

BARTEL ISSOCIATES, LLC

STATE OF MAINE STATE AND TEACHERS RETIREE HEALTHCARE PLAN

June 30, 2012 GASB 45 Actuarial Valuation Final Valuation Results

Bartel Associates, LLC

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January 4, 2013

AGENDA

Topic	Page
Benefit Summary	1
Funding Policy	5
Data Summary	7
State Plan Assets	11
Assumptions Highlights	17
State Employees Results	23
Teachers Results	31
Maine Educational Center for the Deaf Results	39
Northern New England Passenger Rail Authority Results	47
Actuarial Certification	55
Exhibits	56

BENEFIT SUMMARY

■ Eligibility

- MainePERS normal retirement:
 - > Regular Plan:
 - Normal retirement age and 1 year of service:
 - o 60 if \geq 10 years of service on 7/1/93 (Tier 1)
 - \circ 62 if < 10 years of service on 7/1/93 or hire ≥ 7/1/93 (Tier 2)
 - \circ 65 if < 5 years of service on 7/1/11 or hire ≥ 7/1/11 (Tier 3)
 - 25 years of service if earlier
 - > Special Plans:
 - 1998 Special Plan 55&10 or 25 years
 - 25 & Out Plan 25 years
 - State Police, Marine Resource Officers, and Inland Fisheries Wildlife Officers Plans 20 years
 - State Prison Plan 50 & 20
 - Forest Rangers Plan 50 & 25
- MainePERS disability retirement
- Former employees with 25 years of service at normal retirement age
- Part-time employees receive full benefits







BENEFIT SUMMARY

 State Employees & Ancillary Group Service Retirement Medical Benefit

DOH ≤ 7/1/91	7/1/91 < Hi	red < 7/1/11	DOH	≥ 7 /1/11
100% of Retiree	Years in	% Retiree	Years in	% Retiree
Premium	Medical ¹	<u>Premium</u>	Medical ₁	<u>Premium</u>
	< 5	0%	< 10	0%
	5	50%	10-14	50%
	6	60%	15-19	75%
	7	70%	≥ 20	100%
	8	80%		
	9	90%		
	≥ 10	100%		

- No cash subsidy until retiree reaches normal retirement age for nonspecial plan service retirements ≥ 1/1/12 (7/1/12 for Maine Educational Center for Deaf and Teachers in unorganized territories)
- Disability retirement benefits are 100% vested and cash subsidy begins at disability retirement
- Waived retirees not allowed to rejoin medical plan
- Medical premiums for 2011/12 and 2012/13 remain at their 2010/11 levels per LD 1043

¹ Continuous years of group health plan participation before retirement.





BENEFIT SUMMARY

■ Teachers Medical Benefit	 45% of retiree premium based on: Single rate for single and employee + child(ren) coverage 50% of 2-party rate for 2-party and family coverage No State cash subsidy until retiree reaches normal retirement age for retirements ≥ 7/1/12 Waived retirees not allowed to rejoin medical plan The State's total cost for retired Teachers premiums for 2011/12 and 2012/13 is capped at the 2010/11 funding level per LD 1043 (\$23 million for 2011/12 and 2012/13 per State budget)
■ Self-Pay	 Retirees not eligible for State cash subsidy can participate by paying full premium for themselves, spouses, and dependents Surviving spouses and surviving dependents can participate by paying full premium
■ Other OPEB	No State contribution for dental, vision, life insurance, Medicare Part B premium, or pre-retirement death benefit



3



BENEFIT SUMMARY

■ Pay-As-You-Go	Benefit pa	yments plu	ıs administ	rative expe	nses:	
Cost (000's)		-	State	-	Teachers	
	<u>Year</u>	Cash	<u>IS</u>	<u>Total</u>	Cash	Source
	2011/12	\$44,765	\$22,000	\$66,765	\$21,762	State
	2010/11	48,632	22,000	70,632	18,375	State
	2009/10	42,408	13,000	55,408	18,901	State
		Maine E	ducational (Center for		
		the Deaf	and Hard o	f Hearing		
	<u>Year</u>	<u>Cash</u>	<u>IS</u>	<u>Total</u>		Source
	2011/12	\$102	\$43	\$145		State
	2010/11	105	37	142		State
	2009/10	78	16	94		State
		Norther	n New Eng	land Rail		
		Pass	senger Auth	ority		
	<u>Year</u>	Cash	<u>IS</u>	<u>Total</u>		Source
	2011/12	\$6	\$0	\$6		State
	2010/11	2	0	2		State
	2009/10	3	1	4		State





FUNDING POLICY

State Employees

■ Phase into full ARC funding over 10-year period beginning with 2009/10:

		Trust Pre-Fund	ling (\$millions)
Fiscal Year	Funding Policy Contribution	Per Policy	Actual
2007/08	PayGo + \$100 million	\$100.0	\$100.0
2008/09	PayGo	=	-
2009/10	PayGo + 10% x (ARC – PayGo)	3.5	-
2010/11	PayGo + 20% x (ARC – PayGo)	9.8	14.4
2011/12	PayGo + 30% x (ARC – PayGo)	17.7	6.0
2012/13	PayGo + 35% x (ARC – PayGo)	n/a	9.0 (budgeted)
2013/14	PayGo + 50% x (ARC – PayGo)	n/a	n/a
\downarrow	↓	\	\downarrow
2017/18	PayGo + 90% x (ARC – PayGo)	n/a	n/a
2018/19+	100% of ARC	n/a	n/a

- ■Benefit payments paid from State Cash Pool until 2027
- Amortization:
 - Experience gains & losses amortized over fixed 10-year periods (Title 5 MRSA §286-B)
 - Contribution losses amortized over fixed 10-year periods
 - Assumption changes amortized over fixed 25-year periods from 6/30/12
 - Plan changes amortized over fixed 25-year periods from 6/30/12







FUNDING POLICY

5

Teachers

■ Phase into full ARC funding over an 8-year period beginning 2013/14:

Fiscal Year	Contribution
2007/08 to 2012/13	PayGo
2013/14	PayGo + 12.5% x (ARC – PayGo)
2014/15	PayGo + 25.0% x (ARC – PayGo)
2015/16	PayGo + 37.5% x (ARC – PayGo)
2016/17	PayGo + 50.0% x (ARC – PayGo)
2017/18	PayGo + 62.5% x (ARC – PayGo)
2018/19	PayGo + 75.0% x (ARC – PayGo)
2019/20	PayGo + 87.5% x (ARC – PayGo)
2020/21+	100% of ARC

- ■Benefit payments assumed paid from State Cash Pool until at least 2021
- Amortization:
 - Experience gains & losses amortized over fixed 15-year periods
 - Contribution losses amortized over fixed 15-year periods
 - Assumption changes amortized over fixed 25-year periods from 6/30/12
 - Plan changes amortized over fixed 25-year periods from 6/30/12





DATA SUMMARY

Participant Statistics June 30, 2012

			Maine	Northern
	G		Educational	New England
	State		Center	Passenger
	Employees ²	Teachers	for the Deaf	Rail Authority
■ Actives				
• Count	12,419	$28,375^3$	57	6
 Average Age 	48.0	46.3	47.4	45.4
 Average Service 	14.1	14.9	10.0	6.0
 Average Pay⁴ 	\$40,417	\$40,744	\$42,705	\$62,531
• Total Payroll (000's)	501,935	1,156,122	2,434	375
■ Retirees				
• Count	9,587	9,520	11	2
 Average Age 	70.4	70.1	62.6	69.4

Includes 165 Legislative and 59 Judicial active employees and 78 Legislative and 22 Judicial retirees. Average age by service group assumed for 101 employees missing birth dates and average service by age group assumed for 152 employees missing hire dates.

⁴ Average pay provided by the State. Total payroll calculated as average pay multiplied by number of active employees.



January 4, 2013

7



DATA SUMMARY

Participant Statistics March 31, 2010

			Maine Educational	Northern New England
	State		Center	Passenger
	Employees ⁵	Teachers	for the Deaf	Rail Authority
■ Actives				
• Count	12,720	27,159	62	5
Average Age	47.7	48.2	49.5	43.1
• Average Service ⁶	14.3	16.8	11.2	4.6
• Average Pay ⁷	\$42,805	\$38,853	\$41,978	\$57,602
• Total Payroll (000's)	544,480	1,055,209	2,603	288
■ Retirees				
• Count	8,920	9,3818	10	1
Average Age	70.3	70.3	60.6	69.0

⁵ Includes 169 Legislative and 55 Judicial active employees and 69 Legislative and 18 Judicial retirees.

^{8,442} Teacher retirees receiving 45% cash subsidy from State.





Data excludes 7,253 non Teacher school employees who were included in the prior valuation and includes 9,647 Teachers that waived medical coverage and were not included in the prior valuation. Includes 564 inactives and 257 terminated vested included with the active Teacher data.

Average service by age group assumed for 827 State employees and 7,253 Teachers with missing hire dates.

Average pay provided by the State. Total payroll calculated as average pay multiplied by number of active employees.

DATA SUMMARY

Active Participant Statistics by Tier

State Employees and Teachers June 30, 2012

	State Employees ⁹					Teac	chers	
■ Actives	Tier 1	Tier 2	Tier 3	<u>Total</u>	Tier 1	Tier 2	Tier 3	<u>Total</u>
• Counts								
> Covered	1,127	7,612	2,863	11,602	2,648	13,040	3,040	18,728
> Waived	18	<u>296</u>	503	817	484	5,640	<u>3,523</u>	9,647
> Total	1,145	7,908	3,366	12,419	3,132	18,680	6,563	28,375
Average Age	57.9	49.4	41.3	48.0	58.3	47.5	37.5	46.3
Average Service	34.9	15.8	2.8	14.1	33.8	15.9	2.9	14.9

Includes 165 Legislative and 59 Judicial active employees. Includes State employees with assumed birth and hire dates (101 with missing birth dates and 152 with missing hire dates).



January 4, 2013

9



DATA SUMMARY

Active Participant Statistics by Tier State Employees and Teachers March 31, 2010

	State Employees ¹⁰					Tea	chers	
■ Actives	Tier 1	Tier 2	Tier 3	<u>Total</u>	Tier 1	Tier 2	Tier 3	<u>Total</u>
• Counts								
> Covered	1,663	9,008	2,049	12,720	3,904	21,102	2,153	27,159
> Waived	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
> Total	1,663	9,008	2,049	12,720	3,904	21,102	2,153	27,159
Average Age	56.0	47.8	40.3	47.7	57.2	48.0	34.7	48.2
Average Service	32.9	13.8	1.9	14.3	32.5	16.2	2.1	16.8

Includes 169 Legislative and 55 Judicial active employees. Includes assumed hire dates for 827 State Employees with missing hire dates.





STATE PLAN ASSETS

State Employees Trust Fund – Market Value of Assets Fiscal Year 2011/12

(Amounts in Thousands)

Market Value of Assets	State OPEB Trust	State Cash Pool ¹¹	Total
■ June 30, 2011	\$ 133,007	\$ -	\$ 133,007
• Contributions	6,000	44,765	50,765
• Investment Return	1,001	-	1,001
• Benefit Payments	0	(44,765)	(44,765)
• Investment Expenses	(42)	-	(42)
Administrative Expenses	(69)	-	(69)
■ June 30, 2012	139,897	-	139,897
■ Approximate Return	0.7%	-	0.7%

Cash subsidy plus administrative expenses.



