Teachers' Survivors Benefit Cost-Sharing Plan

Schedule of Employer Allocations Schedule of Pension Amounts by Employer June 30, 2018 Measurement Date (for Fiscal 2019 Employer Reporting)



Dennis E. Hoyle, CPA, Auditor General Office of the Auditor General General Assembly State of Rhode Island and Providence Plantations



Office of the Auditor General

State of Rhode Island and Providence Plantations - General Assembly Dennis E. Hoyle, CPA - Auditor General

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September 30, 2019

JOINT COMMITTEE ON LEGISLATIVE SERVICES:

SPEAKER Nicholas A. Mattiello, Chairman

Senator Dominick J. Ruggerio Senator Dennis L. Algiere Representative K. Joseph Shekarchi Representative Blake A. Filippi

We have completed our audit of the Schedule of Employer Allocations and Schedule of Pension Amounts by Employer for the Teachers' Survivors Benefit plan, a cost-sharing defined benefit plan administered by the Employees' Retirement System of the State of Rhode Island for the fiscal year ended June 30, 2018.

These schedules are required for employers participating in the Teachers' Survivors Benefit plan to meet their financial reporting responsibilities under generally accepted accounting principles – specifically the requirements of Governmental Accounting Standards Board Statement No. 68 – Accounting and Financial Reporting for Pensions.

Our report is contained herein as outlined in the Table of Contents.

Sincerely,

Dennis E. Hoyle, CPA

Auditor General

Teachers' Survivors Benefit Cost-Sharing Plan

Schedule of Employer Allocations

Schedule of Pension Amounts by Employer

June 30, 2018 Measurement Date

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Teacher's Survivors Benefit Cost-Sharing Plan

Schedules of Employer Allocations

Schedules of Pension Amounts by Employer

June 30, 2018 Measurement Date

INTRODUCTION

The Teachers' Survivors Benefit (TSB) Plan covers certain teachers employed by local educational agencies. As a cost-sharing plan, separate valuations are not made for individual employers participating in the plan. The net pension asset is apportioned based on proportionate contributions – see Schedule A.

The measurement date is June 30, 2018 – the information included herein is intended for use in Fiscal 2019 financial reporting by employers participating in the TSB plan.

The net pension asset and other measures included herein have been developed consistent with the requirements of GASB 68 – Accounting and Financial Reporting for Pensions. Such amounts are intended for accounting and financial reporting by governments which prepare their financial statements in accordance with generally accepted accounting principles as promulgated by the Governmental Accounting Standards Board. These amounts may and will likely differ from amounts reported in actuarial valuations used to measure actuarially determined contribution amounts consistent with the plan's adopted funding policies.



Office of the Auditor General State of Rhode Island and Providence Plantations - General Assembly Dennis E. Hoyle, CPA - Auditor General

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INDEPENDENT AUDITOR'S REPORT

JOINT COMMITTEE ON LEGISLATIVE SERVICES, GENERAL ASSEMBLY STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS:

RETIREMENT BOARD OF THE EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF RHODE ISLAND:

We have audited the accompanying Schedule of Employer Allocations of the Teachers' Survivors Benefit (TSB) plan as of and for the year ended June 30, 2018, and the related notes. We have also audited the total for all entities of the columns titled ending net pension asset, total deferred outflows of resources, total deferred inflows of resources, and total pension expense (specified column totals) included in the accompanying Schedule of Pension Amounts by Employer of the Teachers' Survivors Benefit plan as of and for the year ended June 30, 2018, and the related notes.

Management's Responsibility for the Schedules

Management is responsible for the preparation and fair presentation of these schedules in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the schedules that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on the Schedule of Employer Allocations and the specified column totals included in the Schedule of Pension Amounts by Employer based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the Schedule of Employer Allocations and specified column totals included in the Schedule of Pension Amounts by Employer are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Schedule of Employer Allocations and specified column totals included in the Schedule of Pension Amounts by Employer. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the Schedule of Employer Allocations and specified column totals included in the Schedule of Pension Amounts by Employer, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the Schedule of Employer Allocations and specified column totals included in the Schedule of Pension Amounts by Employer to design audit procedures that are proper in the circumstances, but not for expressing an opinion on the effectiveness of the entity's internal control. Accordingly,

Joint Committee on Legislative Services, General Assembly Retirement Board of the Employees' Retirement System of the State of Rhode Island

we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the Schedule of Employer Allocations and specified column totals included in the Schedule of Pension Amounts by Employer.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinion

In our opinion, the schedules referred to above present fairly, in all material respects, the employer allocations and ending net pension asset, total deferred outflows of resources, total deferred inflows of resources, and total pension expense for the total of all participating entities for the Teachers' Survivors Benefit cost-sharing plan as of and for the year ended June 30, 2018, in accordance with accounting principles generally accepted in the United States of America.

