,980	1,580,330	1,580,330	-	4,857	-	4,857
79	2,983,106	1,120,982	1,120,982	-	3,198	-	3,198
80	2,050,687	786,359	786,359	-	2,082	-	2,082
81	1,393,353	545,258	545,258	-	1,340	-	1,340
82	935,345	373,545	373,545	-	852	-	852
83	620,085	252,727	252,727	-	535	-	535
84	405,804	168,782	168,782	-	332	-	332
85	262,053	111,211	111,211	-	203	-	203
86	166,923	72,279	72,279	-	122	-	122
87	104,832	46,329	46,329	-	73	-	73
88	64,866	29,279	29,279	-	43	-	43
89	39,500	18,229	18,229	-	25	-	25
90	23,640	11,176	11,176	-	14	-	14
91	13,871	6,738	6,738	-	8	-	8
92	7,952	3,979	3,979	-	4	-	4
93	4,438	2,294	2,294	-	2	-	2
94	2,401	1,288	1,288	-	1	-	1
95	1,249	697	697	-	1	-	1
96	623	362	362	-	0	-	0
97	296	183	183	-	0	-	0
98	129	89	89	-	0	-	0
99	46	46	46	-	0	-	0
100	0	-	-	-	-	-	-
Totals	\$ 12,891,038,464	\$ -	\$ -	\$ -	\$ 12,891,038,464	\$ -	\$ 12,891,038,464