January 4, 2013

11



STATE PLAN ASSETS

State Employees Trust Fund – Actuarial Value of Assets Fiscal Year 2011/12

(Amounts in Thousands)

Actuarial Value of Assets	June 30, 2012
■ Actuarial Value at Beginning of Year	\$ 120,146
 Contributions 	50,765
Benefit Payments	(44,765)
 Expected Investment Return 	8,711
■ Expected AVA at End of Year	134,857
Market Value at End of Year	139,897
■ MVA – Expected AVA	5,040
■ 1/5 of (MVA – Expected AVA)	1,008
■ Preliminary AVA	135,865
■ Minimum AVA (80% of MVA)	111,918
■ Maximum AVA (120% of MVA)	167,876
■ Actuarial Value at End of Year	135,865
■ AVA Net Return	8.1%



■ AVA/MV

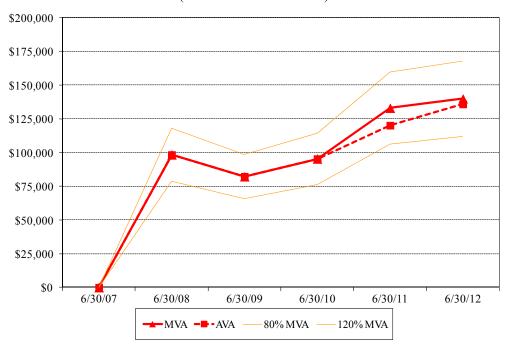


97.1%

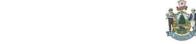
STATE PLAN ASSETS

Historical Plan Assets

(Amounts in Thousands)



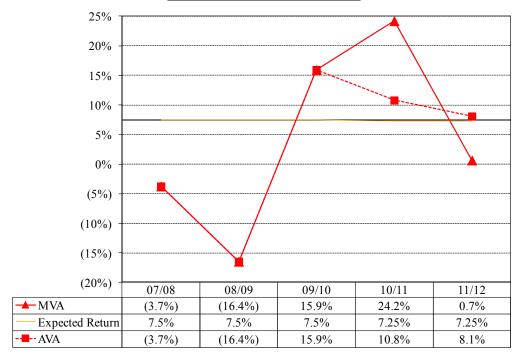




STATE PLAN ASSETS

13

Historical Asset Returns







STATE PLAN ASSETS

Asset Allocation

(Amounts in Thousands)

Asset Class	Target Allocation	6/30/ Actual All	
■ US Equity	45%	\$ 63,097	47%
■ International Equity	25%	28,329	21%
■ US Fixed Income	25%	34,528	26%
■ Real Estate	5%	8,030	6%
■ Cash	0%	0	0%
■ Total	100%	133,984 ¹²	100%

Differs from plan asset value of \$139,897,197 which includes an \$86,650 liability and a \$6,000,000 contribution received on 7/3/12 and not yet invested.



January 4, 2013

15



STATE PLAN ASSETS

Expected Rate of Return Illustration

	Expected	Target
	Real	Asset
Asset Class	Return ¹³	Allocation
■ US Equity	5.5%	45%
■ Foreign Equity	5.5%	25%
■ US Fixed Income	1.6%	25%
■ Real Estate	4.3%	5%
■ Cash	0.5%	0%
 Assumed Rate of Inflation 		3.00%
■ Investment and Administrative Expenses		(0.10%)
■ 50% Confidence Level Return (50 th Percentile)		7.67%
■ 55% Confidence Level Return (45 th Percentile) ¹⁴		7.42%
■ 60% Confidence Level Return (40 th Percentile)		7.13%
■ Full Pre-Funding Discount Rate		7.25%

Approximate 10-year geometric real rates of return provided by independent investment advisors in May 2010.

^{14 &}quot;55% Confidence Level" means that over the long-term 55% of the time net returns are expected to be greater than 7.42% and 45% of the time net returns are expected to be less than 7.42%.





ASSUMPTIONS HIGHLIGHTS

Assumption	March 31, 2011 Valuation				June 30, 2012 Valuation			
■ Valuation Date	March 31, 20112011/12 ARC			June 30, 20122012/13 and 2013/14 ARCs			RCs	
■ Discount Rate Basis	 No pre-funding rate - 4.00% State cash pool return exceeded inflation by 25 bp for 5 years and 14 bp for 10 years ending 6/30/11 Full pre-funding rate - 7.25% 			• Full programme (Refle	re-fundi cts inve	ng rate - 4.0 ng rate - 7 stment and e expenses	.25% d	
■ Discount Rate State Employees	Select & ultimate discount rates based on ARC phase-in funding policy: Year Rate Year Rate				rates b		nate discou ARC pha y: Year	
	2011/12 2012/13 2013/14 2014/15	4.98% 5.30% 5.63% 5.95%	2015/16 2016/17 2017/18 2018/19+	6.28% 6.60% 6.93% 7.25%	2011/12 2012/13 2013/14 2014/15	n/a 4.49% 5.63% 5.95%	2015/16 2016/17 2017/18 2018/19+	6.28% 6.60% 6.93% 7.25%







ASSUMPTIONS HIGHLIGHTS

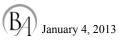
Assumption	March 31, 2	June 30, 2012 Valuation					
■ Discount Rate Teachers	• Select & ultimate discount rates based on ARC phase-in funding policy:			• Select & ultimate discount rates based on ARC phase-in funding policy:			
	Year Rate 2011/12 4.00% 2012/13 4.00% 2013/14 4.41% 2014/15 4.81% 2015/16 5.22%	2017/18 2018/19 2019/20	Rate 5.63% 6.03% 6.44% 6.84% 7.25%	Year 2011/12 2012/13 2013/14 2014/15 2015/16	Rate n/a 4.00% 4.41% 4.81% 5.22%	Year 2016/17 2017/18 2018/19 2019/20 2020/21+	Rate 5.63% 6.03% 6.44% 6.84% 7.25%
■ Discount Rate Ancillary Groups	• 4.0%			• Same			
■ Mortality, Termination, Disability	• MainePERS Study	2010 Expe	erience	• Maine	ePERS 6	5/30/11 Va	aluation





ASSUMPTIONS HIGHLIGHTS

Assumption	March 31, 2011 Valuation	June 30, 2012 Valuation		
■ Retirement	 MainePERS 2010 Experient Study: Adjusted for increased retirements before LD 10 changes Adjusted for deferred retirements after LD 104 changes since no cash subsidy before NRA 	 MainePERS 2010 Experience Study Tier 1 assumption: Tier 2 and Tier 3 rates based on set-back of Tier 1 rates Adjusted for deferred retirements since no cash subsidy before NRA 		
■ Expected Retirement Age	Group Hire Age ER State Tier 1 25 5 State Tier 2 25 6 Teachers Tier 1 25 5 Teachers Tier 2 25 5	_	Assumed Group Hire Age ERA State Tier 1 25 57 State Tier 2 25 58 State Tier 3 25 60 Teachers Tier 1 25 58 Teachers Tier 2 25 60 Teachers Tier 3 25 62	



19



ASSUMPTIONS HIGHLIGHTS

Assumption	March 31, 2011 Valuation			June 3	<u>0, 2012 V</u>	Valuation	
■ State Average Monthly Net Claims Cost	 Average HMO Choice net claims cost: Based on 2009 retiree claims Includes 1% load for stop/loss premium and admin expenses 			Assum modific	ost: on 2012/ es medic	13 premiums al plan is unchanged	
	• Claims co			• Claims cost by age:			
	H	IMO Cho	ice	HMO Choice			
	Retired	e Monthly	<u>Claims</u>	Retiree Monthly Claims			
	<u>Age</u>	Male	<u>Female</u>	<u>Age</u>	Male	<u>Female</u>	
	50	\$ 697	\$ 907	50	\$ 586	\$ 763	
	55	901	924	55	758	777	
	60	1,145	986	60	963	829	
	65	1,400	1,174	65	1,177	987	
	70	1,774	1,446	70	1,492	1,215	
	75	2,143	1,729	75	1,801	1,454	





ASSUMPTIONS HIGHLIGHTS

Assumption	March 31, 2011 Valuation	June 30, 2012 Valuation
■ Participation at Retirement	 State - 95% for future retirees and 20% for spouses Teachers - 75% for future retirees 	 State: Currently covered - 95% for future retirees and 20% for spouses Currently waived hired after 7/1/91 - 20% will elect medical and have 50% cash subsidy, 10% will elect medical and have implied subsidy only Teachers: Currently covered - 75% for future retirees Currently waived - ½ will elect medical







ASSUMPTIONS HIGHLIGHTS

21

Assumption	March 31, 2011 Valuation	June 30, 2012 Valuation
■ Medicare Eligible Rate	 Future retirees: Hired < 4/1/86 - 75% Hired ≥ 4/1/86 - 100% Current retirees < 65 - 87.5% Current retirees ≥ 65 - actual data 	 Future retirees: Hired < 4/1/86 - 75% Hired ≥ 4/1/86 - 100% Current retirees < 65 - 94% Current retirees ≥ 65 - actual data (88% in Medicare Plans)



Actuarial Obligations

(Amounts in Millions)

	3/31/11 Valuation			6/30/12 Valuation		
	Cash	Implied		Cash	Implied	
Actuarial Obligations	Subsidy	Subsidy	Total	Subsidy	Subsidy	Total
■ Present Value of Benefits						
• Actives	\$ 668	\$ 249	\$ 917	\$ 541	\$ 124	\$ 665
• Retirees	<u>566</u>	<u>278</u>	844	624	<u>184</u>	808
• Total	1,234	527	1,761	1,165	308	1,473
■ Actuarial Accrued Liability						
• Actives	494	206	700	401	107	508
• Retirees	<u>566</u>	<u>278</u>	844	624	<u>184</u>	808
• Total	1,060	484	1,544	1,025	291	1,316
■ Actuarial Value of Assets ¹⁵	(77)	(35)	(112)	(106)	(30)	(136)
■ Unfunded AAL	983	449	1,432	919	261	1,180
■ Normal Cost	26	7	33	20	3	23
■ Normal Cost % Pay	4.6%	1.2%	5.8%	4.0%	0.6%	4.6%

¹⁵ Allocated in proportion to the Actuarial Accrued Liability.