Other Matter

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of the Teachers' Survivors Benefit plan within the Employees' Retirement System of Rhode Island as of and for the year ended June 30, 2018, and our report thereon, dated December 20, 2018, expressed an unmodified opinion on those financial statements.

Restriction on Use

Our report is intended solely for the information and use of the Employees' Retirement System of the State of Rhode Island management, the Retirement Board of the Employees' Retirement System of the State of Rhode Island, the employers participating in the TSB plan as of and for the year ended June 30, 2018 and their auditors and is not intended to be and should not be used by anyone other than these specified parties.

Dennis E. Hoyle, CPA

Auditor General

September 27, 2019

TEACHERS' SURVIVORS BENEFIT COST SHARING PLAN Schedule of Employer Allocations

	Fiscal 2018 er	nployer contribution
Participating Employer Unit	Amount	%
Barrington	\$ 34,426	4.62689147%
Bristol-Warren	32,924	4.42503279%
Burrillville	24,725	3.32308118%
Central Falls Collaborative	30,139	4.05075624%
Coventry	53,688	7.21574279%
Cranston	122,309	16.43854871%
Cumberland	49,201	6.61272309%
East Greenwich	28,193	3.78922298%
East Providence	61,209	8.22659390%
Foster	3,130	0.42062515%
Foster-Glocester	14,475	1.94547466%
Glocester	6,210	0.83463772%
Johnston	38,175	5.13079895%
Lincoln	35,063	4.71249896%
Little Compton	3,795	0.51005638%
Middletown	26,580	3.57244700%
Newport	27,069	3.63809711%
North Smithfield	19,613	2.63602381%
Northern RI Collaborative	3,778	0.50782262%
Portsmouth	26,703	3.58897848%
Scituate	16,637	2.23604955%
Smithfield	28,419	3.81956294%
Tiverton	20,776	2.79233223%
Urban Collaborative	1,495	0.20093130%
Westerly	35,305	4.74506999%
Totals	\$ 744,035	100.0000000%

See notes to schedule.

Teachers' Survivor Benefit Cost-Sharing Plan - Schedule of Pension Amounts by Employer June 30, 2018 Measurement Date

				Pension Expense (Credit)			
				Net Amortization of			
	Beginning	Ending		Proportionate	Deferred Amounts from		
	Net	Net		Share of	Changes in Proportion and		
	Pension	Pension		Pension	Differences Between Employer		
Participating Employer	Liability	Liability		Plan	Contributions and Proportionate	9	
Fallicipating Employer	(Asset)	(Asset)		Expense	Share of Contributions		Total
Barrington	\$ (3,783,526)	\$ (4,128,543)	-	\$ (88,551)	\$ 9,252	\$	(79,299)
Bristol-Warren	(3,558,014)	(3,948,426)		(84,686)	13,861		(70,825)
Burrillville	(2,827,278)	(2,965,162)		(63,597)	(6,756)		(70,353)
Central Falls Collaborative	(3,366,604)	(3,614,461)		(77,523)	45,466		(32,057)
Coventry	(6,023,168)	(6,438,556)		(138,094)	21,036		(117,058)
Cranston	(13,726,036)	(14,668,001)		(314,598)	(42,122)		(356,720)
Cumberland	(5,603,243)	(5,900,486)		(126,553)	(8,772)		(135,325)
East Greenwich	(3,080,730)	(3,381,097)		(72,518)	(16,087)		(88,605)
East Providence	(6,979,985)	(7,340,532)		(157,439)	(105,131)		(262,570)
Foster	(395,819)	(375,321)		(8,050)	(5,732)		(13,782)
Foster-Glocester	(1,500,697)	(1,735,933)		(37,232)	(10,270)		(47,502)
Glocester	(826,725)	(744,741)		(15,973)	(97)		(16,070)
Johnston	(4,205,570)	(4,578,176)		(98,192)	(59,662)		(157,854)
Lincoln	(3,863,946)	(4,204,930)		(90,187)	34,340		(55,847)
Little Compton	(321,732)	(455,120)		(9,761)	20,503		10,742
Middletown	(2,921,405)	(3,187,669)		(68,369)	9,989		(58,380)
Newport	(2,873,089)	(3,246,248)		(69,625)	(41,712)		(111,337)
North Smithfield	(2,100,264)	(2,352,105)		(50,448)	10,180		(40,268)
Northern RI Collaborative	(417,356)	(453,127)		(9,719)	2,375		(7,344)
Portsmouth	(3,013,282)	(3,202,420)		(68,685)	42,674		(26,011)
Scituate	(1,800,018)	(1,995,211)		(42,793)	1,613		(41,180)
Smithfield	(3,061,131)	(3,408,169)		(73,098)	2,364		(70,734)
Tiverton	(2,322,934)	(2,491,578)		(53,439)	25,987		(27,452)
Urban Collaborative	(188,485)	(179,290)		(3,845)	4,101		256
Westerly	(3,965,369)	(4,233,992)		(90,810)	52,600		(38,210)
	¢ (02.72/ 40/)	¢ (00.000.004)	_	- ¢ (1.012.705)		¢	(1.010.705)
	\$ (82,726,406)	\$ (89,229,294)	=	\$ (1,913,785)	-	\$	(1,913,785)

