# State of Maine <br> State and Teachers Retiree Healthcare Plan <br> March 31, 2010 GASB 45 Actuarial Valuation <br> Final Results 

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$\square$

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## Benefit Summary

| - Eligibility | - MainePERS normal retirement: <br> > Age 62 with 10 years of service (Tier 2) <br> > Age 60 with 10 years of service on 7/1/93 (Tier 1) <br> > 25 years of service if earlier <br> - MainePERS disability retirement <br> - Part-time employees eligible for full benefits <br> - Former employees with 25 years of service at normal retirement age |
| :---: | :---: |
| State Employees \& Ancillary Group Medical Benefit |  |
| November 19, 2010 | 1 |


| BENEFIT SUMMARY |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Teachers Medical Benefit | - $45 \%$ of retiree premium <br> - Retiree premium based on: <br> - Single rate for single and employee + children coverage <br> > $50 \%$ of 2-party rate for 2-party and family coverage |  |  |  |  |
| - Self-Pay | - Retirees not eligible for State contribution can participate by paying full premium for themselves, spouses, and dependents <br> - Surviving spouses and surviving dependents can participate by paying full premium |  |  |  |  |
| - Dental, Vision, Life | - None |  |  |  |  |
| - Ancillary Groups | - Ancillary Groups included in the valuation: <br> > Maine Educational Center for the Deaf and Hard of Hearing <br> > Northern New England Passenger Rail Authority |  |  |  |  |
| Pay-As-You-Go Cost (000's) | - Benefit payments plus administrative expenses Year State |  |  | Teachers | Source |
|  | Cash | IS | Total | Cash | State CAFR CAFR |
|  | 2009/10 \$42,408 | \$13,000 | \$55,408 | \$18,901 |  |
|  | 2008/09 38,384 | 12,000 | 50,384 | 18,387 |  |
|  | 2007/08 41,388 | 25,000 | 66,388 | 17,657 |  |

## State Employees

## Funding Policy:

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

| Fiscal Year | Contribution |
| :---: | :--- |
| $2007 / 08$ | PayGo $+\$ 100$ million |
| $2008 / 09$ | PayGo |
| $2009 / 10$ | PayGo $+10 \% \times$ (ARC - PayGo) |
| $2010 / 11$ | PayGo $+20 \% \times$ (ARC - PayGo) |
| $2011 / 12$ | PayGo $+30 \% \times$ (ARC - PayGo) |
| $\downarrow$ | $\downarrow$ |
| $2017 / 18$ | PayGo $+90 \% \times$ (ARC - PayGo) |
| $2018 / 19+$ | $100 \%$ of ARC |

- Pre-funding contribution not made for 2009/10
- Benefit payments paid from State Cash Pool until 2027
- Expense amortization:
- Experience gains \& losses amortized over fixed 10 -year periods (per Title 5 §286-B)
- Contribution losses amortized over fixed 10-year periods
- Assumption changes amortized over fixed 10-year periods

Funding \& Expense Policy

## Teachers \& Ancillary Groups

- Funding Policy:
- No segregated and irrevocable trust
- Pay-as-you-go funding

Expense amortization:

- Experience gains \& losses amortized over fixed 15 -year periods
- Contribution losses amortized over fixed 15-year periods
- Assumption changes amortized over fixed 20-year periods


## DATA SUMMARY

## Participant Statistics

March 31, 2010

|  | Maine <br> State <br> Employees Teachers | Northern <br> Educational <br> Center the Deaf | New England <br> Passenger <br> Rail Authority |  |
| :--- | ---: | ---: | ---: | ---: |
| ■ Actives | 12,720 | 27,159 | 62 | 5 |
| - Count | 47.7 | 48.2 | 49.5 | 43.1 |
| - Average Age | 14.3 | 16.8 | 11.2 | 4.6 |
| - Average Service ${ }^{2}$ | $\$ 42,805$ | $\$ 38,853$ | $\$ 41,978$ | $\$ 57,602$ |
| - Average Pay ${ }^{3}$ | 544,480 | $1,055,209$ | 2,603 | 288 |
| - Total Payroll (000's) |  |  |  |  |
| Retirees | 8,920 | 9,381 | 10 | 1 |
| - Count | 70.3 | 70.3 | 60.6 | 69.0 |
| - Average Age | 21,640 | 36,540 | 72 | 6 |
| Total Count |  |  |  |  |

${ }^{1}$ Includes 169 Legislative and 55 Judicial active employees and 69 Legislative and 18 Judicial retirees.
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 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\frac{\text { Participant Statistics }}{\text { June 30, } 2008}$ |  |  |  |  |
|  | State Employees | Teachers | Maine Educational Center for the Deaf | Northern New England Passenger Rail Authority |
| Actives <br> - Count <br> - Average Age <br> - Average Service ${ }^{4}$ <br> - Average Pay ${ }^{5}$ <br> - Total Payroll (000's) | 14,654 46.8 12.7 $\$ 38,774$ 568,200 | $\begin{array}{r} 27,180 \\ 47.3 \\ 16.5 \\ \$ 42,666 \\ 1,159,671 \\ \hline \end{array}$ | $\begin{array}{r} 76 \\ 48.5 \\ 10.8 \\ \$ 41,713 \\ 3,170 \end{array}$ | $\begin{array}{r} 5 \\ 47.4 \\ 4.9 \\ \$ 58,181 \\ 291 \\ \hline \end{array}$ |
| - Retirees <br> - Count <br> - Average Age | $\begin{array}{r} 8,772 \\ 70.3 \end{array}$ | $\begin{array}{r} 9,201 \\ 69.6 \\ \hline \end{array}$ | $\begin{array}{r} 4 \\ 58.9 \\ \hline \end{array}$ | $\begin{array}{r} 2 \\ 62.2 \\ \hline \end{array}$ |
| - Total Count | 23,426 | 36,381 | 80 | 7 |

[^0]
## State Employees Trust Fund

Period Ending 3/31/10
(Amounts in Thousands)

| Market Value of Assets | State OPEB Trust | Estimated State Cash Pool ${ }^{6}$ | Total |
| :---: | :---: | :---: | :---: |
| ■ June 30, 2009 | \$ 82,184 | \$ | \$ 82,184 |
| - Contributions | - | 32,986 | 32,986 |
| - Investment Return | 20,779 | - | 20,779 |
| - Benefit Payments | - | $(32,877)$ | $(32,877)$ |
| - Investment Expenses | (22) | - | (22) |
| - Administrative Expenses | (47) | (109) | (156) |
| - Adjustment ${ }^{7}$ | 37 | - | 37 |
| ■ March 31, 2010 | 102,931 | - | 102,931 |
| ■ Approximate 9-Month Return | 25.2\% | - | 25.2\% |

${ }^{6}$ Estimate provided by State.
${ }^{7}$ OPEB Trust asset as of June 30, 2009 were reported as $\$ 82,184$ for the June 30, 2009 roll-forward valuation and $\$ 82,221$ for the June 30, 2010 valuation.

## State Plan Assets

## State Employees Trust Fund

Fiscal Year Ending 6/30/10
(Amounts in Thousands)

| Market Value of Assets | State <br> OPEB Trust | State <br> Cash Pool | Total |
| :--- | :---: | :---: | :---: |
| ■ June 30, 2009 | $\$ 82,184$ | $\${ }^{2}$ | $\$ 82,184$ |
| - Contributions | - | 42,408 | 42,408 |
| - Investment Return | 13,174 | - | 13,174 |
| - Benefit Payments | - | $(42,294)$ | $(42,294)$ |
| - Investment Expenses | $(30)$ | - | $(30)$ |
| - Administrative Expenses | $(56)$ | $(114)$ | $(170)$ |
| - Adjustment ${ }^{8}$ | 37 | - | 37 |
| $\square$ June 30, 2010 | 95,309 | - | 95,309 |
| $\square$ Approximate 12-Month Return | $15.9 \%$ | - | $15.9 \%$ |

[^1]
## Asset Allocation

(Amounts in Thousands)

| Asset Class | Target <br> Allocation | $\mathbf{3 / 3 1} / \mathbf{1 0}$ <br> Actual Allocation |  |
| :--- | :---: | :---: | :---: |
| - US Equity | $45 \%$ | $\$ 49,014$ | $48 \%$ |
| - International Equity | $25 \%$ | 26,186 | $25 \%$ |
| - US Fixed Income | $25 \%$ | 20,815 | $20 \%$ |
| - Real Estate | $5 \%$ | 6,978 | $7 \%$ |
| - Cash | $0 \%$ | 0 | $0 \%$ |
| - Total | $100 \%$ | $102,993^{10}$ | $100 \%$ |

${ }^{9}$ Target asset allocation for OPEB fund provided by MainePERS.
${ }^{10}$ Differs from Plan asset value of $\$ 102,931,000$ since $\$ 102,993,000$ includes recognition of a $\$ 62,000$ liability.

State Plan Assets


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## Expected Rate of Return Illustration

$\left.$| Asset Class | State <br> Expected <br> Real Rates <br> of Return | T1 | Target <br> Asset <br> Allocation |
| :--- | :---: | :---: | :---: | | Actual |
| :---: |
| $\mathbf{3 / 3 1 / 1 0}$ |
| Asset |
| Allocation | \right\rvert\,

[^2]State Plan Assets

## Expected Rate of Return Illustration

|  | Expected Return |  |
| :---: | :---: | :---: |
| Rate of Return | Target | $\begin{array}{r} 3 / 31 / 10 \\ \text { Actual } \\ \hline \end{array}$ |
| - Expected Annual Real Return | 5.2\% | 5.4\% |
| - Assumed Inflation | 3.0\% | 3.0\% |
| - Inflation Adjusted Expected Annual Return | 8.2\% | 8.4\% |
| - Investment \& Administrative Expenses ${ }^{12}$ | (0.1\%) | (0.1\%) |
| - Expected Net Annual Return | 8.1\% | 8.3\% |
| - Estimated Adjustment for Geometric Return ${ }^{13}$ | (0.7\%) | (0.7\%) |
| - Expected Net Geometric Return | 7.4\% | 7.6\% |
| - Valuation State Ultimate Discount Rate | 7.5\% | 7.5\% |

[^3]| Assumption | June 30, 2009 Roll-Forward | March 31, 2010 Valuation |
| :---: | :---: | :---: |
| - Valuation Date | - June 30, 2008 roll-forward to June 30, 2009 <br> - Updated assets and premiums <br> - 2009/10 ARC | - March 31, 2010 <br> - 2010/11 and 2011/12 ARCs |
| - Discount Rate | - State - select \& ultimate discount ra funding policy: <br> - Teachers and Ancillary Groups - $4.5 \%$ on State's Cash Pool based on a pay | tes based on current ARC phase-in <br> $.5 \%$ expected long-term rate of return -as-you-go funding policy |