January 4, 2013

23



STATE EMPLOYEES RESULTS

Estimated Actuarial Gains & Losses

Actuarial Gains & Losses	NC%	AAL	(AVA)	UAAL
■ 6/30/11 Projected	5.8%	\$ 1,553	\$ (120)	\$ 1,433
■ 6/30/12 Expected	5.8%	1,591	(180)	1,411
■ Experience Losses (Gains):				
 Actual versus Expected Healthcare Costs 	(0.8%)	(215)	-	(215)
• Demographic, Benefit Payments, & Other	(0.7%)	(28)	(8)	(36)
 Contribution Loss 	-	-	53	53
• Investment Loss (Gain)	-	-	(1)	(1)
■ Assumption Changes:				
• Discount Rate	0.3%	2	-	2
 Merit & Longevity Pay Increases 	0.0%	3	-	3
• Retirement Rates	0.0%	13	-	13
 Medicare Eligibility 	0.0%	<u>(50)</u>		(50)
■ Total Changes	(1.2%)	(275)	44	(231)
■ 6/30/12 Actual	4.6%	1,316	(136)	1,180





Annual Required Contribution (ARC) (Amounts in Millions)

	3/31/11 Valuation 2011/12 ARC			6/30/12 Valuation 2012/13 ARC		
Annual Required	Cash	Implied		Cash	Implied	
Contribution	Subsidy	Subsidy	Total	Subsidy	Subsidy	Total
■ ARC - \$						
 Normal Cost 	\$ 26	\$ 7	\$ 33	\$ 20	\$ 3	\$ 23
 UAAL Amortization 	<u>64</u>	<u>29</u>	93	<u>55</u>	<u>16</u>	<u>71</u>
• ARC	90	36	126	75	19	94
■ Projected Payroll	567	567	567	502	502	502
■ ARC - %						
 Normal Cost 	4.6%	1.2%	5.8%	4.0%	0.6%	4.6%
 UAAL Amortization 	<u>11.3%</u>	<u>5.1%</u>	<u>16.4%</u>	<u>10.9%</u>	3.1%	<u>14.0%</u>
• ARC	15.9%	6.3%	22.2%	14.9%	3.7%	18.6%



January 4, 2013

25



STATE EMPLOYEES RESULTS

Annual Required Contribution (ARC)

Annual Required Contribution	6/30/12 Valuation			
■ Fiscal Year	2012/13	2013/14		
■ ARC - \$				
Normal Cost	\$ 23	\$ 24		
UAAL Amortization	<u>71</u>	<u>75</u>		
• ARC	94	99		
■ Projected Payroll	502	518		
■ ARC - %				
Normal Cost	4.6%	4.6%		
 UAAL Amortization 	<u>14.0%</u>	<u>14.5%</u>		
• ARC	18.6%	19.1%		





Unfunded Actuarial Accrued Liability Amortization Balances

(Amounts in Millions)

	Original Bases				ning Bases 0/2012	2012/13 Amortization	
Amortization Base	Date Years Amount		Years	Balance	Payment		
■ Fresh Start UAAL	6/30/08	29	\$ 1,144	25	\$ 1,133	\$ 68	
■ Experience Losses (Gains)	6/30/09	10	83	7	66	10	
	6/30/10	10	99	8	86	12	
	6/30/11	10	(34)	9	(32)	(4)	
	6/30/12	10	(199)	10	(199)	(23)	
■ Assumption Changes	6/30/10	27	35	25	32	2	
	6/30/11	26	266	25	264	16	
	6/30/12	25	(32)	25	(32)	(2)	
■ Plan Changes	6/30/11	26	(139)	25	(138)	<u>(8)</u>	
■ Unfunded AAL	6/30/12				1,180	71	
■ Unfunded AAL ¹⁶	6/30/12			30	1,180	64	

¹⁶ Total amortization payment cannot be less than the UAAL amortized over 30 years.



January 4, 2013

27



STATE EMPLOYEES RESULTS

Estimated Net OPEB Obligation (NOO) Illustration

(Amounts in Millions)

	CAFR	CAFR	CAFR	CAFR	Estimate	Estimate
Estimated Net OPEB Obligation	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
■ Discount Rate	4.50%	4.50%	4.80%	5.10%	4.98%	4.49%
■ NOO at Beginning of Year	\$ 0	\$ (55)	\$ (29)	\$ 8	\$ 42	\$ 92
■ Annual OPEB Cost (AOC)						
 Annual Required Contribution 	111	77	90	120	126	94
• Interest on NOO	0	(2)	(1)	0	2	4
• NOO Adjustment ¹⁷	(0)	_2	_3	(1)	(5)	<u>(11)</u>
Annual OPEB Cost	111	77	92	119	123	87
Contributions						
 Benefit Payments Outside Trust 						
➤ Cash Payments & Admin Fees ¹⁸	(41)	(38)	(42)	(49)	(45)	(53)
Implied Subsidy Payments	(25)	(12)	(13)	(22)	(22)	(14)
Trust Pre-Funding	(100)	(0)	(0)	<u>(14)</u>	<u>(6)</u>	<u>(9)</u> ¹⁹
 Total Contributions 	(166)	(50)	(55)	(85)	(73)	(76)
■ NOO at End of Year	(55)	(29)	8	42	92	103

¹⁷ NOO amortized over average weighted remaining experience gain or loss period for fiscal years starting 2009/10.

¹⁹ Budgeted 2012/13 per State.





¹⁸ Valuation estimate for 2012/13. Actual amount should be used in CAFR.

Contribution & Expense Projection

(Amounts in Millions)

	D		Annual	C	a 4 i b 4 i a		C41		ARC	C43
Fiscal Year	Begin Year NOO ²⁰	ARC	OPEB Cost (AOC)	Benefit Pmts	ontribution Pre Funding	Total	Contrib % of ARC	Pavroll	as % of Payroll	Contrib % of Payroll
2012/13		\$ 94	\$ 87	\$ 67	\$ 9	\$ 76	81.7%	\$ 502	18.6%	15.1%
2013/14	103	99	92	71	14	85	85.9%	518	19.1%	16.4%
2014/15	110	104	96	76	17	93	89.4%	535	19.4%	17.4%
2015/16	113	108	99	82	18	100	92.6%	553	19.5%	18.1%
2016/17	112	112	103	86	21	107	95.5%	571	19.6%	18.7%
2017/18	108	116	106	90	23	113	97.4%	589	19.7%	19.2%
2018/19	101	120	109	94	26	120	100.0%	608	19.7%	19.7%
2019/20	90	111	98	98	13	111	100.0%	628	17.7%	17.7%
2020/21	78	100	85	100	-	100	100.0%	648	15.3%	15.3%
2021/22	63	108	92	104	4	108	100.0%	669	16.1%	16.1%

Gains and losses amortized over 10-year fixed (closed) periods for ARC. NOO amortized over average weighted remaining ARC gain and loss amortization period.



January 4, 2013

29



STATE EMPLOYEES RESULTS

Benefit Payment Projection

Fiscal Year	Cash Subsidy	Implied Subsidy	Total
2012/13	\$ 53	\$ 14	\$ 67
2013/14	56	15	71
2014/15	60	16	76
2015/16	64	18	82
2016/17	67	19	86
2017/18	70	20	90
2018/19	73	21	94
2019/20	76	22	98
2020/21	78	22	100
2021/22	81	23	104





Actuarial Obligations (Amounts in Millions)

	3/31	/11 Valua	tion	6/30/12 Valuation			
	Cash	Implied		Cash			
Actuarial Obligations	Subsidy	Subsidy	Total	Subsidy	Subsidy	Total	
■ Present Value of Benefits							
• Actives	\$ 568	n/a	\$ 568	\$ 378	n/a	\$ 378	
 Retirees 	<u>318</u>	<u>n/a</u>	<u>318</u>	<u>356</u>	<u>n/a</u>	<u>356</u>	
• Total	886	n/a	886	734	n/a	734	
■ Actuarial Accrued Liability							
• Actives	483	n/a	483	309	n/a	309	
• Retirees	<u>318</u>	<u>n/a</u>	<u>318</u>	<u>356</u>	<u>n/a</u>	<u>356</u>	
• Total	801	n/a	801	665	n/a	665	
■ Actuarial Value of Assets	0	<u>n/a</u>	0	0	<u>n/a</u>	0	
■ Unfunded AAL	801	n/a	801	665	n/a	665	
■ Normal Cost	14	n/a	14	10	n/a	10	
■ Normal Cost % Pay	1.3%	n/a	1.3%	0.9%	n/a	0.9%	



January 4, 2013

31



TEACHERS RESULTS

Estimated Actuarial Gains & Losses

Actuarial Gains & Losses	NC%	AAL	(AVA)	UAAL
■ 6/30/11 Projected	1.3%	\$ 806	\$ 0	\$ 806
■ 6/30/12 Expected	1.3%	830	(32)	798
■ Experience Losses (Gains):				
Actual versus Expected Healthcare Costs	(0.1%)	(35)	-	(35)
• Demographic, Benefit Payments, & Other	(0.3%)	(117)	(1)	(118)
Contribution Loss	-	-	33	33
■ Assumption Changes:				
 Merit & Longevity Pay Increases 	0.0%	2	-	2
Retirement Rates	0.0%	(9)	-	(9)
Medicare Eligibility	0.0%	<u>(6)</u>		<u>(6)</u>
■ Total Changes	(0.4%)	(165)	32	(133)
■ Total Changes	0.9%	665	0	665





Annual Required Contribution (ARC) (Amounts in Millions)

	3/31/11 Valuation 2011/12 ARC			6/30/12 Valuation 2012/13 ARC		
Annual Required	Cash	Implied		Cash	Implied	
Contribution	Subsidy	Subsidy	Total	Subsidy	Subsidy	Total
■ ARC - \$						
 Normal Cost 	\$ 14	n/a	\$ 14	\$ 10	n/a	\$ 10
 UAAL Amortization 	<u>41</u>	<u>n/a</u>	<u>41</u>	<u>34</u>	<u>n/a</u>	<u>34</u>
• ARC	55	n/a	55	44	n/a	44
■ Projected Payroll	1,098	n/a	1,098	1,156	n/a	1,156
■ ARC - %						
 Normal Cost 	1.3%	n/a	1.3%	0.9%	n/a	0.9%
 UAAL Amortization 	3.7%	<u>n/a</u>	3.7%	<u>2.9%</u>	<u>n/a</u>	<u>2.9%</u>
• ARC	5.0%	n/a	5.0%	3.8%	n/a	3.8%



January 4, 2013

33



TEACHERS RESULTS

Annual Required Contribution (ARC)

Annual Required Contribution	6/30/12 Valuation				
■ Fiscal Year	2012/13	2013/14			
■ ARC - \$					
 Normal Cost 	\$ 10	\$ 11			
 UAAL Amortization 	<u>34</u>	<u>34</u>			
• ARC	44	45			
Projected Payroll	1,156	1,194			
■ ARC - %					
 Normal Cost 	0.9%	0.9%			
 UAAL Amortization 	<u>2.9%</u>	<u>2.9%</u>			
• ARC	3.8%	3.8%			





Unfunded Actuarial Accrued Liability Amortization Balances

(Amounts in Millions)

	Original Bases				ning Bases 0/2012	2012/13 Amortization
Amortization Base	Date Years Amount		Years	Balance	Payment	
■ Fresh Start UAAL	6/30/08	29	\$ 1,044	25	\$ 1,054	\$ 60
■ Experience Losses (Gains)	6/30/09	15	(62)	12	(57)	(5)
	6/30/10	15	(7)	13	(6)	(1)
	6/30/11	15	(10)	14	(10)	(1)
	6/30/12	15	(120)	15	(120)	(10)
■ Assumption Changes	6/30/10	27	6	25	6	0
	6/30/11	26	(133)	25	(131)	(7)
	6/30/12	25	(13)	25	(13)	(1)
■ Plan Changes	6/30/11	26	(59)	25	<u>(58)</u>	<u>(3)</u>
■ Unfunded AAL	6/30/12				665	32
■ Unfunded AAL ²¹	6/30/12	·		30	665	34

 $[\]overline{^{21}}$ Total amortization payment cannot be less than the UAAL amortized over 30 years.



January 4, 2013

35



TEACHERS RESULTS

Estimated Net OPEB Obligation (NOO) Illustration

(Timound in Timoud)								
	CAFR	CAFR	CAFR	CAFR	Estimate	Estimate		
Estimated Net OPEB Obligation	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13		
■ Discount Rate	4.50%	4.50%	4.50%	4.50%	4.00%	4.00%		
■ NOO at Beginning of Year	\$ 0	\$ 28	\$ 70	\$ 107	\$ 147	\$ 174		
■ Annual OPEB Cost (AOC)								
 Annual Required Contribution 	46	60	58	61	55	44		
• Interest on NOO	0	1	3	5	6	7		
• NOO Adjustment ²²	<u>(0)</u>	<u>(1)</u>	<u>(5)</u>	<u>(8)</u>	(12)	<u>(14)</u>		
 Annual OPEB Cost 	46	60	56	58	49	37		
■ Contributions								
Benefit Payments Outside Trust								
➤ Cash Payments & Admin Fees ²³	(18)	(18)	(19)	(18)	(22)	(23)		
Implied Subsidy Payments	(0)	(0)	(0)	(0)	(0)	(0)		
Trust Pre-Funding	(0)	(0)	(0)	(0)	(0)	(0)		
 Total Contributions 	(18)	(18)	(19)	(18)	(22)	(23)		
■ NOO at End of Year	28	70	107	147	174	188		

NOO amortized over average weighted remaining experience gain or loss period for fiscal years starting 2009/10. Valuation estimate for 2012/13. Actual amount should be used in CAFR.