	Deferred Outflows of Resources								
			Difference	Changes in Proportion					
	Difference		Between	and Differences					
	Between		Projected	Between Employer					
	Expected		and Actual	Contributions and	Total				
Participating Employer	and Actual	Changes in	Investment	Proportionate Share	Deferred				
Participating Employer	Experience	Assumptions	Earnings	of Contributions	Outflows				
Barrington	703,429	543,974	540,939	221,698	2,010,040				
Bristol-Warren	672,740	520,241	517,339	184,136	1,894,456				
Burrillville	505,210	390,687	388,508	171,378	1,455,783				
Central Falls Collaborative	615,839	476,238	473,582	309,283	1,874,942				
Coventry	1,097,014	848,338	843,606	289,265	3,078,223				
Cranston	2,499,162	1,932,642	1,921,862	274,744	6,628,410				
Cumberland	1,005,336	777,443	773,106	178,893	2,734,778				
East Greenwich	576,078	445,490	443,005	13,300	1,477,873				
East Providence	1,250,694	967,182	961,787	185,935	3,365,598				
Foster	63,948	49,452	49,176	67,234	229,810				
Foster-Glocester	295,772	228,725	227,449	63,817	815,763				
Glocester	126,890	98,126	97,579	151,548	474,143				
Johnston	780,038	603,216	599,851	-	1,983,105				
Lincoln	716,444	554,038	550,947	238,102	2,059,531				
Little Compton	77,544	59,966	59,632	441,696	638,838				
Middletown	543,121	420,004	417,661	154,229	1,535,015				
Newport	553,102	427,723	425,337	176,114	1,582,276				
North Smithfield	400,756	309,911	308,182	148,141	1,166,990				
Northern RI Collaborative	77,205	59,704	59,370	43,040	239,319				
Portsmouth	545,635	421,948	419,594	297,862	1,685,039				
Scituate	339,948	262,887	261,421	92,250	956,506				
Smithfield	580,690	449,057	446,552	107,414	1,583,713				
Tiverton	424,520	328,288	326,457	163,603	1,242,868				
Urban Collaborative	30,548	23,623	23,491	46,445	124,107				
Westerly	721,396	557,867	554,755	330,636	2,164,654				
	15,203,059	11,756,770	11,691,188	4,350,763	43,001,780				

Teachers' Survivor Benefit Cost-Sharing Plan - Schedule of Pension Amounts by Employer June 30, 2018 Measurement Date