Actuarial Assumptions Highlights

| Assumption | June 30, 2009 Roll-Forward | March 31, 2010 Valuation |
| :---: | :---: | :---: |
| - General Inflation | - $3.75 \%$ annually <br> - MainePERS 6/30/08 valuation inflation assumption was $4.5 \%$ <br> - Not used for valuation | - $3 \%$ annually <br> - MainePERS 6/30/09 valuation inflation assumption was $4.5 \%$ <br> - Basis for aggregate payroll and discount rate assumptions |
| Aggregate Payroll Increases | - $4.75 \%$ annually <br> - MainePERS 6/30/08 valuation assumption was $4.75 \%$ <br> - Used for amortization and Normal Cost calculation | - $3.25 \%$ <br> - MainePERS 6/30/09 valuation assumption was $4.75 \%$ <br> - Used for amortization and Normal Cost calculation |
| - State Average Monthly Net Claims Cost | - Average HMO Choice net claims cost for 6/30/08 valuation: <br> $>$ Equal to State premium rates based on blended active and retiree experience <br> > $\$ 648$ per month for retiree <br> $>\$ 707$ per month for spouse | - Average HMO Choice net claims cost for 3/31/10 valuation: <br> > Based on 2009 retiree claims <br> > Includes 1\% load for stop/loss premium and admin expenses <br> > \$1,160 per month for retiree <br> > $\$ 1,160$ per month for spouse |




|  | Actuarial Assumptions Highlights |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assumption | June 30, 2009 Roll-Forward |  |  |  | March 31, 2010 Valuation |  |  |  |
| Healthcare Cost Increases for Teachers | $\begin{aligned} & \underline{\text { Year }} \\ & 2009 / 10 \\ & 2010 / 11 \\ & 2011 / 12 \\ & 2012 / 13 \\ & 2013 / 14 \\ & 2014 / 15 \\ & 2015 / 16 \\ & 2016 / 17 \\ & 2017 / 18 \\ & \text { * State es } \end{aligned}$ | HMO Choice Premium $9.0 \%{ }^{*}$ $9.2 \%$ $8.5 \%$ $7.8 \%$ $7.1 \%$ $6.4 \%$ $5.7 \%$ $5.0 \%$ stimate | Blue <br> ChoicePremium$9.00 \%^{*}$$9.50 \%$$8.75 \%$$8.00 \%$$7.25 \%$$6.50 \%$$5.75 \%$$5.00 \%$ | $\begin{gathered} \text { Medicare } \\ \text { Plan } \\ \text { Premium } \\ 9.00 \% * \\ 9.50 \% \\ 8.75 \% \\ 8.00 \% \\ 7.25 \% \\ 6.50 \% \\ 5.75 \% \\ 5.00 \% \end{gathered}$ | $\underset{\text { Year }}{2009 / 10}$ $2010 / 11$ $2011 / 12$ $2012 / 13$ $2013 / 14$ $2014 / 15$ $2015 / 16$ $2016 / 17$ $2017 / 18$ * State es | HMO $\frac{\text { Choice }}{\text { N/A }}$ Premium $10.0 \%^{*}$ $9.1 \%$ $8.2 \%$ $7.3 \%$ $6.3 \%$ $5.4 \%$ $4.5 \%$ timate | Blue <br> ChoiceN/APremium$10.0 \%^{*}$$9.1 \%$$8.2 \%$$7.3 \%$$6.3 \%$$5.4 \%$$4.5 \%$ | $\begin{gathered} \text { Medicare } \\ \frac{\text { Plan }}{\text { N/A }} \\ \text { Premium } \\ 10.5 \% \\ 9.5 \% \\ 8.5 \% \\ 7.5 \% \\ 6.5 \% \\ 5.5 \% \\ 4.5 \% \end{gathered}$ |
| - Participation at Retirement | - State $-95 \%$ for future retirees and surviving spouses <br> - Teachers $-75 \%$ for future retirees |  |  |  | - State $-95 \%$ for future retirees and $20 \%$ for surviving spouses <br> - Teachers $-75 \%$ for future retirees |  |  |  |

## Actuarial Obligations

(Amounts in Millions)

| Actuarial Obligations | 6/30/09 Roll-Forward |  |  | 3/31/10 Valuation |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Cash } \\ \text { Subsidy } \end{gathered}$ | Implied Subsidy | Total | Cash <br> Subsidy | Implied Subsidy | Total |
| Present Value of Benefits <br> - Actives <br> - Retirees <br> - Total | $\begin{array}{r} \$ 610 \\ \hline 526 \\ \hline 1,136 \end{array}$ | $\begin{array}{r} \$ 193 \\ \frac{196}{389} \end{array}$ | $\begin{array}{r} \$ 803 \\ -722 \\ \hline 1,525 \end{array}$ | $\begin{array}{r} \$ 608 \\ +547 \\ \hline 1,155 \end{array}$ | $\begin{array}{r} \$ 226 \\ \underline{285} \\ \hline 511 \end{array}$ | $\begin{array}{r} \$ 834 \\ -832 \\ \hline 1,666 \end{array}$ |
| Actuarial Accrued Liability <br> - Actives <br> - Retirees <br> - Total <br> Actuarial Value of Assets ${ }^{14}$ <br> Unfunded UAAL | $\begin{aligned} & 431 \\ & \underline{526} \\ & 957 \\ & \underline{(60)} \\ & 897 \end{aligned}$ | $\begin{aligned} & 158 \\ & \frac{196}{354} \\ & \frac{(22)}{332} \end{aligned}$ | $\begin{array}{r} 589 \\ +722 \\ \hline 1,311 \\ \hline 1,229 \end{array}$ | $\begin{aligned} & 438 \\ & \underline{547} \\ & 985 \\ & \underline{(70)} \\ & 915 \end{aligned}$ | $\begin{aligned} & 180 \\ & \underline{285} \\ & 465 \\ & \frac{(33)}{432} \end{aligned}$ | $\begin{array}{r} 618 \\ 832 \\ \hline 1,450 \\ \underline{(103)} \\ 1,347 \end{array}$ |
| - Normal Cost | 23 | 6 | 29 | 23 | 6 | 29 |

14 Allocated in proportion to the AAL.

## State Employees Results

## Annual Required Contribution (ARC)

(Amounts in Millions)

|  | 6/30/09 <br> Roll-Forward | 3/31/10 Valuation |  |
| :--- | :---: | :---: | :---: |
| Annual Required Contribution | 2009/10 ARC | 2010/11 ARC | 2011/12 ARC |
| ■ ARC - \$ |  |  |  |
| - Normal Cost | $\$ 29$ | $\$ 29$ | $\$ 30$ |
| - UAAL Amortization | $\underline{61}$ | $\underline{91}$ | $\underline{99}$ |
| - ARC | 90 | 120 | 129 |
| ■ Projected Payroll | 595 | $549^{15}$ | 567 |
| ■ ARC - \% | $4.9 \%$ | $5.3 \%$ | $5.3 \%$ |
| - Normal Cost | $\underline{10.3 \%}$ | $\underline{16.5 \%}$ | $\underline{17.4 \%}$ |
| - UAAL Amortization | $15.2 \%$ | $21.8 \%$ | $22.7 \%$ |

[^4]
## Actuarial Gains \& Losses

(Amounts in Millions)

| Actuarial Gains \& Losses | NC\% | AAL | (AVA) | UAAL |
| :--- | :---: | :---: | :---: | :---: |
| ■ 6/30/09 Actual | $4.9 \%$ | $\$ 1,311$ | $\$(82)$ | $\$ 1,229$ |
| ■ 6/30/10 Expected | $4.9 \%$ | 1,342 | $(115)$ | 1,227 |
| ■ Experience Losses (Gains): |  |  |  |  |
| - Actual versus Expected Premiums \& Claims | $0.5 \%$ | 124 | $\mathrm{n} / \mathrm{a}$ | 124 |
| - Demographic \& Other | $0.3 \%$ | $(45)$ | $\mathrm{n} / \mathrm{a}$ | $(45)$ |
| - Contribution Loss | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | 31 | 31 |
| - Investment Loss (Gain) | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $(11)$ | $(11)$ |
| ■ Assumption Changes: |  |  |  |  |
| - Medical Trend \& Claims Cost | $0.3 \%$ | 57 | $\mathrm{n} / \mathrm{a}$ | 57 |
| - Aggregate Payroll Increase Rate | $(0.5 \%)$ | 32 | $\mathrm{n} / \mathrm{a}$ | 32 |
| - Spouse Participation | $(0.3 \%)$ | $(40)$ | $\mathrm{n} / \mathrm{a}$ | $(40)$ |
| - Other Demographic Assumptions | $\underline{0.1 \%}$ | $\underline{114)}$ | $\underline{\mathrm{n} / \mathrm{a}}$ | $\underline{(14)}$ |
| ■ Total Changes | $0.4 \%$ | 114 | 20 | 134 |
| ■ 6/30/10 Projected | $5.3 \%$ | 1,456 | $(95)$ | 1,361 |

## State Employees Results

Unfunded Actuarial Accrued Liability Amortization Balances
(Amounts in Millions)

| Amortization Base | Original Bases |  |  | Remaining Bases 6/30/2010 |  | $\begin{gathered} 2010 / 11 \\ \text { Amortization } \\ \text { Payment } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Date | Years | Amount | Years | Balance |  |
| - Fresh Start UAAL | 6/30/08 | 30 | \$ 1,144 | 28 | \$ 1,149 | \$ 65 |
| - Experience Losses (Gains) | 6/30/09 | 10 | 83 | 9 | 78 | 10 |
|  | 6/30/10 | 10 | 99 | 10 | 99 | 12 |
| - Assumption Changes | 6/30/10 | 10 | 35 | 10 | 35 | 4 |
| - Projected Unfunded AAL | 6/30/10 |  |  |  | 1,361 | 91 |
| - Projected Unfunded AAL ${ }^{16}$ | 6/30/10 |  |  | 30 | 1,361 | 74 |