Contribution & Expense Projection

(Amounts in Millions)

			Annual	~			~		ARC	~
T2*1	Begin		OPEB		ontributio		Contrib		as o/ c	Contrib
Fiscal	Year NOO ²⁴	ADC	Cost	Benefit	Pre-	Total	% of	Dazmall	% of	% of
Year	NUU	ARC	(AOC)	Pmts	Funding	Contrib	ARC	Payron	Payroll	Payroll
2012/13	\$ 174	\$ 44	\$ 37	\$ 23	\$ -	\$ 23	52.3%	\$ 1,156	3.8%	2.0%
2013/14	188	45	38	27	2	29	64.4%	1,194	3.8%	2.4%
2014/15	197	48	40	29	5	34	70.8%	1,232	3.9%	2.8%
2015/16	203	50	42	32	7	39	78.0%	1,272	3.9%	3.1%
2016/17	206	52	44	34	9	43	82.7%	1,314	4.0%	3.3%
2017/18	207	54	46	36	11	47	87.0%	1,356	4.0%	3.5%
2018/19	206	56	48	39	13	52	92.9%	1,401	4.0%	3.7%
2019/20	202	58	50	41	15	56	96.6%	1,446	4.0%	3.9%
2020/21	197	61	52	43	18	61	100.0%	1,493	4.1%	4.1%
2021/22	188	63	52	46	17	63	100.0%	1,542	4.1%	4.1%

Gains and losses amortized over 15-year fixed (closed) periods for ARC. NOO amortized over average weighted ARC gain and loss amortization period.



January 4, 2013

37



TEACHERS RESULTS

Benefit Payment Projection

Fiscal Year	Cash Subsidy	Implied Subsidy	Total
2012/13	\$ 23	n/a	\$ 23
2013/14	27	n/a	27
2014/15	29	n/a	29
2015/16	32	n/a	32
2016/17	34	n/a	34
2017/18	36	n/a	36
2018/19	39	n/a	39
2019/20	41	n/a	41
2020/21	43	n/a	43
2021/22	46	n/a	46





Actuarial Obligations (Amounts in Thousands)

	3/31/11 Valuation			6/30	/12 Valua	tion
	Cash	Implied		Cash	Implied	
Actuarial Obligations	Subsidy	Subsidy	Total	Subsidy	Subsidy	Total
■ Present Value of Benefits						
 Actives 	\$ 4,958	\$ 1,122	\$ 6,080	\$ 3,739	\$ 572	\$ 4,311
• Retirees	<u>1,511</u>	<u>762</u>	<u>2,273</u>	<u>1,504</u>	438	<u>1,942</u>
• Total	6,469	1,884	8,353	5,243	1,010	6,253
■ Actuarial Accrued Liability						
• Actives	3,137	857	3,994	2,247	475	2,722
• Retirees	<u>1,511</u>	762	<u>2,273</u>	<u>1,504</u>	<u>438</u>	<u>1,942</u>
• Total	4,648	1,619	6,267	3,751	913	4,664
■ Actuarial Value of Assets	0	0	0	0	0	0
■ Unfunded AAL	4,648	1,619	6,267	3,751	913	4,664
■ Normal Cost	231	37	268	172	15	187
■ Normal Cost % Pay	8.5%	1.4%	9.9%	7.1%	0.6%	7.7%



39



MAINE EDUCATIONAL CENTER FOR THE DEAF

Estimated Actuarial Gains & Losses

Actuarial Gains & Losses	NC%	AAL	(AVA)	UAAL
■ 6/30/11 Projected	9.9%	\$ 6,360	\$ -	\$ 6,360
■ 6/30/12 Expected	9.9%	6,747	(446)	6,301
■ Experience Losses (Gains):				
 Actual versus Expected Healthcare Costs 	(1.0%)	(712)	-	(712)
• Demographic, Benefit Payments, & Other	(1.3%)	(1,187)	9	(1,178)
Contribution Loss	-	-	437	437
■ Assumption Changes:		-	-	-
 Merit & Longevity Pay Increases 	0.0%	21	-	21
• Retirement Rates	0.1%	54	-	54
Medicare Eligibility	0.0%	(259)	<u> </u>	(259)
■ Total Changes	(2.2%)	(2,083)	446	(1,637)
■ 6/30/12 Actual	7.7%	4,664	-	4,664





Annual Required Contribution (ARC)

(Amounts in Thousands)

	3/31/11 Valuation 2011/12 ARC)/12 Valua)12/13 AR	_
Annual Required	Cash	Implied		Cash	Implied	
Contribution	Subsidy	Subsidy	Total	Subsidy	Subsidy	Total
■ ARC - \$						
 Normal Cost 	\$ 231	\$ 37	\$ 268	\$ 172	\$ 15	\$ 187
 UAAL Amortization 	<u>233</u>	81	<u>314</u>	<u>168</u>	<u>41</u>	<u>209</u>
• ARC	464	118	582	340	56	396
■ Projected Payroll	2,709	2,709	2,709	2,434	2,434	2,434
■ ARC - %						
 Normal Cost 	8.5%	1.4%	9.9%	7.1%	0.6%	7.7%
 UAAL Amortization 	8.6%	3.0%	<u>11.6%</u>	6.9%	1.7%	8.6%
• ARC	17.1%	4.4%	21.5%	14.0%	2.3%	16.3%



January 4, 2013

41



MAINE EDUCATIONAL CENTER FOR THE DEAF

Annual Required Contribution (ARC)

Annual Required Contribution	6/30/12 V	Valuation
■ Fiscal Year	2012/13	2013/14
■ ARC - \$		
Normal Cost	\$ 187	\$ 192
 UAAL Amortization 	<u>209</u>	<u>233</u>
• ARC	396	425
■ Projected Payroll	2,434	2,513
■ ARC - %		
Normal Cost	7.7%	7.6%
UAAL Amortization	8.6%	9.3%
• ARC	16.3%	16.9%





Unfunded Actuarial Accrued Liability Amortization Balances

(Amounts in Thousands)

	Original Bases				ing Bases 0/2012	2012/13 Amortization
Amortization Base	Date	Years	Amount	Years	Balance	Payment
■ Initial UAAL	6/30/07	30	\$ 3,814	25	\$ 3,881	\$ 176
■ Experience Losses (Gains)	6/30/08	15	(127)	11	(110)	(11)
	6/30/09	15	474	12	427	38
	6/30/10	15	597	13	557	47
	6/30/11	15	114	14	110	9
	6/30/12	15	(1,453)	15	(1,453)	(106)
■ Assumption Changes	6/30/08	29	511	25	492	22
	6/30/10	27	251	25	246	11
	6/30/11	26	1,218	25	1,213	55
	6/30/12	25	(184)	25	(184)	(9)
■ Plan Changes	6/30/11	26	(517)	25	(515)	<u>(23)</u>
■ Unfunded AAL	6/30/11				4,664	209
■ Unfunded AAL ²⁵	6/30/12			30	4,664	179

 $[\]overline{^{25}}$ Total amortization payment cannot be less than the UAAL amortized over 30 years.



January 4, 2013

43



MAINE EDUCATIONAL CENTER FOR THE DEAF

Estimated Net OPEB Obligation (NOO) Illustration

(Amounts in Thousands)

	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate
Estimated Net OPEB Obligation	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
■ Discount Rate	4.50%	4.50%	4.50%	4.50%	4.00%	4.00%
■ NOO at Beginning of Year	\$ 0	\$ 358	\$ 645	\$ 950	\$ 1,284	\$ 1,678
■ Annual OPEB Cost (AOC)						
 Annual Required Contribution 	394	353	416	505	582	396
• Interest on NOO	0	16	29	43	51	67
• NOO Adjustment ²⁶	(0)	(24)	<u>(46)</u>	<u>(72)</u>	<u>(94)</u>	(123)
 Annual OPEB Cost 	394	345	399	476	539	340
■ Contributions						
 Benefit Payments Outside Trust 						
➤ Cash Payments & Admin Fees ²⁷	(22)	(45)	(78)	(105)	(102)	(96)
Implied Subsidy Payments	(14)	(13)	(16)	(37)	(43)	(30)
Trust Pre-Funding	(0)	(0)	(0)	(0)	_(0)	(0)
Total Contribution	(36)	(58)	(94)	(142)	(145)	(126)
■ NOO at End of Year	358	645	950	1,284	1,678	1,892

NOO amortized over average weighted remaining experience gain or loss period for fiscal years starting 2009/10.

²⁷ Valuation estimate for 2012/13. Actual amount should be used in CAFR.





Contribution & Expense Projection

(Amounts in Thousands)

	ъ .		Annual		(C 4 7		ARC	G 4 7
Fiscal	Begin Year		OPEB Cost	Benefit	ontribution Pre-	on Total	Contrib % of		as % of	Contrib % of
Year	NOO ²⁸	ARC	(AOC)	Pmts	Funding			Payroll		Payroll
2012/13		\$ 396	\$ 340	\$ 126	\$ -	\$ 126	31.8%	\$ 2,434	16.3%	5.2%
2013/14	1,892	425	358	127	-	127	29.9%	2,513	16.9%	5.1%
2014/15	2,123	457	376	158	-	158	34.6%	2,595	17.6%	6.1%
2015/16	2,342	490	394	177	-	177	36.1%	2,679	18.3%	6.6%
2016/17	2,559	524	413	166	-	166	31.7%	2,766	18.9%	6.0%
2017/18	2,806	564	433	202	-	202	35.8%	2,856	19.7%	7.1%
2018/19	3,037	605	453	215	-	215	35.5%	2,949	20.5%	7.3%
2019/20	3,274	650	473	236	-	236	36.3%	3,045	21.3%	7.8%
2020/21	3,511	698	493	239	-	239	34.2%	3,144	22.2%	7.6%
2021/22	3,766	751	515	251	-	251	33.4%	3,246	23.1%	7.7%

Gains and losses amortized over 15-year fixed (closed) periods for ARC. NOO amortized over average weighted remaining ARC gain and loss amortization period.