	Deferred Inflows of Resources								
			Difference	Changes in Proportion					
	Difference		Between	and Differences					
	Between		Projected	Between Employer					
	Expected		and Actual	Contributions and	Total				
Participating Employer	and Actual	Changes in	Investment	Proportionate Share	Deferred				
Participating Employer	Experience	Assumptions	Earnings	of Contributions	Inflows				
Barrington	692,799	-	447,242	162,511	1,302,552				
Bristol-Warren	662,576	-	427,732	110,386	1,200,694				
Burrillville	497,577	-	321,215	202,210	1,021,002				
Central Falls Collaborative	606,534	-	391,553	43,970	1,042,057				
Coventry	1,080,439	-	697,487	169,734	1,947,660				
Cranston	2,461,402	-	1,588,980	548,483	4,598,865				
Cumberland	990,146	-	639,198	184,603	1,813,947				
East Greenwich	567,374	-	366,273	123,393	1,057,040				
East Providence	1,231,797	-	795,197	763,696	2,790,690				
Foster	62,982	-	40,658	88,997	192,637				
Foster-Glocester	291,303	-	188,053	147,319	626,675				
Glocester	124,973	-	80,678	132,176	337,827				
Johnston	768,253	-	495,952	343,642	1,607,847				
Lincoln	705,619	-	455,519	36,817	1,197,955				
Little Compton	76,373	-	49,303	371,104	496,780				
Middletown	534,915	-	345,319	95,062	975,296				
Newport	544,745	-	351,665	430,440	1,326,850				
North Smithfield	394,701	-	254,803	93,053	742,557				
Northern RI Collaborative	76,038	-	49,087	27,605	152,730				
Portsmouth	537,390	-	346,917	40,496	924,803				
Scituate	334,812	-	216,141	90,479	641,432				
Smithfield	571,917	-	369,206	126,720	1,067,843				
Tiverton	418,106	-	269,912	-	688,018				
Urban Collaborative	30,086	-	19,422	17,867	67,375				
Westerly	710,496	-	458,667	-	1,169,163				
	14,973,353	-	9,666,179	4,350,763	28,990,295				

	Collective Deferred Outflows for Plan as a Whole											
Participating Employer		2020	2021	2021 2022		2023		2024		Thereafter		
Barrington	\$	315,029	\$	177,818	\$	(24,045)	\$	87,769	\$	115,718	\$	35,193
Bristol-Warren		306,300		175,072		(17,984)		88,954		115,684		25,737
Burrillville		212,858		114,309		(30,670)		49,637		69,710		18,938
Central Falls Collaborative		313,170		193,041		16,315		114,207		138,676		57,474
Coventry		497,905		283,917		(30,892)		143,487		187,074		49,072
Cranston		1,044,258		556,760		(160,422)		236,840		336,139		15,970
Cumberland		428,245		232,140		(56,360)		103,446		143,391		69,969
East Greenwich		234,333		121,960		(43,356)		48,216		71,105		(11,425)
East Providence		438,543		194,577		(164,333)		34,474		84,168		(12,521)
Foster		22,066		9,592		(8,759)		1,406		3,947		8,921
Foster-Glocester		118,301		60,607		(24,271)		22,745		34,497		(22,791)
Glocester		55,062		30,310		(6,103)		14,067		19,109		23,873
Johnston		279,419		127,261		(96,586)		27,408		58,401		(20,644)
Lincoln		345,776		206,024		427		114,311		142,777		52,261
Little Compton		54,211		39,085		16,832		29,159		32,240		(29,469)
Middletown		246,082		140,139		(15,720)		70,613		92,193		26,412
Newport		198,720		90,830		(67,893)		20,027		42,003		(28,260)
North Smithfield		184,388		106,215		(8,790)		54,913		70,836		16,872
Northern RI Collaborative		35,936		20,876		(1,280)		10,993		14,060		6,004
Portsmouth		279,860		173,426		16,846		103,579		125,259		61,265
Scituate		149,388		83,076		(14,479)		39,559		53,066		4,465
Smithfield		254,789		141,517		(25,123)		67,182		90,254		(12,747)
Tiverton		210,525		127,716		5,892		73,373		90,240		47,104
Urban Collaborative		17,380		11,421		2,655		7,511		8,725		9,040
Westerly		366,189		225,470		18,452		133,124		161,787		90,468
	\$	6,608,733	\$	3,643,159	\$	(719,647)	\$	1,697,000	\$	2,301,059	\$	481,181