[^5]
## State Employees Results

## Estimated Net OPEB Obligation (NOO) Illustration

(Amounts in Millions)

| Estimated Net OPEB Obligation | $\begin{gathered} \text { CAFR } \\ 2007 / 08 \\ \hline \end{gathered}$ | $\begin{gathered} \text { CAFR } \\ \text { 2008/09 } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Estimated } \\ 2009 / 10 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Estimated } \\ 2010 / 11 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| - NOO at Beginning of Year | \$ 0 | \$ (55) | \$ (29) | \$ 8 |
| Annual OPEB Cost (AOC) <br> - Annual Required Contribution <br> - Interest on NOO <br> - Amortization of $\mathrm{NOO}^{17}$ <br> - Annual OPEB Cost | $\begin{array}{r} 111 \\ 0 \\ (0) \\ \hline 111 \end{array}$ | $\begin{aligned} & 77 \\ & (2) \\ & \frac{2}{77} \end{aligned}$ | $\begin{aligned} & 90 \\ & (1) \\ & \frac{3}{92} \end{aligned}$ | $\begin{array}{r} 120 \\ 0 \\ (1) \\ \hline 119 \end{array}$ |
| - Contributions <br> - Benefit Payments Outside of Trust <br> $>$ Cash Payments \& Admin Fees ${ }^{18}$ <br> $>$ Implied Subsidy Payments <br> - Trust Pre-Funding <br> - Total Contribution | $\begin{array}{r} (41) \\ (25) \\ (100) \\ \hline(166) \\ \hline \end{array}$ | $\begin{aligned} & (38) \\ & (12) \\ & (0) \\ & \hline(50) \end{aligned}$ | $\begin{array}{r} (42) \\ (13) \\ (0) \\ \hline(55) \\ \hline \end{array}$ | $\begin{aligned} & (47) \\ & (22) \\ & (10) \\ & \hline(79) \end{aligned}$ |
| - NOO at End of Year | (55) | (29) | 8 | 48 |

${ }^{17}$ NOO amortized over average weighted remaining experience gain or loss period for 2009/10 and 2010/11.
${ }^{18}$ Payments from CAFR for 2007/08 and 2008/09. Payments per State for 2009/10. Valuation estimate for 2010/11.

State Employees Results

Contribution \& Expense Projection
(Amounts in Millions)

| Fiscal Year | Begin Year $\mathrm{NOO}^{19}$ | ARC | $\begin{gathered} \text { Annual } \\ \text { OPEB } \\ \text { Cost } \\ (\mathrm{AOC}) \\ \hline \end{gathered}$ | Contribution |  |  | $\begin{array}{\|c} \hline \text { Contrib } \\ \text { \% of } \\ \text { ARC } \\ \hline \end{array}$ | Payroll | ARC as \% of Payroll | Contrib \% of Payroll |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Benefit <br> Pmts | Pre <br> Funding | Total Contrib |  |  |  |  |
| 2010/11 | \$ 8 | \$ 120 | \$ 119 | \$ 69 | \$ 10 | \$ 79 | 66\% | \$ 549 | 21.9\% | 14.4\% |
| 2011/12 | 48 | 129 | 126 | 76 | 16 | 92 | 71\% | 567 | 22.8\% | 16.2\% |
| 2012/13 | 81 | 138 | 132 | 82 | 22 | 104 | 75\% | 585 | 23.6\% | 17.8\% |
| 2013/14 | 109 | 147 | 138 | 89 | 29 | 118 | 80\% | 604 | 24.3\% | 19.5\% |
| 2014/15 | 129 | 155 | 145 | 95 | 36 | 131 | 85\% | 624 | 24.8\% | 21.0\% |
| 2015/16 | 143 | 164 | 151 | 102 | 43 | 145 | 88\% | 644 | 25.5\% | 22.5\% |
| 2016/17 | 148 | 172 | 157 | 108 | 51 | 159 | 92\% | 665 | 25.9\% | 23.9\% |
| 2017/18 | 146 | 180 | 162 | 113 | 60 | 173 | 96\% | 687 | 26.2\% | 25.2\% |
| 2018/19 | 135 | 187 | 167 | 117 | 70 | 187 | 100\% | 709 | 26.4\% | 26.4\% |
| 2019/20 | 116 | 179 | 157 | 122 | 57 | 179 | 100\% | 732 | 24.5\% | 24.5\% |

[^6]
## Benefit Payment Projection

(Amounts in Millions)

| Fiscal <br> Year | Cash <br> Subsidy | Implied <br> Subsidy | Total |
| :---: | :---: | :---: | :---: |
| $2010 / 11$ | $\$ 47$ | $\$ 22$ | $\$ 69$ |
| $2011 / 12$ | 52 | 24 | 76 |
| $2012 / 13$ | 56 | 26 | 82 |
| $2013 / 14$ | 61 | 28 | 89 |
| $2014 / 15$ | 65 | 30 | 95 |
| $2015 / 16$ | 70 | 32 | 102 |
| $2016 / 17$ | 74 | 34 | 108 |
| $2017 / 18$ | 77 | 36 | 113 |
| $2018 / 19$ | 80 | 37 | 117 |
| $2019 / 20$ | 83 | 39 | 122 |

## State Employees Results

## 2010/11 Implied Subsidy Transfer Illustration

(Amounts in Millions)

| Before GASB 45 | Actives | Retirees | Total |
| :---: | :---: | :---: | :---: |
| - Total Premium/Claims ${ }^{20}$ | \$ 167 | \$ 57 | \$ 224 |
| - Employee Contribution ${ }^{21}$ | $(21)$ | $(10)$ | $(31)$ |
| - State Contribution | 146 | 47 | 193 |


| After GASB 45 | Actives | Retirees | Total |
| :--- | :---: | :---: | :---: |
| ■ | Total Premium/Claims | $\$ 167$ | $\$ 57$ |
| Employee Contribution | $(21)$ | $(10)$ | $\$ 224$ |
| ■ | Implied Subsidy Transfer | $\underline{(22)}$ | $\underline{22}$ |
| $\square$ | State Contribution | 124 | 69 |

[^7]
## Actuarial Obligations

(Amounts in Millions)

|  | 6/30/09 Roll-Forward |  |  | 3/31/10 Valuation |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarial Obligations | $\begin{gathered} \text { Cash } \\ \text { Subsidy } \end{gathered}$ | Implied Subsidy | Total | $\begin{gathered} \text { Cash } \\ \text { Subsidy } \end{gathered}$ | Implied Subsidy | Total |
| Present Value of Benefits <br> - Actives <br> - Retirees <br> - Total | $\begin{array}{r} \$ 866 \\ -336 \\ \hline 1,202 \end{array}$ | n/a <br> n/a <br> n/a | $\begin{array}{r} \$ 866 \\ 336 \\ \hline 1,202 \end{array}$ | $\begin{array}{r} \$ 818 \\ 352 \\ \hline 1,170 \end{array}$ | n/a <br> n/a <br> n/a | $\begin{array}{r} \$ 818 \\ -352 \\ \hline 1,170 \end{array}$ |
| Actuarial Accrued Liability <br> - Actives <br> - Retirees <br> - Total Actuarial Value of Assets <br> ■ Unfunded UAAL | $\begin{array}{r} 658 \\ \frac{336}{} \\ 994 \\ - \\ \hline 994 \end{array}$ | n/a <br> n/a <br> n/a <br> n/a <br> n/a | $\begin{array}{r} 658 \\ \frac{336}{} \\ 994 \\ - \\ \hline 994 \end{array}$ | $\begin{aligned} & 642 \\ & \frac{352}{} \\ & 994 \\ & - \\ & \hline 994 \end{aligned}$ | n/a <br> n/a <br> n/a <br> n/a <br> n/a | $\begin{array}{r} 642 \\ \frac{352}{9} \\ 994 \\ - \\ \hline 994 \end{array}$ |
| - Normal Cost | 24 | $\mathrm{n} / \mathrm{a}$ | 24 | 20 | $\mathrm{n} / \mathrm{a}$ | 20 |

## Teachers Results

Annual Required Contribution (ARC)
(Amounts in Millions)

|  | 6/30/09 <br> Roll-Forward | 3/31/10 Valuation |  |
| :--- | :---: | :---: | :---: |
| Annual Required Contribution | 2009/10 ARC | 2010/11 ARC | 2011/12 ARC |
| ■ ARC - \$ |  |  |  |
| - Normal Cost | $\$ 24$ | $\$ 20$ | $\$ 21$ |
| - UAAL Amortization | $\underline{34}$ | $\underline{41}$ | $\underline{46}$ |
| - ARC | 58 | 61 | 67 |
| ■ Projected Payroll | 1,215 | $1,064^{22}$ | 1,098 |
| ■ ARC - \% |  |  |  |
| - Normal Cost | $2.0 \%$ | $1.9 \%$ | $1.9 \%$ |
| - UAAL Amortization | $\underline{2.8 \%}$ | $\underline{3.8 \%}$ | $\underline{4.2 \%}$ |
| - ARC | $4.8 \%$ | $5.7 \%$ | $6.1 \%$ |

[^8]
## Actuarial Gains \& Losses

(Amounts in Millions)

| Actuarial Gains \& Losses | NC\% | AAL | (AVA) | UAAL |
| :---: | :---: | :---: | :---: | :---: |
| - 6/30/09 Actual | 2.0\% | \$ 994 | \$ - | \$ 994 |
| - 6/30/10 Expected | 2.0\% | 1,042 | (36) | 1,006 |
| Experience Losses (Gains): <br> - Actual versus Expected Premiums \& Claims | (0.2\%) | (62) | n/a | (62) |
| - Demographic \& Other | 0.4\% | 19 | n/a | 19 |
| - Contribution Loss | $\mathrm{n} / \mathrm{a}$ | n/a | 36 | 36 |
| - Investment Loss (Gain) | $\mathrm{n} / \mathrm{a}$ | n/a | n/a | n/a |
| Assumption Changes: <br> - Medical Trend \& Claims Cost | $(0.2 \%)$ | (31) | $\mathrm{n} / \mathrm{a}$ | (31) |
| - Aggregate Payroll Increase Rate | (0.2\%) | 32 | $\mathrm{n} / \mathrm{a}$ | 32 |
| - Other Demographic Assumptions | $\underline{0.1 \%}$ | 5 | $\underline{\mathrm{n} / \mathrm{a}}$ | 5 |
| Total Changes | (0.1\%) | (37) | 36 | (1) |
| - 6/30/10 Projected | 1.9\% | 1,005 | - | 1,005 |
| November 19, 2010 |  |  |  |  |