January 4, 2013

45



MAINE EDUCATIONAL CENTER FOR THE DEAF

Benefit Payment Projection

Fiscal Year	Cash Subsidy	Implied Subsidy	Total
2012/13	\$ 96	\$ 30	\$ 126
2013/14	100	27	127
2014/15	121	37	158
2015/16	133	44	177
2016/17	134	32	166
2017/18	160	42	202
2018/19	173	42	215
2019/20	191	45	236
2020/21	193	46	239
2021/22	203	48	251





Actuarial Obligations

(Amounts in Thousands)

	3/31/11 Valuation			6/30	/12 Valua	tion
	Cash	Implied		Cash	Implied	
Actuarial Obligations	Subsidy	Subsidy	Total	Subsidy	Subsidy	Total
■ Present Value of Benefits						
• Actives	\$ 297	\$ 24	\$ 321	\$ 326	\$ 12	\$ 338
• Retirees	<u>69</u>	_0	69	<u>137</u>	_0	<u>137</u>
• Total	366	24	390	463	12	475
■ Actuarial Accrued Liability						
• Actives	124	5	129	139	3	142
• Retirees	<u>69</u>	<u>0</u>	69	<u>137</u>	<u>0</u>	<u>137</u>
• Total	193	5	198	276	3	279
■ Actuarial Value of Assets	0	<u>0</u>	0	0	<u>0</u>	0
■ Unfunded AAL	193	5	198	276	3	279
■ Normal Cost	19	2	21	21	1	22
■ Normal Cost % Pay	6.4%	0.6%	7.0%	5.5%	0.3%	5.8%



January 4, 2013





NORTHERN NEW ENGLAND PASSENGER RAIL AUTHORITY

Estimated Actuarial Gains & Losses

Actuarial Gains & Losses	NC%	AAL	(AVA)	UAAL
■ 6/30/11 Projected	7.0%	\$ 204	\$ -	\$ 204
■ 6/30/12 Expected	7.0%	228	(26)	202
■ Experience Losses (Gains):				
 Actual versus Expected Healthcare Costs 	(0.7%)	(28)	-	(28)
• Demographic, Benefit Payments, & Other	(0.7%)	74	2	76
Contribution Loss	-	-	24	24
■ Assumption Changes:				
 Merit & Longevity Pay Increases 	0.1%	2	-	2
• Retirement Rates	0.1%	3	-	3
Medicare Eligibility	0.0%			
■ Total Changes	(1.2%)	51	26	77
■ 6/30/12 Actual	5.8%	279	-	279





Annual Required Contribution (ARC)

(Amounts in Thousands)

	3/31/11 Valuation 2011/12 ARC)/12 Valua)12/13 AR	
Annual Required Contribution	Cash	Implied Subsidy	Total	Cash	Implied Subsidy	Total
■ ARC - \$	Subsidy	Subsidy	Total	Subsidy	Subsidy	Total
 Normal Cost 	\$ 19	\$ 2	\$ 21	\$ 21	\$ 1	\$ 22
 UAAL Amortization 	<u>10</u>	<u>0</u>	<u>10</u>	<u>15</u>	<u>0</u>	<u>15</u>
• ARC	29	2	31	36	1	37
■ Projected Payroll	300	300	300	375	375	375
■ ARC - %						
 Normal Cost 	6.4%	0.6%	7.0%	5.5%	0.3%	5.8%
 UAAL Amortization 	3.2%	<u>0.1%</u>	3.3%	<u>4.1%</u>	0.0%	<u>4.1%</u>
• ARC	9.6%	0.7%	10.3%	9.6%	0.3%	9.9%



January 4, 2013

49



NORTHERN NEW ENGLAND PASSENGER RAIL AUTHORITY

Annual Required Contribution (ARC)

Annual Required Contribution	6/30/12 V	Valuation
■ Fiscal Year	2012/13	2013/14
■ ARC - \$		
Normal Cost	\$ 22	\$ 23
 UAAL Amortization 	<u>15</u>	<u>18</u>
• ARC	37	41
■ Projected Payroll	375	387
■ ARC - %		
 Normal Cost 	5.8%	5.8%
 UAAL Amortization 	<u>4.1%</u>	4.7%
• ARC	9.9%	10.5%





Unfunded Actuarial Accrued Liability Amortization Balances

(Amounts in Thousands)

	Or	iginal B	ases		ing Bases 0/2012	2012/13 Amortization
Amortization Base	Date Years Amount		Years Balance		Payment	
■ Initial UAAL	6/30/07	30	\$ 130	25	\$ 132.0	\$ 6.0
■ Experience Losses (Gains)	6/30/08	15	119	11	103.3	10.1
	6/30/09	15	35	12	31.1	2.8
	6/30/10	15	(198)	13	(184.3)	(15.4)
	6/30/11	15	34	14	33.1	2.6
	6/30/12	15	72	15	71.9	5.2
■ Assumption Changes	6/30/08	29	60	25	57.8	2.6
	6/30/10	27	9	25	8.5	0.4
	6/30/11	26	29	25	28.2	1.3
	6/30/12	25	5	25	4.9	0.2
■ Plan Changes	6/30/11	26	(8)	25	(7.5)	(0.3)
■ Unfunded AAL	6/30/11				279.0	15.5
■ Unfunded AAL ²⁹	6/30/12			30	279.0	10.7

²⁹ Total amortization payment cannot be less than the UAAL amortized over 30 years.



January 4, 2013

51

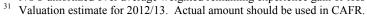


NORTHERN NEW ENGLAND PASSENGER RAIL AUTHORITY

Estimated Net OPEB Obligation (NOO) Illustration

	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate
Estimated Net OPEB Obligation	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
■ Discount Rate	4.50%	4.50%	4.50%	4.50%	4.00%	4.00%
■ NOO at Beginning of Year	\$ 0	\$ 13	\$ 36	\$ 63	\$ 82	\$ 104
■ Annual OPEB Cost (AOC)						
 Annual Required Contribution 	17	29	33	23	31	37
• Interest on NOO	0	1	2	3	3	4
• NOO Adjustment ³⁰	<u>(0)</u>	<u>(1)</u>	<u>(2)</u>	<u>(5)</u>	<u>(6)</u>	<u>(8)</u>
 Annual OPEB Cost 	17	28	32	21	28	33
■ Contributions						
 Benefit Payments Outside Trust 						
➤ Cash Payments & Admin Fees ³¹	(4)	(5)	(3)	(2)	(6)	(8)
Implied Subsidy Payments	(1)	(1)	(1)	(0)	(0)	(0)
Trust Pre-Funding	<u>(0)</u>	<u>(0)</u>	<u>(0)</u>	<u>(0)</u>	<u>(0)</u>	<u>(0)</u>
Total Contribution	(4)	(6)	(4)	(2)	(6)	(8)
■ NOO at End of Year	13	36	63	82	104	129

NOO amortized over average weighted remaining experience gain or loss period for fiscal years starting 2009/10.







Contribution & Expense Projection

(Amounts in Thousands)

	Begin		Annual OPEB	C	ontributio	on	Contrib		ARC as	Contrib
Fiscal Year	Year NOO ³²	ARC	Cost (AOC)	Benefit	Pre- Funding	Total	% of		% of Payroll	% of Payroll
2012/13	\$ 104	\$ 37	\$ 33	\$ 8	\$ -	\$ 8	21.6%	\$ 375	9.9%	2.1%
2013/14	129	41	36	9	-	9	22.0%	387	10.5%	2.3%
2014/15	157	44	38	10	-	10	22.7%	400	11.0%	2.5%
2015/16	185	48	40	12	-	12	25.0%	413	11.6%	2.9%
2016/17	213	52	42	13	-	13	25.0%	426	12.2%	3.1%
2017/18	242	56	45	15	-	15	26.8%	440	12.7%	3.4%
2018/19	272	61	47	15	-	15	24.6%	454	13.4%	3.3%
2019/20	304	66	49	16	-	16	24.2%	469	14.1%	3.4%
2020/21	337	72	52	16	-	16	22.2%	484	14.9%	3.3%
2021/22	373	78	55	17	-	17	21.8%	500	15.6%	3.4%

Gains and losses amortized over 15-year fixed (closed) periods for ARC. NOO amortized over average weighted remaining ARC gain and loss amortization period.



January 4, 2013

53



NORTHERN NEW ENGLAND PASSENGER RAIL AUTHORITY

Benefit Payment Projection

Fiscal Year	Cash Subsidy	Implied Subsidy	Total
2012/13	\$ 8	\$ 0	\$ 8
2013/14	9	0	9
2014/15	10	0	10
2015/16	12	0	12
2016/17	13	0	13
2017/18	15	0	15
2018/19	15	0	15
2019/20	16	0	16
2020/21	16	0	16
2021/22	17	0	17





ACTUARIAL CERTIFICATION

This report presents the State of Maine Retiree Healthcare Plan for State Employees and Teachers ("Plan") June 30, 2012 actuarial valuation. The purpose of this valuation is to:

- Determine the Governmental Accounting Standards Board Statement Nos. 43 and 45 June 30, 2012 Benefit Obligations,
- Determine the Plan's June 30, 2012 Funded Status, and
- Calculate the 2012/13 and 2013/14 Annual Required Contributions.

This report provides information intended for reporting under GASB 43 and 45, but may not be appropriate for other purposes. Information provided in this report may be useful to the State for the Plan's financial management. Future valuations may differ significantly if the Plan's experience differs from our assumptions or if there are changes in Plan design, actuarial methods or actuarial assumptions. The project scope did not include an analysis of this potential variation.

The valuation is based on Plan provisions, participant data, contribution policy, and asset information provided by the State as summarized in this report, which we relied on and did not audit. We reviewed the participant data for reasonableness.

To the best of our knowledge, this report is complete and accurate and has been conducted using generally accepted actuarial principles and practices. Additionally, in our opinion, actuarial methods and assumptions comply with GASB 43 and 45. As members of the American Academy of Actuaries meeting the Academy Qualification Standards, we certify the actuarial results and opinions herein.

Respectfully submitted,

John E. Bartel, ASA, MAAA, FCA President

Bartel Associates, LLC January 4, 2013

Joseph D'an Joseph R. D'Onofrio, FSA, EA, MAAA, FCA Catherine A. Wandro, ASA, MAAA, FCA

Assistant Vice President Bartel Associates, LLC January 4, 2013

Cotherine a. Wandro

Assistant Vice President Bartel Associates, LLC January 4, 2013





EXHIBITS

55

Topic	Page
Premiums	E-1
Participant Statistics	E-5
Actuarial Assumptions	E-19
Actuarial Methods	E-40
Definitions	E-43



PREMIUMS

State Employees' Health Plans Monthly Premiums

Actives and Non-Medicare Eligible Retirees

					Participant
Medical Plan	Year	Single	2-Party	Family	w/Child(ren)
HMO Choice	2008/09	\$648.10	\$1,355.00	\$1,612.10	\$1,065.84
	2009/10	686.66	1,435.96	1,708.50	1,129.46
	2010/11	727.54	1,521.78	1,810.70	1,196.90
	2011/12*	727.54	1,521.78	1,810.70	1,196.90
	2012/13*	727.54	1,521.78	1,810.70	1,196.90

^{*} LD 1043 caps premium increases to 0% for 2011/12 and 2012/13.