	Net	Net	Net
	Net	Net	Net
	Pension	Pension	Pension
	Liability (Asset)	Liability (Asset)	Liability (Asset)
Participating Employer	1% Decrease	(7.00/ Discount Data)	1% Increase
Barrington		(7.0% Discount Rate)	(8.0% Discount Rate)
Bristol-Warren	\$ (2,864,996)		
Burrillville	(2,740,004)	(3,948,426)	(4,848,111)
Central Falls Collaborative	(2,057,670)	(2,965,162)	(3,640,801)
	(2,508,250)	(3,614,461)	(4,438,049)
Coventry Cranston	(4,468,027)	(6,438,556)	(7,905,641)
Cranston Cumberland	(10,178,839)	(14,668,001)	(18,010,240)
	(4,094,634)	(5,900,486)	(7,244,966)
East Greenwich	(2,346,308)	(3,381,097)	(4,151,511)
East Providence	(5,093,952)	(7,340,532)	(9,013,139)
Foster	(260,453)	(375,321)	(460,841)
Foster-Glocester	(1,204,649)	(1,735,933)	(2,131,482)
Glocester	(516,812)	(744,741)	(914,438)
Johnston	(3,177,019)	(4,578,176)	(5,621,355)
Lincoln	(2,918,005)	(4,204,930)	(5,163,061)
Little Compton	(315,830)	(455,120)	(558,823
Middletown	(2,212,079)	(3,187,669)	(3,914,009)
Newport	(2,252,730)	(3,246,248)	(3,985,936
North Smithfield	(1,632,240)	(2,352,105)	(2,888,054
Northern RI Collaborative	(314,447)	(453,127)	(556,376
Portsmouth	(2,222,315)	(3,202,420)	(3,932,121)
Scituate	(1,384,574)	(1,995,211)	(2,449,838)
Smithfield	(2,365,094)	(3,408,169)	(4,184,752)
Tiverton	(1,729,027)	(2,491,578)	(3,059,307)
Urban Collaborative	(124,418)	(179,290)	(220,142)
Westerly	(2,938,173)	(4,233,992)	(5,198,747)
	\$ (61,920,545)	\$ (89,229,294)	\$ (109,561,010)

Teachers' Survivors Benefit Cost-Sharing Plan

NOTES TO THE SCHEDULES OF EMPLOYER ALLOCATIONS AND PENSION AMOUNTS BY EMPLOYER

June 30, 2018 Measurement Date

1. Plan Description and Governance

The Employees' Retirement System of the State of Rhode Island (the System) acts as a common investment and administrative agent for pension benefits to be provided through various defined benefit and defined contribution retirement plans. The System is administered by the State of Rhode Island Retirement Board which was authorized, created and established in the Office of the General Treasurer as an independent retirement board to hold and administer, in trust, the funds of the retirement system.

Each plan's assets, including those of the Teachers' Survivors Benefit cost-sharing plan, are accounted for separately and may be used only for the payment of benefits to the members of that plan, in accordance with the terms of that plan.

The Teachers' Survivors Benefit Cost-Sharing Plan was established and placed under the management of the Retirement Board for the purpose of providing monthly benefits to certain survivors of deceased teachers previously employed in school districts that do not participate in social security. Specific eligibility criteria and the amount of the benefit is subject to the provisions of Chapter 16-16 of the Rhode Island General Laws.

2. Schedule of Employer Allocations

The Schedule of Employer Allocations reflects employer contributions recognized for the fiscal year ended June 30, 2018 consistent with contributions reflected within the Plan's financial statements. The percentages included in the Schedules of Employer Allocations have been rounded to 8 decimal places.

The Schedule of Employer Allocations (Schedule A) reflects employer contribution amounts which are the preliminary basis for allocating the pension amounts to each employer. The final or effective allocations also include any changes in allocations between years which are reflected as deferred outflows/inflows and recognized over the remaining service lives of the respective employee group.

3. Schedule of Pension Amounts by Employer

The Schedule of Pension Amounts by Employer was prepared by the Plan's actuary using amounts from (1) the Plan's financial statements for the fiscal year ended June 30, 2018, (2) Required Supplementary Information prepared in accordance with the requirements of GASB Statement No. 67, and (3) certain data from the actuarial valuation of the Plan performed at June 30, 2017 rolled-forward to June 30, 2018. This Schedule utilizes the proportionate employer contribution schedule detailed in the Schedule of Employer Allocations to apportion each employer's amounts for the cost-sharing plan.

The Schedule of Pension Amounts by Employer includes the sensitivity of the net pension liability (asset) to changes in the discount rate. The following presents the net pension liability (asset) of the employers calculated using the discount rate of 7.0 percent, as well as what the employers' net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate.