## Teachers Results

Unfunded Actuarial Accrued Liability Amortization Balances
(Amounts in Millions)

| Amortization Base | Original Bases |  |  | Remaining Bases 6/30/2010 |  | $\qquad$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Date | Years | Amount | Years | Balance |  |
| - Fresh Start UAAL | 6/30/08 | 30 | \$ 1,044 | 28 | \$ 1,067 | \$ 47 |
| - Experience Losses (Gains) | 6/30/09 | 15 | (62) | 14 | (61) | (5) |
|  | 6/30/10 | 15 | (7) | 15 | (7) | (1) |
| - Assumption Changes | 6/30/10 | 20 | 6 | 15 | 6 | 0 |
| - Projected Unfunded AAL | 6/30/10 |  |  |  | 1,005 | 41 |
| - Projected Unfunded AAL ${ }^{23}$ | 6/30/10 |  |  | 30 | 1,005 | 41 |

[^9]
## Estimated Net OPEB Obligation (NOO) Illustration

(Amounts in Millions)

| Estimated Net OPEB Obligation | $\begin{gathered} \text { CAFR } \\ \text { 2007/08 } \end{gathered}$ | $\begin{gathered} \text { CAFR } \\ \text { 2008/09 } \end{gathered}$ | $\begin{gathered} \text { Estimated } \\ \text { 2009/10 } \end{gathered}$ | $\begin{gathered} \text { Estimated } \\ 2010 / 11 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| - NOO at Beginning of Year | \$ 0 | \$ 28 | \$ 70 | \$ 107 |
| Annual OPEB Cost (AOC) <br> - Annual Required Contribution <br> - Interest on $\mathrm{NOO}^{24}$ <br> - Amortization of NOO <br> - Annual OPEB Cost | $\begin{gathered} 46 \\ 0 \\ \frac{(0)}{46} \end{gathered}$ | $\begin{gathered} 60 \\ 1 \\ \frac{(1)}{60} \end{gathered}$ | $\begin{gathered} 58 \\ 3 \\ \frac{(5)}{55} \end{gathered}$ | $\begin{gathered} 61 \\ 5 \\ \frac{(8)}{58} \end{gathered}$ |
| Contributions <br> - Benefit Payments Outside of Trust $>$ Cash Payments \& Admin Fees ${ }^{25}$ <br> $>$ Implied Subsidy Payments <br> - Trust Pre-Funding <br> - Total Contribution | $\begin{array}{r} (18) \\ (0) \\ (0) \\ \hline(18) \end{array}$ | $\begin{array}{r} (18) \\ (0) \\ (0) \\ \hline(18) \end{array}$ | $\begin{array}{r} (19) \\ (0) \\ (0) \\ \hline(19) \end{array}$ | $\begin{array}{r} (21) \\ (0) \\ (0) \\ \hline(21) \end{array}$ |
| - NOO at End of Year | 28 | 70 | 107 | 144 |

${ }^{24}$ NOO amortized over average weighted experience gain or loss period for 2009/10 and 2010/11.
${ }^{25}$ Payments from CAFR for 2007/08 and 2008/09. Payments per State for 2009/10. Valuation estimate for 2010/11.

## Teachers Results

## Contribution \& Expense Projection

(Amounts in Millions)

| Fiscal Year | $\begin{gathered} \text { Begin } \\ \text { Year } \\ \text { NOO }^{26} \end{gathered}$ | ARC | $\begin{aligned} & \text { Annual } \\ & \text { OPEB } \\ & \text { Cost } \\ & (\mathbf{A O C}) \end{aligned}$ | Contribution |  |  | $\begin{gathered} \text { Contrib } \\ \text { \% of } \\ \text { ARC } \end{gathered}$ | Payroll | ARC as $\%$ of Payroll | Contrib \% of Payroll |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Benefit <br> Pmts | Pre- <br> Funding | Total Contrib |  |  |  |  |
| 2010/11 | \$ 107 | \$ 61 | \$ 58 | \$ 21 | \$ - | \$ 21 | 34\% | \$ 1,064 | 5.7\% | 2.0\% |
| 2011/12 | 144 | 67 | 62 | 25 | - | 25 | 37\% | 1,098 | 6.1\% | 2.3\% |
| 2012/13 | 181 | 72 | 66 | 29 | - | 29 | 40\% | 1,134 | 6.3\% | 2.6\% |
| 2013/14 | 219 | 78 | 70 | 32 | - | 32 | 41\% | 1,171 | 6.7\% | 2.7\% |
| 2014/15 | 257 | 84 | 74 | 36 | - | 36 | 43\% | 1,209 | 6.9\% | 3.0\% |
| 2015/16 | 294 | 90 | 78 | 40 | - | 40 | 44\% | 1,248 | 7.2\% | 3.2\% |
| 2016/17 | 332 | 97 | 82 | 43 | - | 43 | 44\% | 1,289 | 7.5\% | 3.3\% |
| 2017/18 | 371 | 104 | 86 | 46 | - | 46 | 44\% | 1,331 | 7.8\% | 3.5\% |
| 2018/19 | 411 | 112 | 91 | 49 | - | 49 | 44\% | 1,374 | 8.2\% | 3.6\% |
| 2019/20 | 452 | 120 | 95 | 52 | - | 52 | 43\% | 1,418 | 8.5\% | 3.7\% |

[^10]
## Benefit Payment Projection

(Amounts in Millions)

| Fiscal <br> Year | Cash <br> Subsidy | Implied <br> Subsidy | Total |
| :---: | :---: | :---: | :---: |
| $2010 / 11$ | $\$ 21$ | $\mathrm{n} / \mathrm{a}$ | $\$ 21$ |
| $2011 / 12$ | 25 | $\mathrm{n} / \mathrm{a}$ | 25 |
| $2012 / 13$ | 29 | $\mathrm{n} / \mathrm{a}$ | 29 |
| $2013 / 14$ | 32 | $\mathrm{n} / \mathrm{a}$ | 32 |
| $2014 / 15$ | 36 | $\mathrm{n} / \mathrm{a}$ | 36 |
| $2015 / 16$ | 40 | $\mathrm{n} / \mathrm{a}$ | 40 |
| $2016 / 17$ | 43 | $\mathrm{n} / \mathrm{a}$ | 43 |
| $2017 / 18$ | 46 | $\mathrm{n} / \mathrm{a}$ | 46 |
| $2018 / 19$ | 49 | $\mathrm{n} / \mathrm{a}$ | 49 |
| $2019 / 20$ | 52 | $\mathrm{n} / \mathrm{a}$ | 52 |

## Teachers Results



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Actuarial Obligations
(Amounts in Thousands)

|  | 6/30/09 Roll-Forward |  |  | 3/31/10 Valuation |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarial Obligations | Cash Subsidy | Implied Subsidy | Total | $\begin{aligned} & \text { Cash } \\ & \text { Subsidy } \end{aligned}$ | Implied Subsidy | Total |
| Present Value of Benefits <br> - Actives <br> - Retirees <br> - Total | $\begin{array}{r} \$ 4,417 \\ \hline 620 \\ \hline 5,037 \end{array}$ | $\begin{array}{r} \$ 1,090 \\ \frac{311}{1,401} \end{array}$ | $\begin{array}{r} \$ 5,507 \\ \underline{931} \\ \hline 6,438 \end{array}$ | $\begin{array}{r} \$ 4,083 \\ \underline{1,391} \\ \hline 5,474 \end{array}$ | $\begin{array}{r} \$ 1,035 \\ \hline 746 \\ \hline 1,781 \end{array}$ | $\begin{array}{r} \$ 5,118 \\ \underline{2,137} \\ \hline 7,255 \\ \hline \end{array}$ |
| Actuarial Accrued Liability <br> - Actives <br> - Retirees <br> - Total <br> - Actuarial Value of Assets <br> - Unfunded UAAL | $\begin{array}{r} 2,916 \\ 6200 \\ \hline 3,536 \\ \hline \\ \hline 3,536 \end{array}$ | $\begin{array}{r} 873 \\ 311 \\ \hline 1,184 \\ \hline \\ \hline 1,183 \\ \hline \end{array}$ | $\begin{array}{r} 3,789 \\ \begin{array}{r} 931 \\ 4,720 \\ \hline 4,720 \end{array} \end{array}$ | $\begin{array}{r} 2,597 \\ \underline{1,391} \\ 3,988 \\ \hline 3,988 \\ \hline \end{array}$ | $\begin{array}{r} 774 \\ 746 \\ \hline 1,520 \\ \hline 1,520 \end{array}$ | $\begin{array}{r} 3,371 \\ 2,137 \\ 5,508 \\ - \\ \hline 5,508 \end{array}$ |
| - Normal Cost | 190 | 33 | 223 | 176 | 34 | 210 |

## Maine Educational Center for the Deaf

Annual Required Contribution (ARC)
(Amounts in Thousands)

|  | $\mathbf{6} / 30 / 09$ <br> Roll-Forward | 3/31/10 Valuation |  |
| :--- | :---: | :---: | :---: |
| Annual Required Contribution | 2009/10 ARC | 2010/11 ARC | 2011/12 ARC |
| ■ ARC - \$ |  |  |  |
| - Normal Cost | $\$ 223$ | $\$ 210$ | $\$ 217$ |
| - UAAL Amortization | $\underline{193}$ | $\underline{295}$ | $\underline{333}$ |
| - ARC | 416 | 505 | 550 |
| ■ Projected Payroll | 3,321 | 2,624 | 2,709 |
| ■ ARC - \% |  |  |  |
| - Normal Cost | $6.7 \%$ | $8.0 \%$ | $8.0 \%$ |
| - UAAL Amortization | $\underline{5.8 \%}$ | $\underline{11.2 \%}$ | $\underline{12.3 \%}$ |
| - ARC | $12.5 \%$ | $19.2 \%$ | $20.3 \%$ |

## Actuarial Gains \& Losses

(Amounts in Thousands)

| Actuarial Gains \& Losses | NC\% | AAL | (AVA) | UAAL |
| :--- | ---: | ---: | ---: | ---: |
| 6 $6 / 30 / 09$ Actual | $6.7 \%$ | $\$ 4,720$ | $\$-$ | $\$ 4,720$ |
| 6/30/10 Expected | $6.7 \%$ | 5,083 | $(342)$ | 4,741 |
| ■ Experience Losses (Gains): |  |  |  |  |
| - Actual versus Expected Premiums \& Claims | $0.6 \%$ | 217 | $\mathrm{n} / \mathrm{a}$ | 217 |
| - Demographic \& Other | $0.8 \%$ | 38 | $\mathrm{n} / \mathrm{a}$ | 38 |
| - Contribution Loss | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | 342 | 342 |
| - Investment Loss (Gain) | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |
| ■ Assumption Changes: |  |  |  |  |
| - Medical Trend \& Claims Cost | $0.2 \%$ | 211 | $\mathrm{n} / \mathrm{a}$ | 211 |
| - Aggregate Payroll Increase Rate | $(0.3 \%)$ | 173 | $\mathrm{n} / \mathrm{a}$ | 173 |
| - Spouse Participation | $(0.2 \%)$ | $(83)$ | $\mathrm{n} / \mathrm{a}$ | $(83)$ |
| - Other Demographic Assumptions | $\underline{0.2 \%}$ | $\underline{(50)}$ | $\underline{\mathrm{n} / \mathrm{a}}$ | $\underline{(50)}$ |
| ■ Total Changes | $1.3 \%$ | 506 | 342 | 848 |
| $\square$ 6/30/10 Projected | $8.0 \%$ | 5,589 | - | 5,589 |