E-1



PREMIUMS

State Employees' Health Plans Monthly Premiums

Medicare Eligible Retirees

					Participant
Medical Plan	Year	Single	2-Party	Family	w/Child(ren)
Group Companion	2008/09	\$320.10	\$634.70	\$988.14	\$673.54
Advantra Freedom PFFS	2009	237.42	469.34	n/a	n/a
Anthem SmartValue PFFS	2010	269.28	533.06	n/a	n/a
Anthem Medicare PPO	2011	290.07	574.64	n/a	n/a
	2012	290.07	574.64	n/a	n/a





PREMIUMS

Teachers' Health Plans Monthly Premiums

Active and Non-Medicare Eligible Retirees

					Participant
Medical Plan	Year	Single	2-Party	Family	w/Child(ren)
MEA Choice Plus	2009/10	\$528.40	\$1,190.91	\$1,449.51	\$935.16
(HMO Choice)	2010/11	538.97	1,214.73	1,478.50	953.86
	2011/12	574.00	1,293.69	1,574.60	1,015.86
	2012/13	596.96	1,345.44	1,637.58	1,056.49
MEA Standard Plan	2009/10	570.61	1,286.19	1,565.47	1,009.96
(Blue Choice \$15)	2010/11	582.02	1,311.91	1,596.78	1,030.16
	2011/12	619.85	1,397.18	1,700.75	1,097.12
	2012/13	644.64	1,453.07	1,768.59	1,141.00
MEA Standard \$500 Ded.	2012/13	567.11	1,278.17	1,555.70	1,003.67
(Blue Choice \$20)					
MEA Standard \$1,000 Ded.	2012/13	540.85	1,218.97	1,483.65	957.18
(Blue Choice \$20)					



January 4, 2013

E-3



PREMIUMS

Teachers' Health Plans Monthly Premiums

Medicare Eligible Retirees

					Participant
Medical Plan	Year	Single	2-Party	Family	w/Child(ren)
Group Companion	2008/09	\$321.36	\$674.55	n/a	n/a
	2009/10	321.36	674.55	n/a	n/a
	2010/11	321.36	674.55	n/a	n/a
	2011/12	327.79	688.04	n/a	n/a
	2012/13	340.90	715.56	n/a	n/a





Active Employee Plan & Coverage Elections June 30, 2012

State Employees

				*			
				EE +			
Medical Plan	Single	2-Party	Family	Child(ren)	FLES ³³	Waived	Total
HMO Choice	5,640	1,469	2,128	1,674	641	-	11,552
Comp Care ³⁴	39	2	-	7	2	-	50
Waived	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	817	817
Total	5,679	1,471	2,128	1,681	643	817	12,419

Teachers

				EE +			
Medical Plan	Single	2-Party	Family	Child(ren)	FLES	Waived	Total
HMO Choice	6,054	2,107	4,342	2,714	n/a	n/a	15,217
Blue Choice \$15	1,627	625	811	430	n/a	n/a	3,493
Blue Choice \$20 ³⁵	2	5	8	3	n/a	n/a	18
Waived	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	9,647	9,647
Total	7,683	2,737	5,161	3,147	n/a	9,647	28,375

State employees or retirees married to other State employees or retirees and valued as single coverage.

Included with HMO Choice for purposes of the valuation.
Assumed to be in MEA Standard \$500 Deductible Plan for purposes of the valuation.



January 4, 2013

E-5



PARTICIPANT STATISTICS

Retiree Plan & Coverage Elections June 30, 2012

State Employees

				EE +		
Medical Plan	Single	2-Party	Family	Child(ren)	FLES ³⁶	Total
HMO Choice	3,329	277	27	49	53	3,735
Comp Care ³⁷	153	4	-	-	2	159
Medicare PFFS	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	5,693
Total	3,482	281	27	49	55	9,587

Teachers

				EE +		
Medical Plan	Single	2-Party	Family	Child(ren)	FLES	Total
HMO Choice	1,575	242	21	26	n/a	1,864
Blue Choice \$15	1,698	170	9	15	n/a	1,892
Blue Choice \$20 ³⁸	7	2	-	-	n/a	9
Group Companion	4,640	1,109	-	-	n/a	5,749
Medigap B	5	1		<u> </u>	<u>n/a</u>	6
Total	7,925	1,524	30	41	n/a	9,520

State employees or retirees married to other State employees or retirees and valued as single coverage.

Included with HMO Choice for purposes of the valuation.

Assumed to be in MEA Standard \$500 Deductible Plan for purposes of the valuation.





State Actives by Age and Service³⁹ June 30, 2012

	Service							
Age	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	Total
< 25	103	178	3	-	-	-	-	284
25-29	117	315	210	13	-	-	-	655
30-34	77	267	406	171	7	-	1	929
35-39	66	221	325	416	101	12	-	1,141
40-44	119	254	327	406	261	211	37	1,615
45-49	57	228	317	367	193	371	304	1,837
50-54	81	249	340	365	212	347	611	2,205
55-59	44	192	288	355	186	263	720	2,048
60-64	26	120	210	186	130	172	439	1,283
≥ 65	6	38	84	82	53	53	106	422
Total	696	2,062	2,510	2,361	1,143	1,429	2,218	12,419

³⁹ Including actives with assumed birth and hire dates.



January 4, 2013

E-7



PARTICIPANT STATISTICS

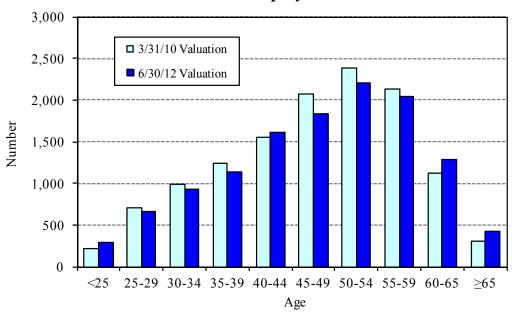
Teacher Actives by Age and Service June 30, 2012

	Service							
Age	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	Total
< 25	368	470	51	-	-	-	-	889
25-29	298	943	920	60	-	-	1	2,221
30-34	160	517	1,113	903	40	-	-	2,733
35-39	158	455	648	937	766	24	-	2,988
40-44	156	462	724	675	1,056	583	14	3,670
45-49	103	357	698	704	548	771	557	3,738
50-54	85	285	547	769	617	553	1,365	4,221
55-59	56	195	387	550	656	662	1,858	4,364
60-64	49	115	235	324	379	520	1,181	2,803
≥ 65	22	70	117	101	79	91	268	748
Total	1,455	3,869	5,440	5,023	4,141	3,204	5,243	28,375





Active Age Distribution State Employees





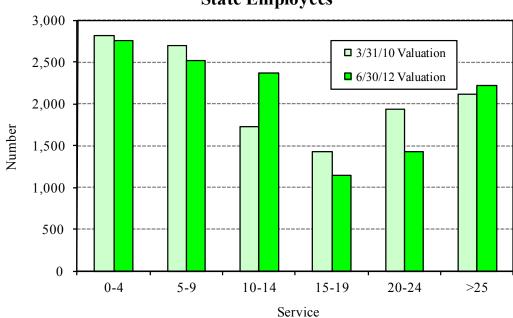
January 4, 2013

E-9



PARTICIPANT STATISTICS

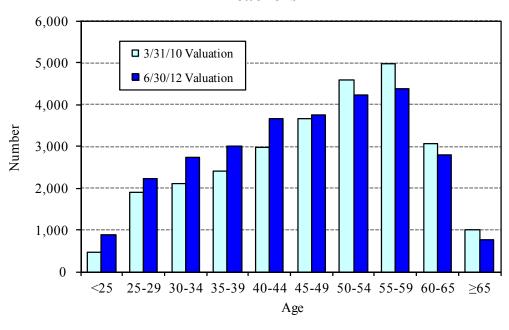
Active Service Distribution State Employees







Active Age Distribution Teachers



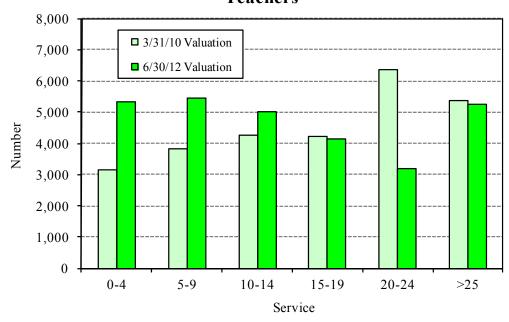






PARTICIPANT STATISTICS

Active Service Distribution Teachers







State Retiree Healthcare Coverage by Age Group June 30, 2012

Age	Single	2-Party	Family	FLES	PFFS ⁴⁰	Total
Under 50	96	2	9	9	3	119
50-54	340	17	24	10	10	401
55-59	827	71	18	18	10	944
60-64	1,590	148	23	17	35	1,813
65-69	202	14	1	1	1,592	1,810
70-74	161	11	-	-	1,147	1,319
75-79	138	11	1	-	1,074	1,224
80-84	71	6	-	-	937	1,014
Over 85	57	1		-	885	943
Total	3,482	281	76	55	5,693	9,587
Average Age	62.3	62.6	55.6	56.7	76.1	70.4
< 65 Election %	87%	7%	2%	2%	2%	100%
≥ 65 Election %	10%	1%	0%	0%	89%	100%
Total Election %	36%	3%	1%	1%	59%	100%

⁴⁰ Medical coverage election not provided for State retirees in Medicare PFFS plan.



January 4, 2013

E-13



PARTICIPANT STATISTICS

<u>Teachers Retiree Healthcare Coverage by Age Group</u> June 30, 2012

Age	Single	2-Party	Family	Total
Under 50	19	-	-	19
50-54	44	1	8	53
55-59	412	70	26	508
60-64	2,097	305	35	2,437
65-69	2,179	333	1	2,513
70-74	1,285	337	-	1,622
75-79	834	251	1	1,086
80-84	521	144	-	665
Over 85	534	83	-	617
Total	7,925	1,524	71	9,520

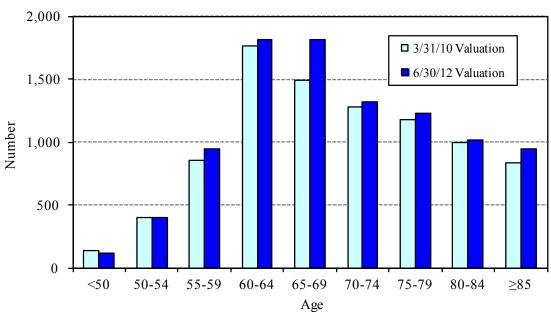
Average Age	69.9	71.3	59.9	70.1
< 65 Election %	85%	12%	2%	100%
≥ 65 Election %	82%	18%	0%	100%
Total Election %	83%	16%	1%	100%





PARTICIPANT STATISTICS

Retiree Age Distribution State Employees



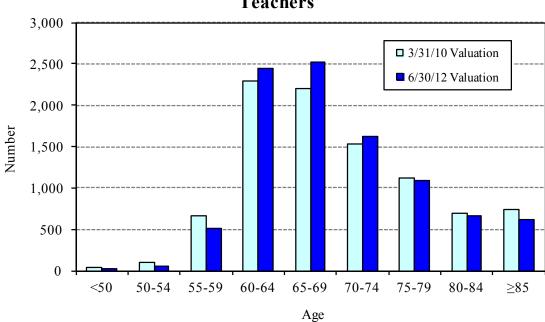
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E-15



PARTICIPANT STATISTICS

Retiree Age Distribution Teachers







PARTICIPANT STATISTICS

<u>Data Reconciliation</u> Maine Educational Center for the Deaf

Participants	Actives	Retirees
■ March 31, 2010 Valuation Count	62	10
• New Hires	15	-
• Terminations/Deaths	(21)	(2)
• Retirements	(1)	1
• Adjustments	_2	_2
■ June 30, 2012 Valuation Count	57	11





PARTICIPANT STATISTICS

E-17

<u>Data Reconciliation</u> Northern New England Passenger Rail Authority

Participants	Actives	Retirees
■ March 31, 2010 Valuation Count	5	1
• New Hires	1	-
• Terminations/Deaths	0	0
• Retirements	0	0
• Adjustments	_0	_1
■ June 30, 2012 Valuation Count	6	2