Net Pension Liability (Asset) – Sensitivity Analysis

	1.0	00% Decrease (6.0%)	-	Di	scount Rate (7.0%)	1.	00% Increase (8.0%)
TSB	\$	(61,920,545)		\$	(89,229,294)	\$	(109,561,010)

Teachers' Survivors Benefit Cost-Sharing Plan

NOTES TO THE SCHEDULES OF EMPLOYER ALLOCATIONS AND PENSION AMOUNTS BY EMPLOYER

June 30, 2018 Measurement Date

4. Relationship to the Plan financial statements

The components associated with pension expense and deferred outflows and inflows of resources have been determined based on the net increase in fiduciary net position as reflected for the TSB Plan in the System's financial statements and consistent with the requirements of GASB Statements No. 67 and 68.

5. Summary of Significant Accounting Policies

Basis of Accounting – The underlying information to prepare the allocation schedules is based on the System's financial statements as of and for the year ended June 30, 2018. The financial statements of the System are prepared on the accrual basis of accounting. Under this method, revenues are recorded when earned and expenses are recorded when incurred. Plan member contributions are recognized in the period in which the wages, subject to required contributions, are earned for the performance of duties for covered employment. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions.

6. Net Pension Liability (Asset)

The components of the net pension liability of the employers participating in the TSB Plan at June 30, 2018 were as follows:

Fiscal year ended June 30, 2018						
Total pension liability Plan Fiduciary net position	\$	238,563,945 327,793,239				
Employers' Net Pension Liability (Asset)	\$	(89,229,294)				
Plan Fiduciary Net Position as a percentage of total pension liability		137.4%				

7. Actuarial methods and assumptions

The total pension liability was determined by actuarial valuations performed as of June 30, 2017, rolled forward to 2018, using the following actuarial assumptions, applied to all periods included in the measurement.

Actuarial Cost Method - Entry Age Normal - the Individual Entry Age Actuarial Cost methodology is used.

Investment Rate of Return - 7.00%

Projected Salary Increases - 3.0% to 13.0%

Mortality:

- Male Employees, RP-2014 Combined Healthy for Males with White Collar adjustments, projected with Scale Ultimate MP16.
- Female Employees, RP-2014 Combined Healthy for Females with White Collar adjustments, projected with Scale Ultimate MP16.

Inflation – 2.50%

Teachers' Survivors Benefit Cost-Sharing Plan NOTES TO THE SCHEDULES OF EMPLOYER ALLOCATIONS AND PENSION AMOUNTS BY EMPLOYER

June 30, 2018 Measurement Date

7. Actuarial methods and assumptions (continued)

Cost of Living Adjustments: eligible survivors receive a yearly cost of living adjustment based on the annual social security adjustment – for valuation purposes, a 2.50% cost of living adjustment is assumed.

The long-term expected rate of return best-estimate on pension plan investments was determined by the actuary using a building-block method. The actuary started by calculating best-estimate future expected real rates of return (expected returns net of pension plan investment expense and inflation) for each major asset class, based on a collective summary of capital market expectations from 35 sources. These return assumptions are then weighted by the target asset allocation percentage, factoring in correlation effects, to develop the overall long-term expected rate of return best-estimate on an arithmetic basis.

8. Discount rate

The discount rate used to measure the total pension liability of the TSB plan was 7.0 percent. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate and that contributions from the employers will be made at statutorily required rates, actuarially determined. Based on those 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.

9. Deferred Outflows and Inflows of Resources

Consistent with the requirements of GASB Statement No. 68, differences between expected and actual experience and changes in assumptions are recognized in pension expense using a systematic and rational method over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pensions through the pension plan (active employees and inactive employees) determined as of the beginning of the measurement period.

Differences between projected and actual earnings on pension plan investments are to be recognized in pension expense using a systematic and rational method over a closed five-year period. Projected earnings of the plan reflect the plan's investment return assumption or discount rate of 7.0%.

Changes in proportion between the June 30, 2017 and June 30, 2018 measurement dates are also recognized in pension expense using the expected remaining service lives of teachers.

For teachers, the average of the expected remaining service lives for purposes of recognizing the applicable deferred inflows/outflows of resources established in fiscal 2018 is 8.1155 years.