## Maine Educational Center for the Deaf

Unfunded Actuarial Accrued Liability Amortization Balances
(Amounts in Thousands)

| Amortization Base | Original Bases |  |  | Remaining Bases 6/30/2010 |  | 2010/11 <br> Amortization Payment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Date | Years | Amount | Years | Balance |  |
| - Initial UAAL | 6/30/07 | 30 | \$ 3,814 | 27 | \$ 3,896 | \$ 176 |
| - Experience Losses (Gains) | 6/30/08 | 15 | (127) | 13 | (121) | (10) |
|  | 6/30/09 | 15 | 474 | 14 | 463 | 37 |
|  | 6/30/10 | 15 | 597 | 15 | 597 | 45 |
| - Assumption Changes | 6/30/08 | 20 | 511 | 18 | 503 | 32 |
|  | 6/30/10 | 20 | 251 | 20 | 251 | 15 |
| - Projected Unfunded AAL | 6/30/10 |  |  |  | 5,589 | 295 |
| - Projected Unfunded AAL ${ }^{27}$ | 6/30/10 |  |  | 30 | 5,589 | 231 |

[^11]
## Maine Educational Center for the Deaf

## Estimated Net OPEB Obligation (NOO) Illustration

(Amounts in Thousands)

| Estimated Net OPEB Obligation | $\begin{gathered} \text { Estimated } \\ 2007 / 08 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Estimated } \\ 2008 / 09 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Estimated } \\ 2009 / 10 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Estimated } \\ 2010 / 11 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| - NOO at Beginning of Year | \$ 0 | \$ 358 | \$ 645 | \$ 950 |
| Annual OPEB Cost (AOC) <br> - Annual Required Contribution <br> - Interest on NOO <br> - Amortization of $\mathrm{NOO}^{28}$ <br> - Annual OPEB Cost | $\begin{array}{r} 394 \\ 0 \\ (0) \\ \hline 394 \end{array}$ | $\begin{gathered} 353 \\ 16 \\ \underline{(24)} \\ \hline 345 \end{gathered}$ | $\begin{gathered} 416 \\ 29 \\ \underline{(46)} \\ \hline 399 \end{gathered}$ | $\begin{gathered} 505 \\ 43 \\ \frac{(72)}{476} \end{gathered}$ |
| Contributions <br> - Benefit Payments Outside of Trust <br> $>$ Cash Payments ${ }^{29}$ <br> $>$ Implied Subsidy Payments <br> - Trust Pre-Funding <br> - Total Contribution | $\begin{aligned} & (22) \\ & (14) \\ & (0) \\ & \hline(36) \end{aligned}$ | $\begin{aligned} & (45) \\ & (13) \\ & (0) \\ & \hline(58) \end{aligned}$ | $\begin{aligned} & (78) \\ & (16) \\ & (0) \\ & \hline(94) \end{aligned}$ | $\begin{array}{r} (87) \\ (37) \\ (0) \\ \hline(124) \\ \hline \end{array}$ |
| - NOO at End of Year | 358 | 645 | 950 | 1,302 |

${ }^{28}$ NOO amortized over average weighted remaining experience gain or loss period for 2009/10 and 2010/11.
${ }^{29}$ Payments per State for 2007/08, 2008/09, and 2009/10 (prorated for 12 months). Valuation estimate for 2010/11.

## Maine Educational Center for the Deaf

Contribution \& Expense Projection
(Amounts in Thousands)

| Fiscal <br> Year | Begin Year $\mathrm{NOO}^{30}$ | ARC | $\begin{gathered} \hline \text { Annual } \\ \text { OPEB } \\ \text { Cost } \\ (\mathbf{A O C}) \\ \hline \end{gathered}$ | Contribution |  |  | $\begin{array}{\|c} \hline \text { Contrib } \\ \text { \% of } \\ \text { ARC } \\ \hline \end{array}$ | Payroll | ARC as \% of Payroll | Contrib \% of Payroll |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Benefit <br> Pmts | PreFunding | Total Contrib |  |  |  |  |
| 2010/11 | \$ 950 | \$ 505 | \$ 476 | \$ 124 | \$ - | \$ 124 | 25\% | \$ 2,624 | 19.2\% | 4.7\% |
| 2011/12 | 1,302 | 550 | 510 | 157 | - | 157 | 29\% | 2,709 | 20.3\% | 5.8\% |
| 2012/13 | 1,654 | 597 | 543 | 201 | - | 201 | 34\% | 2,797 | 21.3\% | 7.2\% |
| 2013/14 | 1,996 | 647 | 576 | 225 | - | 225 | 35\% | 2,888 | 22.4\% | 7.8\% |
| 2014/15 | 2,347 | 700 | 610 | 252 | - | 252 | 36\% | 2,982 | 23.5\% | 8.4\% |
| 2015/16 | 2,705 | 757 | 645 | 299 | - | 299 | 39\% | 3,078 | 24.6\% | 9.7\% |
| 2016/17 | 3,051 | 816 | 680 | 291 | - | 291 | 36\% | 3,179 | 25.7\% | 9.2\% |
| 2017/18 | 3,440 | 882 | 718 | 321 | - | 321 | 36\% | 3,282 | 26.9\% | 9.8\% |
| 2018/19 | 3,838 | 953 | 758 | 349 | - | 349 | 37\% | 3,388 | 28.1\% | 10.3\% |
| 2019/20 | 4,246 | 1,030 | 798 | 372 | - | 372 | 36\% | 3,499 | 29.4\% | 10.6\% |

[^12]
## Benefit Payment Projection

(Amounts in Thousands)

| Fiscal <br> Year | Cash <br> Subsidy | Implied <br> Subsidy | Total |
| :---: | :---: | :---: | :---: |
| $2010 / 11$ | $\$ 87$ | $\$ 37$ | $\$ 124$ |
| $2011 / 12$ | 107 | 50 | 157 |
| $2012 / 13$ | 133 | 68 | 201 |
| $2013 / 14$ | 151 | 74 | 225 |
| $2014 / 15$ | 169 | 83 | 252 |
| $2015 / 16$ | 198 | 101 | 299 |
| $2016 / 17$ | 203 | 88 | 291 |
| $2017 / 18$ | 228 | 93 | 321 |
| $2018 / 19$ | 253 | 96 | 349 |
| $2019 / 20$ | 271 | 101 | 372 |

## Maine Educational Center For the Deaf



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Actuarial Obligations
(Amounts in Thousands)

|  | 6/30/09 Roll-Forward |  |  | 3/31/10 Valuation |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarial Obligations | $\begin{gathered} \text { Cash } \\ \text { Subsidy } \end{gathered}$ | Implied Subsidy | Total | $\begin{gathered} \text { Cash } \\ \text { Subsidy } \end{gathered}$ | Implied Subsidy | Total |
| Present Value of Benefits <br> - Actives <br> - Retirees <br> - Total | $\begin{array}{r} \$ 201 \\ \underline{201} \\ 402 \end{array}$ | $\begin{array}{r} \$ 5 \\ 37 \\ \hline 42 \end{array}$ | $\begin{array}{r} \$ 206 \\ \underline{238} \\ 444 \end{array}$ | $\begin{array}{r} \$ 220 \\ \underline{57} \\ \hline 277 \end{array}$ | $\begin{array}{r} \$ 22 \\ - \\ 22 \end{array}$ | $\begin{array}{r} \$ 242 \\ \frac{57}{299} \end{array}$ |
| Actuarial Accrued Liability <br> - Actives <br> - Retirees <br> - Total Actuarial Value of Assets <br> ■ Unfunded UAAL | $\begin{array}{r} 102 \\ \frac{201}{303} \\ - \\ \hline 303 \end{array}$ | $\begin{array}{r} 1 \\ \frac{37}{38} \\ \hline- \\ \hline 38 \end{array}$ | $\begin{array}{r} 103 \\ 238 \\ 341 \\ - \\ \hline 341 \end{array}$ | $\begin{array}{r} 84 \\ 57 \\ \hline 141 \\ - \\ \hline 141 \end{array}$ | $\begin{aligned} & 5 \\ & = \\ & 5 \\ & = \\ & 5 \end{aligned}$ | $\begin{array}{r} 89 \\ 57 \\ \hline 146 \\ - \\ \hline 146 \end{array}$ |
| - Normal Cost | 14 | - | 14 | 14 | 1 | 15 |

## NORTHERN NEW England Passenger Rail Authority

Annual Required Contribution (ARC)
(Amounts in Thousands)

| Annual Required Contribution | $\begin{gathered} \text { 6/30/09 } \\ \text { Roll-Forward } \end{gathered}$ | 3/31/10 Valuation |  |
| :---: | :---: | :---: | :---: |
|  | 2009/10 ARC | 2010/11 ARC | 2011/12 ARC |
| - ARC - \$ |  |  |  |
| - Normal Cost | \$14 | \$ 15 | \$ 15 |
| - UAAL Amortization | $\underline{18}$ | 8 | $\underline{10}$ |
| - ARC | 33 | 23 | 25 |
| - Projected Payroll | 305 | 290 | 300 |
| - ARC - \% |  |  |  |
| - Normal Cost | 4.7\% | 5.1\% | 5.1\% |
| - UAAL Amortization | 6.0\% | 2.8\% | 3.2\% |
| - ARC | 10.7\% | 7.9\% | 8.3\% |