Assumption	Marc	ch 31, 20	011 Valua	tion	Jun	e 30, 20	12 Valuat	tion
■ Valuation Date	March2011/2				June 30, 20122012/13 and 2013/14 ARCs			RCs
■ Discount Rate Basis	 No pre-funding rate - 4.00% State cash pool return exceeded inflation by 25 bp for 5 years and 14 bp for 10 years ending 6/30/11 Full pre-funding rate - 7.25% 				• Full properties (Refle	re-fundi cts inve	ng rate - 4. ng rate - 7 stment and e expenses	7.25% d
■ Discount Rate State Employees	rates b		nate discou ARC pha y:		rates b		nate discou ARC pha y:	
	Year 2011/12 2012/13 2013/14 2014/15	Rate 4.98% 5.30% 5.63% 5.95%	<u>Year</u> 2015/16 2016/17 2017/18 2018/19+	Rate 6.28% 6.60% 6.93% 7.25%	Year 2011/12 2012/13 2013/14 2014/15	Rate n/a 4.49% 5.63% 5.95%	<u>Year</u> 2015/16 2016/17 2017/18 2018/19+	Rate 6.28% 6.60% 6.93% 7.25%



E-19



Assumption	March 31, 202	11 Valua	tion	Jun	e 30, 20	12 Valua	tion
■ Discount Rate Teachers	• Select & ultimates based on a funding policy:	ARC pha		rates b		nate discon ARC pha y:	
	2012/13 4.00% 2 2013/14 4.41% 2 2014/15 4.81% 2	2017/18 2018/19 2019/20	Rate 5.63% 6.03% 6.44% 6.84% 7.25%	Year 2011/12 2012/13 2013/14 2014/15 2015/16	Rate n/a 4.00% 4.41% 4.81% 5.22%	Year 2016/17 2017/18 2018/19 2019/20 2020/21+	Rate 5.63% 6.03% 6.44% 6.84% 7.25%
■ Discount Rate Ancillary Groups	• 4.0%			• Same			
■ General Inflation	 3% annually Basis for aggre discount rate as			• Same			





Assumption	March 31, 2011 Valuation	June 30, 2012 Valuation
■ Aggregate Payroll Increases	 3.25% Inflation plus 0.25% For Normal Cost calculation and UAAL amortization	• Same
■ Merit and Longevity Pay	• MainePERS 2010 Experience Study sample rates:	• MainePERS 6/30/11 Valuation sample rates:
Increases	Service State Teachers 0 7.25% 10.25%	<u>Service</u> <u>State</u> <u>Teachers</u> 0 7.00% 10.00%
	5 2.75% 3.00% 10 1.25% 1.75% 15 0.70% 1.25%	5 2.50% 2.75% 10 1.00% 1.50% 15 0.45% 1.00%
	20 0.45% 0.45% 25+ 0.25% 0.25%	20 0.20% 0.20% 25+ 0.00% 0.00%
	0.0% for Legislative0.5% for Judicial	0.0% for Legislative0.0% for Judicial
	 Added to aggregate payroll increase assumption and used for Normal Cost calculation 	Added to aggregate payroll increase assumption and used for Normal Cost calculation



E-21



Assumption	March 31, 2011 Valuation				Jun	e 30, 2012	2 Valu	ation
■ Healthcare Cost	In	crease from	Prior Y	ear ear	In	crease from	Prior Y	ear
Increases	Voor	HMO	Voor	Medicare	Vaar	HMO	Voor	Medicare
State Employees	<u>Year</u> 2011/12	Choice Premium*	<u>Year</u> 2011	<u>Plan</u> Premium	<u>Year</u> 2011/12	Choice n/a	<u>Year</u> 2011	<u>Plan</u> n/a
and Ancillary	2012/13	0.0%*	2012	9.4%	2012/13	Premium*	2012	Premium
Groups	2013/14	8.5%	2013	8.9%	2013/14	8.5%	2013	8.9%
	2014/15	8.0%	2014	8.3%	2014/15	8.0%	2014	8.3%
	2015/16	7.5%	2015	7.8%	2015/16	7.5%	2015	7.8%
	2016/17	7.0%	2016	7.2%	2016/17	7.0%	2016	7.2%
	2017/18	6.5%	2017	6.7%	2017/18	6.5%	2017	6.7%
	2018/19	6.0%	2018	6.1%	2018/19	6.0%	2018	6.1%
	2019/20	5.5%	2019	5.6%	2019/20	5.5%	2019	5.6%
	2020/21+	5.0%	2020+	5.0%	2020/21+	5.0%	2020+	5.0%
	* LD 1043 caps non-Medicare					43 caps no		
	premium increases to 0% for				premium increases to 0% for			
	2011/1	12 and 201	2/13.		2011/12 and 2012/13.			





Assumption	Mar	ch 31, 20	11 Valu	ation	Jun	e 30, 201	12 Valua	tion
■ Healthcare Cost	In	crease fron	n Prior Yea	r*	In	crease fron	n Prior Yea	r*
Increases	Year	HMO Choice	Blue Choice	Medicare Plan	Year	HMO Choice	Blue Choice	Medicare Plan
Teachers	2011/12		Premium		2011/12	n/a	n/a	n/a
	2012/13	9.0%	9.0%	9.4%	2012/13	Premium	Premium	Premium
	2013/14	8.5%	8.5%	8.9%	2013/14	8.5%	8.5%	8.9%
	2014/15	8.0%	8.0%	8.3%	2014/15	8.0%	8.0%	8.3%
	2015/16	7.5%	7.5%	7.8%	2015/16	7.5%	7.5%	7.8%
	2016/17	7.0%	7.0%	7.2%	2016/17	7.0%	7.0%	7.2%
	2017/18	6.5%	6.5%	6.7%	2017/18	6.5%	6.5%	6.7%
	2018/19	6.0%	6.0%	6.1%	2018/19	6.0%	6.0%	6.1%
	2019/20	5.5%	5.5%	5.6%	2019/20	5.5%	5.5%	5.6%
	2020/21+	5.0%	5.0%	5.0%	2020/21+	5.0%	5.0%	5.0%
	non-Me and 201 level. M subsidy	3 caps Statedicare pren 2/13 at the Aultiplied S by 86.3% and ed budgeted	niums for 2 2010/11 ft State paid c for 2012/13	2011/12 unding ash 3 so as not	non-Medicare premiums for 2011/12 and 2012/13 at the 2010/11 funding level. Multiplied State paid cash			2011/12 unding ash 3 so as not



E-23



Assumption	March 3	31, 2011	Valuation	June 3	0, 2012 V	aluation
■ State Average Monthly Net Claims Cost	 Average claims co Based co Include stop/los admin Claims co 	HMO Clost: on 2009 es 1% loss ss premie	retiree claims ad for um and see: ice 7 Claims Female	 Average claims co Based Assum modifi premiu Claims c 	HMO Chost: on 2012/ nes medic ed to net ums for 20	13 premiums al plan is unchanged 012/13 e:





Assumption	March 3	1, 2011	Valuation	June 30, 2012 Valuation
Assumption ■ State Relative Age-Related Claims Cost Factors	Н	MO Choree and Spee an	ice pouse Female 71% 73% 80% 100% 122% 144% 160%	• Same
			e and gender	



E-25



A	M
Assumption	March 31, 2011 Valuation June 30, 2012 Valuation
■ Mortality for	• MainePERS 2010 Experience • Same per MainePERS 6/30/11
Healthy Lives	Study assumption valuation
	> State, Legislative & Judicial -
	RP2000 projected to 2015
	using Scale AA
	> Teachers - RP2000 projected to
	2015 using Scale AA setback 2
	years
	<u>State</u> <u>Teachers</u>
	Age Male Female Male Female
	20 0.03% 0.01% 0.02% 0.02%
	25 0.03% 0.02% 0.03% 0.02%
	30 0.04% 0.02% 0.04% 0.02%
	35 0.07% 0.04% 0.06% 0.03%
	40 0.10% 0.06% 0.09% 0.05%
	45 0.12% 0.09% 0.11% 0.07%
	50 0.16% 0.13% 0.15% 0.11%
	55 0.27% 0.24% 0.22% 0.18%
	60 0.53% 0.47% 0.41% 0.36%
	65 1.03% 0.90% 0.81% 0.71%
	70 1.77% 1.55% 1.45% 1.25%





Assumption	March	31, 2011	Valuation	June 30, 2012 Valuation
■ Mortality for Disabled Lives		ERS 6/30/2 ssumption	10 valuation	• Same per MainePERS 6/30/11 valuation
	Age 25 30 35 40 45 50 55 60 65 70	State & 'Male 0.92% 1.12% 1.34% 1.60% 1.93% 2.36% 2.95% 3.62% 4.46% 5.76%	Female 0.72% 0.89% 1.09% 1.26% 1.44% 1.65% 1.91% 2.26% 2.72% 3.31%	





ACTUARIAL ASSUMPTIONS

Assumption	March	31, 2011 Va	luation	June 30, 2012 Valuation
■ Termination		ERS 2010 E	xperience	• Same per MainePERS 6/30/11
	Study as	ssumption		valuation
	<u>Service</u>	<u>State</u>	<u>Teachers</u>	
	0	30.0%	37.0%	
	5	7.5%	12.0%	
	10	4.4%	6.9%	
	15	4.0%	5.5%	
	20	4.0%	5.5%	
	25+	4.0%	5.5%	
	<u>Age</u>	<u>Legislative</u>	<u>Judicial</u>	
	25	7.0%	7.0%	
	30	6.0%	6.0%	
	35	5.0%	5.0%	
	40	4.0%	4.0%	
	45	3.0%	3.0%	
	50	2.0%	2.0%	
	55	1.0%	1.0%	





Assumption	March 31, 2011 Valuation June 30, 2012 Valuation
■ Disability Incidence	 MainePERS 2010 Experience Study assumption Same per MainePERS 6/30/11 valuation
	Legislative
	Age State Teachers & Judicial
	25 .068% .034% .06%
	30 .076% .038% .06%
	35 .102% .038% .07%
	40 .190% .051% .11%
	45 .279% .116% .22%
	50 .427% .182% .42%
	55 .530% .248% .72%
	60 .630% .313% .00%



E-29



Assumption	N	Tarch 3	31, 201	1 Valua	tion		June 30	, 2012	Valuati	ion
■ Service	• M	MainePERS 2010 Experience				• M	ainePEF	RS 2010) Exper	ience
Retirement -		udy ass				Study Tier 1 assumption*				
State Regular		-	sion	OPEB (>1/1/12)		Pension		OPEB	
Plan	Age	Tier 1	Tier 2	Tier 1	Tier 2	Age	Tier 1	Tier 1	Tier 2	Tier 3
	45	1.0%	0.5%	1.0%	0.5%	45	1.0%	1.0%	1.0%	1.0%
Adjusted	50	7.5%	3.8%	7.5%	3.8%	50	7.5%	7.5%	7.5%	1.0%
MainePERS	55	7.5%	3.8%	6.6%	3.3%	55	7.5%	6.6%	6.5%	7.5%
Assumption	56	10.0%	5.0%	9.0%	4.2%	56	10.0%	9.0%	6.2%	7.1%
•	57	14.0%	15.0%	12.7%	12.0%	57	14.0%	12.7%	5.8%	6.6%
	58	15.0%	15.0%	13.6%	12.5%	58	15.0%	13.6%	8.0%	6.1%
	59	23.0%	15.0%	21.0%	13.1%	59	23.0%	21.0%	11.4%	5.5%
	60	30.0%	20.0%	36.3%	18.2%	60	30.0%	36.3%	12.4%	5.0%
	61	30.0%	20.0%	30.0%	18.9%	61	30.0%	30.0%	19.3%	7.0%
	62	27.0%	25.0%	27.0%	26.3%	62	27.0%	27.0%	41.6%	10.3%
	63	27.0%	25.0%	27.0%	25.0%	63	27.0%	27.0%	30.0%	11.3%
	64	25.0%	25.0%	25.0%	25.0%	64	25.0%	25.0%	27.0%	17.8%
	65	25.0%	25.0%	25.0%	25.0%	65	25.0%	25.0%	27.0%	46.1%
	70	100%	100%	100%	100%	70	100%	100%	100%	100%
	* Tier 2 rates estimated at ½ of Tier 1				* Tie	r 1 rates	set back	2 years	for	
				than 57 a			er 2 and 5		-	
		-	•	as state			usted for	-		