## Actuarial Gains \& Losses

(Amounts in Thousands)

| Actuarial Gains \& Losses | NC\% | AAL | (AVA) | UAAL |
| :--- | :---: | :---: | :---: | :---: |
| ■ 6/30/09 Actual | $4.7 \%$ | $\$ 341$ | $\$-$ | $\$ 341$ |
| ■/30/10 Expected | $4.7 \%$ | 358 | $(19)$ | 339 |
| ■ Experience Losses (Gains): |  |  |  |  |
| - Actual versus Expected Premiums \& Claims | $0.2 \%$ | 3 | $\mathrm{n} / \mathrm{a}$ | 3 |
| - Demographic \& Other | $(0.4 \%)$ | $(220)$ | $\mathrm{n} / \mathrm{a}$ | $(220)$ |
| - Contribution Loss | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | 19 | 19 |
| - Investment Loss (Gain) | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |
| ■ Assumption Changes: |  |  |  |  |
| - Medical Trend \& Claims Cost | $0.2 \%$ | 5 | $\mathrm{n} / \mathrm{a}$ | 5 |
| - Aggregate Payroll Increase Rate | $0.3 \%$ | 8 | $\mathrm{n} / \mathrm{a}$ | 8 |
| - Spouse Participation | $0.0 \%$ | - | $\mathrm{n} / \mathrm{a}$ | - |
| - Other Demographic Assumptions | $\underline{0.1 \%}$ | $\underline{(4)}$ | $\underline{\mathrm{n} / \mathrm{a}}$ | $\underline{(4)}$ |
| ■ Total Changes | $0.4 \%$ | $(208)$ | 19 | $(189)$ |
| $\square$ 6/30/10 Projected | $5.1 \%$ | 150 | - | 150 |



## Northern New England Passenger Rail Authority

Unfunded Actuarial Accrued Liability Amortization Balances
(Amounts in Thousands)

| Amortization Base | Original Bases |  |  |  | Remaining Bases <br> $\mathbf{6 / 3 0 / 2 0 1 0}$ | 2010/11 <br> Amortization <br> Payment |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Date | Years | Amount | Years | Balance | $\$ 132$ |
| - Initial UAAL | $6 / 30 / 07$ | 30 | $\$ 130$ | 27 | $\$ 132$ | $\$ 6$ |
| - Experience Losses (Gains) | $6 / 30 / 08$ | 15 | 119 | 13 | 113 | 10 |
|  | $6 / 30 / 09$ | 15 | 35 | 14 | 34 | 3 |
| - Assumption Changes | $6 / 30 / 10$ | 15 | $(198)$ | 15 | $(198)$ | $(15)$ |
|  | $6 / 30 / 08$ | 20 | 60 | 18 | 59 | 4 |
| - Projected Unfunded AAL | $6 / 30 / 10$ | 20 | 9 | 20 | $\underline{9}$ | 1 |
| - Projected Unfunded $\mathrm{AAL}^{31}$ | $6 / 30 / 10$ |  |  |  | 150 | 8 |

[^13]
## Estimated Net OPEB Obligation (NOO) Illustration

(Amounts in Thousands)

| Estimated Net OPEB Obligation | $\begin{gathered} \text { Estimated } \\ \text { 2007/08 } \end{gathered}$ | $\begin{gathered} \text { Estimated } \\ 2008 / 09 \end{gathered}$ | $\begin{gathered} \text { Estimated } \\ 2009 / 10 \end{gathered}$ | $\begin{gathered} \text { Estimated } \\ 2010 / 11 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| - NOO at Beginning of Year | \$ 0 | \$ 13 | \$ 36 | \$ 63 |
| Annual OPEB Cost (AOC) <br> - Annual Required Contribution <br> - Interest on NOO <br> - Amortization of $\mathrm{NOO}^{32}$ <br> - Annual OPEB Cost | $\begin{gathered} 17 \\ 0 \\ \frac{(0)}{17} \end{gathered}$ | $\begin{gathered} 29 \\ 1 \\ \frac{(1)}{28} \end{gathered}$ | $\begin{gathered} 33 \\ 2 \\ \frac{(2)}{32} \end{gathered}$ | $\begin{array}{r} 23 \\ 3 \\ \frac{(5)}{21} \end{array}$ |
| - Contributions <br> - Benefit Payments Outside of Trust <br> $>$ Cash Payments \& Admin Fees ${ }^{33}$ <br> $>$ Implied Subsidy Payments <br> - Trust Pre-Funding <br> - Total Contribution | (4) <br> (1) <br> (0) <br> (4) | $\begin{aligned} & (5) \\ & (1) \\ & \frac{(0)}{(6)} \end{aligned}$ | (3) <br> (1) <br> (0) <br> (4) | (3) <br> (0) <br> (0) <br> (3) |
| - NOO at End of Year | 13 | 36 | 63 | 81 |

${ }_{33}^{32}$ NOO amortized over average weighted experience gain or loss period for 2009/10 and 2010/11.
${ }^{33}$ Payments per State for 2007/08, 2008/09, and 2009/10 (prorated for 12 months). Valuation estimate for 2010/11.

Northern New England Passenger Rail Authority

## Contribution \& Expense Projection

(Amounts in Thousands)

| Fiscal Year |  | ARC | Annual <br> OPEB <br> Cost <br> (AOC) | Contribution |  |  | $\begin{array}{\|c} \text { Contrib } \\ \text { \% of } \\ \text { ARC } \\ \hline \end{array}$ | Payroll |  | Contrib \% of Payroll |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Benefit Pmts | Pre- <br> Funding | Total Contrib |  |  |  |  |
| 2010/11 | \$ 63 | \$ 23 | \$ 21 | \$ 3 | \$ - | \$ 3 | 13\% | \$ 290 | 7.9\% | 1.0\% |
| 2011/12 | 81 | 25 | 22 | 4 | - | 4 | 16\% | 300 | 8.3\% | 1.3\% |
| 2012/13 | 99 | 27 | 24 | 4 | - | 4 | 15\% | 309 | 8.7\% | 1.3\% |
| 2013/14 | 119 | 30 | 25 | 4 | - | 4 | 13\% | 320 | 9.4\% | 1.3\% |
| 2014/15 | 140 | 33 | 27 | 5 | - | 5 | 15\% | 330 | 10.0\% | 1.5\% |
| 2015/16 | 162 | 36 | 29 | 7 | - | 7 | 19\% | 341 | 10.6\% | 2.1\% |
| 2016/17 | 184 | 39 | 31 | 8 | - | 8 | 21\% | 352 | 11.1\% | 2.3\% |
| 2017/18 | 207 | 43 | 33 | 9 | - | 9 | 21\% | 363 | 11.8\% | 2.5\% |
| 2018/19 | 231 | 47 | 35 | 9 | - | 9 | 19\% | 375 | 12.5\% | 2.4\% |
| 2019/20 | 257 | 51 | 37 | 10 | - | 10 | 20\% | 387 | 13.2\% | 2.6\% |

[^14]
## Benefit Payment Projection

(Amounts in Thousands)

| Fiscal <br> Year | Cash <br> Subsidy | Implied <br> Subsidy | Total |
| :---: | :---: | :---: | :---: |
| $2010 / 11$ | $\$ 3$ | $\$-$ | $\$ 3$ |
| $2011 / 12$ | 4 | - | 4 |
| $2012 / 13$ | 4 | - | 4 |
| $2013 / 14$ | 4 | - | 4 |
| $2014 / 15$ | 5 | - | 5 |
| $2015 / 16$ | 7 | - | 7 |
| $2016 / 17$ | 8 | - | 8 |
| $2017 / 18$ | 8 | - | 9 |
| $2018 / 19$ | 9 | - | 9 |
| $2019 / 20$ | 9 | 1 | 10 |

## Actuarial Certification

This report presents the State of Maine Retiree Healthcare Plan for State Employees and Teachers ("Plan") March 31, 2010 actuarial valuation. The purpose of this valuation is to:

- Determine the Plan's Benefit Obligations and Funded Status as of March 31, 2010 under Governmental Accounting Standards Board Statement Nos. 43 and 45, and
- Calculate the Annual Required Contributions for fiscal years 2010/11 and 2011/12.

The valuation is based on Plan provisions, participant data, claims, contribution policy, and asset information provided by the State and Anthem and summarized in this report. We reviewed the participant data and claims for reasonableness but did not perform an audit. The valuation was prepared using generally accepted actuarial principles and practices and the actuarial methods and assumptions summarized in this report. The assumptions represent our best estimate of expected future experience. Some of the assumptions used are based on the MainePERS June 30, 2009 actuarial valuation assumptions. The healthcare claims cost and healthcare cost increase assumption were reviewed by a qualified healthcare plan actuary.
This report presents Bartel Associates' best estimate of the Plan's liabilities, funded status, and costs in accordance with our understanding of GASB 43 and 45 . The information presented in this report is intended to be used to satisfy the requirements of GASB 43 and 45 and for no other purpose. The undersigned are members of the American Academy of Actuaries and meet Academy Qualification Standards to render the actuarial results and opinions in this report.
Respectfully submitted,

Fen $k$ bats
John E. Barrel, ASA, EA, MAAA, FCA President
Bartel Associates, LLC
November 19, 2010


Joseph R. D’Onofrio, FSA, EA, MAAA, FCA Assistant Vice President Barrel Associates, LLC November 19, 2010

Catherine a. Wandro
Catherine A. Wandro, ASA, MAAA Assistant Vice President Barrel Associates, LLC November 19, 2010

## ExHIBITS

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## ExHIBITS



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## Premiums

## State Employees' Health Plans

## Monthly Premiums

Actives and Non-Medicare Eligible Retirees

| Medical Plan | Year | Single | 2-Party | Family | Participant <br> 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 | $1,521.78$ | $1,810.70$ | $1,196.90$ |

Medicare Eligible Retirees

| Medical Plan | Year | Single | 2-Party | Family | Participant <br> w/Child(ren) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Group Companion | $2008 / 09$ | $\$ 320.10$ | $\$ 634.70$ | $\$ 988.14$ | $\$ 673.54$ |
| Advantra Freedom PFFS | 2009 | 237.42 | 469.34 | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |
| Anthem SmartValue PFFS | 2010 | 269.28 | 533.06 | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |

## Premiums

## Teachers' Health Plans <br> Monthly Premiums

Active and Non-Medicare Eligible Retirees

| Medical Plan | Year | Single | 2-Party | Family | Participant <br> w/Child(ren) |
| :--- | :---: | ---: | ---: | ---: | :---: |
| HMO Choice | $2008 / 09$ | $\$ 528.40$ | $\$ 1,190.91$ | $\$ 1,449.51$ | $\$ 935.16$ |
| (MEA Choice Plus) | $2009 / 10$ | 528.40 | $1,190.91$ | $1,449.51$ | 935.16 |
|  | $2010 / 11$ | 538.97 | $1,214.73$ | $1,478.50$ | 953.86 |
| Blue Choice | $2008 / 09$ | 570.61 | $1,286.19$ | $1,565.47$ | $1,009.96$ |
| (MEA Standard Plan) | $2009 / 10$ | 570.61 | $1,286.19$ | $1,565.47$ | $1,009.96$ |
|  | $2010 / 11$ | 582.02 | $1,311.91$ | $1,596.78$ | $1,030.16$ |

Medicare Eligible Retirees

| Medical Plan | Year | Single | 2-Party | Family | Participant <br> w/Child(ren) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Group Companion | $2008 / 09$ | $\$ 321.36$ | $\$ 674.55$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |
|  | $2009 / 10$ | 321.36 | 674.55 | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |
|  | $2010 / 11$ | 321.36 | 674.55 | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |

## State HMO Choice Average Claim Per Covered Person

## Non-Medicare Retirees

- Claims for Retiree \& Spouse
- Medical Claims
- $\mathrm{R}_{\mathrm{x}}$ Claims
- Total Claims
- Average Covered Persons
- Retirees
- Spouses
- Total
- Period

■ Average Monthly Claim Per Covered Person
■ Average Monthly Claim Trended to $1 / 1 / 11^{35}$

- Average Monthly Net Claims Cost ${ }^{36}$
- Average Mo the
\$ 37,848,000
8,767,000
46,615,000

3,664
346
4,010
12 months
r
${ }_{35}$ Average monthly claim per person increased to the middle of the $2010 / 11$ fiscal year using a $12 \%$ medical trend rate.
${ }^{36}$ Loaded $1 \%$ for stop/loss premium and administrative expenses.