Assumption	March	31, 201	1 Valua	tion	•	June 30	, 2012	Valuati	ion
■ Service	MainePERS 2010 Experience				MainePERS 2010 Experience				
Retirement -	Study as				Study Tier 1 assumption*				
Teachers	Pe	nsion_	OPEB (>7/1/12)		Pension		<u>OPEB</u>	
Adjusted	Age Tier 1		Tier 1	Tier 2	<u>Age</u>	Tier 1	Tier 1	Tier 2	Tier 3
MainePERS	45 1.8%		1.8%	0.9%	45	1.8%	1.8%	1.8%	1.8%
	50 3.9%		3.9%	2.0%	50	3.9%	3.9%	2.9%	1.8%
Assumption	55 10.6%	5.3%	9.4%	4.7%	55	10.6%	9.4%	4.5%	3.9%
	56 11.6%	5.8%	10.4%	4.9%	56	11.6%	10.4%	4.8%	3.7%
	57 12.9%	30.0%	11.7%	23.9%	57	12.9%	11.7%	8.3%	4.1%
	58 14.4%	30.0%	13.2%	24.9%	58	14.4%	13.2%	9.3%	4.1%
	59 20.0%	30.0%	18.3%	25.9%	59	20.0%	18.3%	10.6%	4.3%
	60 22.5%	30.0%	29.0%	26.8%	60	22.5%	29.0%	12.0%	7.2%
	61 23.0%	30.0%	23.0%	27.8%	61	23.0%	23.0%	16.9%	8.2%
	62 25.0%	30.0%	25.0%	32.6%	62	25.0%	25.0%	34.4%	9.5%
	63 26.0%	30.0%	26.0%	30.0%	63	26.0%	26.0%	23.0%	11.0%
	64 27.0%	30.0%	27.0%	30.0%	64	27.0%	27.0%	25.0%	15.6%
	65 30.0%	30.0%	30.0%	30.0%	65	30.0%	30.0%	26.0%	39.1%
	70 100%	100%	100%	100%	70	100%	100%	100%	100%
	* Tier 2 rate	s estima	ted at ½	of Tier 1	* Tie	r 1 rates	set back	2 years	for
	rates for a	rates for ages less than 57 and				er 2 and 3	5 years f	or Tier 3	3 and
	adjusted f	or OPEB	as state	d below	adj	usted for	r OPEB	as stated	d below



E-31



Assumption	March 31, 2011 Valuation	June 30, 2012 Valuation
■ Service Retirement State Regular Plan and Teachers OPEB Assumption Adjustment	• Retirement rates above include an additional percentage retirees per MainePERS Experience Study who defer retirement until NRA since no cash subsidy before NRA Age Tier 1 Tier 2 51 2% 0% 52 4% 0% 53 6% 4% 54 8% 8% 55 10% 12% 56 8% 16% 57 6% 20% 58 4% 16% 59 2% 12% 60 n/a 8% 61 n/a 4%	





Assumption	March 31, 2011 Valuation	June 30, 2012 Valuation
■ Early Retirement State Regular Plans and Teachers OPEB Assumptions	• Increase retirement rates by 10% for Tier 1 and 5% for Tier 2 for ½ year for State and 1 year for Teachers from valuation date to reflect additional retirements before cash subsidy eliminated on 1/1/12 for State and 7/1/12 for Teachers	• n/a
■ Service Retirement Legislative and Judicial Plans	 MainePERS 6/30/09 valuation report assumption Legislative: Tier 1 - Age 60, Tier 2 - Age 62 Judicial: Tier 1 - Age 60, Tier 2 - 50%/year starting at 62 	 MainePERS 6/30/11 valuation report assumption Legislative: Tier 1 - Age 60, Tier 2 - Age 62, Tier 3 - Age 65 Judicial: Tier 1 - Age 60, Tier 2 - 50%/year starting at 62, Tier 3 - 50%/year starting at 65



E-33



Assumption	March 31, 2011	Valuation	June 30, 2012 Valuation
■ Service Retirement State Special Plans	 MainePERS 6/30 report assumption except 1998 Spectors 50% per year of for unreduced reached MainePERS 2010 Study for 1998 Study fo	n for all plans cial Plan nce eligibility benefits is 0 Experience pecial Plan:	 MainePERS 6/30/11 valuation report assumption for all Special Plans > 50% per year once eligibility for unreduced benefits is reached





Assumption	March 31, 20	11 Valua	ation	June 30, 20	12 Valua	tion
■ Expected	l A	Assumed			Assumed	
Retirement Age	Group I	Hire Age	<u>ERA</u>	<u>Group</u>	Hire Age	<u>ERA</u>
	State Tier 1	25	57	State Tier 1	25	57
	State Tier 2	25	60	State Tier 2	25	58
	Teachers Tier 1	25	58	State Tier 3	25	60
	Teachers Tier 2	25	59	Teachers Tier 1	25	58
				Teachers Tier 2	25	60
				Teachers Tier 3	25	62
■ Medicare Eligible Rate	 Future retirees: → Hired < 4/1/8 → Hired ≥ 4/1/8 Current retirees: Current retirees: data 	86 - 75% 86 - 100% 8 < 65 - 8	% 87.5%	 Future retiree Hired < 4/1 Hired ≥ 4/1 Current retire Current retire data (88% in 1) 	/86 - 75% /86 - 100% es < 65 - 9 $es \ge 65 - 4$	% 94% actual





ACTUARIAL ASSUMPTIONS

Assumption	March 31, 2011 Valuation	June 30, 2012 Valuation
■ Medical Plan at Retirement	 Medicare eligible: Current plan election < 65 Medicare plan ≥ 65 Non Medicare eligible Current plan election State employees have one plan option 	• Same
■ Marital Status	Based on current coverage election	 Currently covered - based on current coverage election Currently waived - 80%



Assumption	March 31, 2011 Valuation	June 30, 2012 Valuation
■ Participation at Retirement	 State - 95% for future retirees and 20% for spouses Teachers - 75% for future retirees 	 State: Currently covered - 95% for future retirees and 20% for spouses Currently waived hired after 7/1/91 - 20% will elect medical and have 50% cash subsidy, 10% will elect medical and have implied subsidy only Teachers: Currently covered - 75% for future retirees Currently waived - ½ will elect medical







Assumption	March 31, 2011 Valuation	June 30, 2012 Valuation
■ Spouse Age	 Current actives - males 3 years older than females Current retirees - males 3 years older than females, no retiree spouse birth dates provided 	 Current actives - males 3 years older than females Current retirees - males 3 years older than females if no retiree spouse birth date provided
■ Ineligible Teachers	 Ineligible Teachers assumed equal to 10% of all Teachers 1/3 of ineligible Teachers assumed to receive State contribution at retirement Assumption per State 	• Same



Assumption	March 31, 2011 Valuation	June 30, 2012 Valuation
■ Data Assumptions	 827 State employees and 7,253 Teachers missing hire dates - average service by age group Ineligible State elected officials - assume none in data Active employees with waived health insurance coverage - small group per State and not included in valuation Maine School Management Association (Aetna insurance) - claims data not provided by State and not included in valuation 	 152 State employees missing hire dates - average service by age group 101 State waived employees missing birth date - average age by service group Ineligible State elected officials - assume none in data Active employees with waived health insurance coverage - included in valuation





ACTUARIAL METHODS

Method	March 31, 2011 Valuation	June 30, 2012 Valuation
■ Cost Method	Entry Age NormalNormal Cost is a level percentage of payroll	• Same
Actuarial Value of Assets	 Investment gains and losses spread over a 5-year period Not less than 80% nor more than 120% of market value 	• Same
Amortization Method	Level percent of payroll	• Same



ACTUARIAL METHODS

Method	March 31, 2011 Valuation	June 30, 2012 Valuation
Amortization Periods State Employees	 30-year fixed (closed) period from 6/30/07 for initial UAAL, assumption and plan changes (26 years remaining on 6/30/11) 10-year fixed (closed) periods for gains and losses Maximum 30-year combined period 	 30-year fixed (closed) period from 6/30/07 for initial UAAL, assumption and plan changes (25 years remaining on 6/30/12) 10-year fixed (closed) periods for gains and losses Maximum 30-year combined period
 Amortization Periods Teachers and Ancillary Groups 	 30-year fixed (closed) period from 6/30/07 for initial UAAL, assumption and plan changes (26 years remaining on 6/30/11) 15-year fixed (closed) periods for gains and losses Maximum 30-year combined period 	 30-year fixed (closed) period from 6/30/07 for initial UAAL, assumption and plan changes (25 years remaining on 6/30/12) 15-year fixed (closed) periods for gains and losses Maximum 30-year combined period



E-41



ACTUARIAL METHODS

Method	March 31, 2011 Valuation	June 30, 2012 Valuation
■ Implied Subsidy	 Employer cost for allowing non-Medicare eligible retirees to participate at active rates State Employees and Ancillary Groups – valuation includes an implied subsidy for retirees, spouses, and surviving spouses to age 65 if Medicare eligible and for life if not Medicare eligible Teachers – valuation does not include an implied subsidy assuming State is not responsible for Teachers' implied subsidy as Public Education General Purpose Aid payments do not directly pay for active Teachers' premiums 	
■ Future New Entrants	¥ •	



DEFINITIONS

GASB 45
Accrual
Accounting

- Project future employer-provided benefit cash flow for current active employees and current retirees
- Discount projected cash flow to valuation date using discount rate and actuarial assumptions to determine present value of benefits (PVB)
- Discount rate is expected long-term return on plan assets
- Allocate PVB to past, current, and future periods
- Normal Cost is portion of PVB allocated to current fiscal year
- Actuarial cost method used for valuation is Entry Age Normal Cost method which determines Normal Cost as a level percent of payroll
- Actuarial Accrued Liability (AAL) is portion of PVB allocated to prior service with the employer
- Unfunded AAL (UAAL) is AAL less Plan Assets
- Assets must be in segregated and restricted trust to be considered Plan Assets for GASB 45

■ PayGo Cost

- Cash subsidy is employer pay-as-you-go benefit payments for retirees
- Implied subsidy is difference between actual cost of retiree benefits and retiree premiums subsidized by active employee premiums



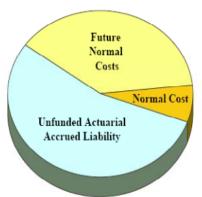
E-43



DEFINITIONS

Present Value of Benefits

Present Value of Benefits (Without Plan Assets)



Present Value of Benefits (With Plan Assets)







DEFINITIONS

■ Annual Required Contribution (ARC)	 GASB 45 contribution is Normal Cost plus amortization of: Initial UAAL and AAL for plan, assumption, and method changes Experience gains and losses (difference between actual experience and that expected from assumptions) Contribution gains and losses (difference between ARC and actual contributions)
■ Net OPEB Obligation (NOO)	 NOO is accumulated amounts expensed but not funded Net OPEB Asset if amounts funded exceed those expensed
■ Annual OPEB Cost (AOC)	 Expense for current period including: ARC Interest on NOO Adjustment of NOO Adjustment of NOO prevents double counting of expense since ARCs include amortization of prior contribution gains and losses previously expensed