## Claims



## Participant Statistics

## Active Employee Plan \& Coverage Elections

March 31, 2010
State Employees


Teachers


[^15]
## Participant Statistics

## Retiree Plan \& Coverage Elections

March 31, 2010
State Employees


Teachers


[^16]
## Participant Statistics

State Actives by Age and Service Excluding Actives Without Hire Dates

| Age | Service |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $<\mathbf{1}$ | $\mathbf{1 - 4}$ | $\mathbf{5 - 9}$ | $\mathbf{1 0 - 1 4}$ | $\mathbf{1 5 - 1 9}$ | $\mathbf{2 0 - 2 4}$ | $\mathbf{\geq 2 5}$ | Total |
| $<25$ | 61 | 121 | 13 | - | - | - | - | 195 |
| $25-29$ | 96 | 351 | 202 | 4 | - | - | - | 653 |
| $30-34$ | 83 | 298 | 394 | 156 | 4 | - | - | 935 |
| $35-39$ | 66 | 265 | 386 | 313 | 114 | 24 | - | 1,168 |
| $40-44$ | 80 | 245 | 327 | 287 | 211 | 289 | 21 | 1,460 |
| $45-49$ | 81 | 252 | 369 | 258 | 212 | 496 | 284 | 1,952 |
| $50-54$ | 67 | 255 | 366 | 254 | 206 | 408 | 673 | 2,229 |
| $55-59$ | 49 | 197 | 263 | 213 | 157 | 353 | 756 | 1,988 |
| $60-64$ | 25 | 107 | 197 | 114 | 122 | 169 | 302 | 1,036 |
| $\geq 65$ | 1 | 23 | 62 | 32 | 22 | 55 | 82 | 277 |
| Total | 609 | 2,114 | 2,579 | 1,631 | 1,048 | 1,794 | 2,118 | 11,893 |

## Participant Statistics

Teacher Actives by Age and Service ${ }^{43}$
Excluding Actives Without Hire Dates

|  | Service |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Age | $\mathbf{< 1}$ | $\mathbf{1 - 4}$ | $\mathbf{5 - 9}$ | $\mathbf{1 0 - 1 4}$ | $\mathbf{1 5 - 1 9}$ | $\mathbf{2 0 - 2 4}$ | $\mathbf{2 5}$ | Total |
| $<25$ | 101 | 255 | 22 | - | - | - | - | 378 |
| $25-29$ | 104 | 779 | 761 | 32 | - | - | - | 1,676 |
| $30-34$ | 64 | 325 | 795 | 655 | 24 | - | - | 1,863 |
| $35-39$ | 31 | 277 | 410 | 657 | 628 | 2 | - | 2,005 |
| $40-44$ | 41 | 240 | 409 | 420 | 785 | 341 | 10 | 2,246 |
| $45-49$ | 23 | 182 | 393 | 400 | 393 | 672 | 461 | 2,524 |
| $50-54$ | 27 | 138 | 370 | 443 | 486 | 492 | 1,242 | 3,198 |
| $55-59$ | 20 | 115 | 245 | 355 | 469 | 598 | 1,882 | 3,684 |
| $60-64$ | 10 | 58 | 134 | 148 | 262 | 412 | 951 | 1,975 |
| $\geq 65$ | 1 | 13 | 30 | 37 | 38 | 57 | 181 | 357 |
| Total | 422 | 2,382 | 3,569 | 3,147 | 3,085 | 2,574 | 4,727 | 19,906 |

[^17]
## Participant Statistics

State Actives by Age and Service ${ }^{44}$ Including Actives With Assumed Hire Dates

| Age | Service |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{<} \mathbf{1}$ | $\mathbf{1 - 4}$ | $\mathbf{5 - 9}$ | $\mathbf{1 0 - 1 4}$ | $\mathbf{1 5 - 1 9}$ | $\mathbf{2 0 - 2 4}$ | $\mathbf{2 5}$ | Total |
| $<25$ | 61 | 147 | 13 | - | - | - | - | 221 |
| $25-29$ | 96 | 410 | 202 | 4 | - | - | - | 712 |
| $30-34$ | 83 | 298 | 446 | 156 | 4 | - | - | 987 |
| $35-39$ | 66 | 265 | 453 | 313 | 114 | 24 | - | 1,235 |
| $40-44$ | 80 | 245 | 327 | 383 | 211 | 289 | 21 | 1,556 |
| $45-49$ | 81 | 252 | 369 | 258 | 326 | 496 | 284 | 2,066 |
| $50-54$ | 67 | 255 | 366 | 254 | 362 | 408 | 673 | 2,385 |
| $55-59$ | 50 | 196 | 263 | 213 | 157 | 497 | 756 | 2,132 |
| $60-64$ | 25 | 107 | 197 | 114 | 203 | 169 | 302 | 1,117 |
| $\geq 65$ | 1 | 23 | 62 | 32 | 54 | 55 | 82 | 309 |
| Total | 610 | 2,198 | 2,698 | 1,727 | 1,431 | 1,938 | 2,118 | 12,720 |

44 Includes actives with missing hire dates.

## Participant Statistics

$\xrightarrow[\text { Teacher Actives by Age and Service }{ }^{45}]{\text { Including Actives With Assumed Hire Dates }}$

| Age | Service |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{<} \mathbf{1}$ | $\mathbf{1 - 4}$ | $\mathbf{5 - 9}$ | $\mathbf{1 0 - 1 4}$ | $\mathbf{1 5 - 1 9}$ | $\mathbf{2 0 - 2 4}$ | $\mathbf{2 5}$ | Total |
| $<25$ | 101 | 352 | 22 | - | - | - | - | 475 |
| $25-29$ | 104 | 1,008 | 762 | 31 | - | - | - | 1,905 |
| $30-34$ | 65 | 324 | 1,044 | 654 | 24 | - | - | 2,111 |
| $35-39$ | 31 | 277 | 411 | 1,061 | 628 | 2 | - | 2,410 |
| $40-44$ | 41 | 240 | 409 | 1,152 | 785 | 341 | 10 | 2,978 |
| $45-49$ | 23 | 182 | 394 | 399 | 1,515 | 672 | 461 | 3,646 |
| $50-54$ | 27 | 138 | 372 | 441 | 486 | 1,877 | 1,242 | 4,583 |
| $55-59$ | 20 | 115 | 246 | 354 | 469 | 1,898 | 1,882 | 4,984 |
| $60-64$ | 10 | 58 | 134 | 148 | 262 | 1,506 | 951 | 3,069 |
| $\geq 65$ | 1 | 13 | 30 | 37 | 38 | 57 | 822 | 998 |
| Total | 423 | 2,707 | 3,824 | 4,277 | 4,207 | 6,353 | 5,368 | 27,159 |

[^18]Active Age Distribution State Employees


## Active Service Distribution

State Employees


Active Age Distribution
Teachers


## Participant Statistics

## Active Service Distribution

Teachers


State Retiree Healthcare Coverage by Age Group March 31, 2010

| Age | Single | 2-Party | Family | FLEX $^{46}$ | PFFS $^{47}$ | Total |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Under 50 | 107 | 2 | 23 | 6 | 1 | 139 |
| $50-54$ | 335 | 23 | 29 | 3 | 7 | 397 |
| $55-59$ | 740 | 54 | 46 | 4 | 8 | 852 |
| $60-64$ | 1,498 | 160 | 51 | 2 | 48 | 1,759 |
| $65-69$ | 177 | 17 | 5 | - | 1,292 | 1,491 |
| $70-74$ | 174 | 12 | - | - | 1,089 | 1,275 |
| $75-79$ | 106 | 12 | 2 | - | 1,052 | 1,172 |
| $80-84$ | 60 | 4 | - | - | 933 | 997 |
| Over 85 | 46 | 1 | - | - | 791 | 838 |
| Total | 3,243 | 285 | 156 | 15 | 5,221 | 8,920 |


| Average Age | 70.9 | 62.5 | 56.9 | 52.1 | 76.5 | 70.3 |
| :---: | :---: | ---: | ---: | ---: | ---: | :--- |
| $<65$ Election \% | $85 \%$ | $8 \%$ | $5 \%$ | $0 \%$ | $2 \%$ | $100 \%$ |
| $\geq 65$ Election \% | $10 \%$ | $1 \%$ | $0 \%$ | $0 \%$ | $89 \%$ | $100 \%$ |
| Total Election \% | $36 \%$ | $3 \%$ | $2 \%$ | $0 \%$ | $59 \%$ | $100 \%$ |

${ }_{47}^{46}$ State retirees married to other State employees or retirees.
${ }^{47}$ Medical coverage election not provided for State retirees in Medicare PFFS plan.

## Participant Statistics

Teachers Retiree Healthcare Coverage by Age Group March 31, 2010

| Age | Single | 2-Party | Family | Total |
| :---: | ---: | ---: | ---: | ---: |
| Under 50 | 25 | 2 | 7 | 34 |
| $50-54$ | 80 | 10 | 9 | 99 |
| $55-59$ | 549 | 87 | 24 | 660 |
| $60-64$ | 1,965 | 303 | 27 | 2,295 |
| $65-69$ | 1,884 | 309 | 1 | 2,194 |
| $70-74$ | 1,180 | 356 | - | 1,536 |
| $75-79$ | 877 | 246 | 1 | 1,124 |
| $80-84$ | 542 | 157 | - | 699 |
| Over 85 | 674 | 66 | - | 740 |
| Total | 7,776 | 1,536 | 69 | 9,381 |


| Average Age | 70.3 | 71.0 | 58.2 | 70.3 |
| :---: | :---: | :---: | ---: | :---: |
| $<65$ Election $\%$ | $85 \%$ | $13 \%$ | $2 \%$ | $100 \%$ |
| $\geq 65$ Election $\%$ | $82 \%$ | $18 \%$ | $0 \%$ | $100 \%$ |
| Total Election $\%$ | $83 \%$ | $16 \%$ | $1 \%$ | $100 \%$ |

Retiree Age Distribution State Employees








| ACTUARIAL ASSUMPTIONS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assumption | June 30, 2009 Roll-Forward |  |  | March 31, 2010 Valuation |  |  |
| - State Average Monthly Net Claims Cost | - Average HMO Choice net claims cost: <br> > Equal to State premium rates based on blended active and retiree experience <br> > $\$ 648$ per month for retiree <br> $>\$ 707$ per month for spouse <br> - Claims cost by age: <br> HMO Choice <br> Retiree Monthly Claims |  |  | - Average HMO Choice net claims cost: <br> > Based on 2009 retiree claims <br> $>$ Includes $1 \%$ load for stop/loss premium and admin expenses <br> > \$1,160 per month for retiree <br> > $\$ 1,160$ per month for spouse <br> - Claims cost by age: |  |  |
|  | Age | Male | Female | Age | Male | Female |
|  | 50 | \$ 569 | \$ 741 | 50 | \$ 697 | \$ 907 |
|  | 55 | 736 | 755 | 55 | 901 | 924 |
|  | 60 | 935 | 805 | 60 | 1,145 | 986 |
|  | 65 | 1,143 | 958 | 65 | 1,400 | 1,174 |
|  | 70 | 1,449 | 1,180 | 70 | 1,774 | 1,446 |
|  | 75 | 1,750 | 1,412 | 75 | 2,143 | 1,729 |


| Assumption | June 30, 2009 Roll-Forward | March 31, 2010 Valuation |  |
| :--- | ---: | ---: | :--- |
| ■ State Age-Related | HMO Choice |  | - Same |
| $\begin{array}{l}\text { Claims Cost }\end{array}$ | $\underline{\text { Retiree and Spouse }}$ |  |  |
| Relative Factors | $\underline{\text { Age }}$ | $\underline{\text { Male }}$ | $\underline{\text { Female }}$ |$)$







| Assumption | June 30, 2009 Roll-Forward | March 31, 2010 Valuation |
| :---: | :---: | :---: |
| Service Retirement Interpolation | - Valuation report sample rates interpolated for intermediate ages | - Rates at each age provided by MainePERS actuary <br> - Some rates inconsistent with valuation report sample rates <br> - Valuation report sample rates interpolated for these ages |
| Expected Retirement Age |  Hire  <br> Group $\frac{\text { Age }}{}$ ERA <br> State Tier 1 24 57 <br> State Tier 2 36 64 <br> Teachers Tier 1 30 60 <br> Teachers Tier 2 32 62 |  Hire  <br> Group $\frac{\text { Age }}{}$ ERA <br> State Tier 1 23 57 <br> State Tier 2 35 63 <br> Teachers Tier 1 25 59 <br> Teachers Tier 2 30 61 |
| - Medicare Eligible Rate | - Future retirees: <br> > Hired $<4 / 1 / 86-75 \%$ <br> $>$ Hired $\geq 4 / 1 / 86-100 \%$ <br> - Current retirees $<65-87.5 \%$ <br> - Current retirees $\geq 65-75 \%$ | - Same |


| ACTUARIAL ASSUMPTIONS |  |  |
| :---: | :---: | :---: |
| Assumption | June 30, 2009 Roll-Forward | March 31, 2010 Valuation |
| - Medical Plan at Retirement | - Medicare eligible: <br> > Current plan election before Medicare eligibility <br> > Medicare plan after Medicare eligibility <br> - Non Medicare eligible - current plan election | - Same |
| - Coverage Election at Retirement | - Current coverage election | - Same |
| - Participation at Retirement | - State $-95 \%$ for future retirees and surviving spouses <br> - Teachers $-75 \%$ for future retirees | - State - $95 \%$ for future retirees and $20 \%$ for surviving spouses <br> - Teachers - $75 \%$ for future retirees |
| - Marital Status | - Based on current coverage election <br> - Waived - $80 \%$ married | - Based on current coverage election <br> - Waivers - no waivers reported |


| Assumption | June 30, 2009 Roll-Forward | March 31, 2010 Valuation |
| :---: | :---: | :---: |
| - Spouse Age | - Current actives - males 3 years older than females <br> - Current Teacher retirees - males 3 years older than females if spouse birth date not provided | - Current actives - males 3 years older than females <br> - Current retirees - males 3 years older than females, no retiree spouse birth dates provided |
| - State Part-Time Employees | - Hired < 3/1/08 and not participating assumed part-time employees <br> - $25 \%$ of part-time employees assumed eligible for $100 \%$ State contribution | - Part-time employees eligible for same State contribution as fulltime employees per plan operation |
| ■ Ineligible Teachers | - Ineligible Teachers assumed equal to $10 \%$ of all Teachers <br> - $1 / 3$ of ineligible Teachers assumed to receive State contribution at retirement <br> - Assumption per State | - Same |


| Actuarial Assumptions |  |  |
| :---: | :---: | :---: |
| Assumption | June 30, 2009 Roll-Forward | March 31, 2010 Valuation |
| - Data Assumptions | - 900 State employees and 7,770 Teachers missing hire dates average service by age group <br> - 357 State employees and 7,889 Teachers missing pay - average pay by age/service group <br> - 33 State employees missing birth dates - average birth date <br> - Ineligible State elected officials assume none in data <br> - 9,743 Teachers in the State data file that did not have matching records in Anthem data file - not included in valuation | - 827 State employees and 7,253 Teachers missing hire dates average service by age group <br> - Ineligible State elected officials assume none in data <br> - Active employees with waived health insurance coverage - small group per State and not included in valuation <br> - Maine School Management Association (Aetna insurance) data not provided by State and not included in valuation |

## Actuarial Methods




## DEFINITIONS

| GASB 45 <br> Accrual <br> Accounting | - Project future employer-provided benefit cash flows for current active employees and current retirees <br> - Discount projected cash flow to valuation date using discount rate (assumed return on assets used to pay benefits) and other actuarial assumptions to determine present value of projected future benefits (PVB) <br> - Allocate PVB to past, current, and future periods using the actuarial cost method <br> - Actuarial cost method used for this valuation is the Entry Age Normal Cost method which determines Normal Cost as a level percentage of payroll (same method used by MainePERS) <br> - Normal Cost is amount allocated to current fiscal year <br> - Actuarial Accrued Liability (AAL) is amount allocated to prior service with employer <br> - Unfunded AAL (UAAL) is AAL less plan assets pre-funded in a segregated and restricted trust |
| :---: | :---: |
| - PayGo Cost | - Cash subsidy is the pay-as-you-go employer benefit payments for retirees <br> - Implied subsidy is the difference between the actual cost of retiree benefits and retiree premiums subsidized by active employee premiums |

## DEFINITIONS

## Present Value of Benefits

Present Value of Benefits
(Without Plan Assets)


Present Value of Benefits
(With Plan Assets)


## DEFINITIONS

| Annual Required Contribution (ARC) | - "Required contribution" for the current period including: <br> > Normal Cost <br> > Amortization of: <br> - Initial UAAL <br> - AAL for plan, assumption, and method changes <br> - Experience gains/losses (difference between expected and actual) <br> - Contribution gains/losses (difference between ARC and contributions) <br> - ARC in excess of pay-as-you-go costs not required to be funded |
| :---: | :---: |
| $\begin{aligned} & \text { - Net OPEB } \\ & \text { Obligation } \\ & \text { (NOO) } \\ & \hline \end{aligned}$ | - Net OPEB Obligation is the accumulated amounts expensed but not funded <br> - Net OPEB Asset if amounts funded exceed those expensed |
| Annual OPEB Cost (AOC) | - Expense for the current period including: <br> > ARC <br> > Interest on NOO <br> > Adjustment of NOO <br> - NOO adjustment prevents double counting of expense since ARCs include an amortization of prior contribution gains and losses previously expensed |


[^0]:    ${ }_{5}$ Average service by age group assumed for 900 State employees and 7,770 Teachers with missing hire dates.
    Average pay by age/service group assumed for 357 State employees and 7,889 Teachers with no pay reported.

[^1]:    ${ }^{8}$ OPEB Trust asset as of June 30, 2009 were reported as $\$ 82,184$ for the June 30, 2009 roll-forward valuation and $\$ 82,221$ for the June 30, 2010 valuation.

[^2]:    ${ }^{11}$ Expected real rates of return for OPEB fund provided by MainePERS.

[^3]:    12 OPEB investment and administrative expenses were approximately $.085 \%$ of beginning year market value of assets for 2008/09 and . $105 \%$ of beginning year market value of assets for 2009/10.
    ${ }^{13}$ Expected long-term geometric or compound return is estimated as 70 basis points lower than arithmetic or annual return. (Geometric return for several years is lower than arithmetic return for 1 year. For example, a $10 \%$ return for 1 year followed by a $-10 \%$ return for the next year is $-1 \%$ rather than $0 \%$ for the 2 -year period, that is, $110 \% \times 90 \%=99 \%$.)

[^4]:    ${ }^{15}$ Estimated payroll as of $3 / 31 / 10$ increased for $1 / 4$ year using the valuation aggregate pay increase assumption of $3.25 \%$.

[^5]:    ${ }^{16}$ Total amortization payment cannot be less than the UAAL amortized over 30 years.

[^6]:    ${ }^{19}$ Gains and losses amortized over 10-year fixed (closed) periods for ARC. NOO amortized over average weighted remaining ARC gain and loss amortization period.

[^7]:    ${ }^{20}$ Estimated premium/claims based on the 3/31/10 valuation data and 2010/11 medical premiums and estimated claims cost.
    ${ }^{21}$ Assumes State pays full active employee premium plus $1 / 3$ of the dependent premium.

[^8]:    ${ }^{22}$ Estimated payroll as of $3 / 31 / 10$ increased for $1 / 4$ year using the valuation aggregate pay increase assumption of $3.25 \%$.

[^9]:    ${ }^{23}$ Total amortization payment cannot be less than the UAAL amortized over 30 years.

[^10]:    ${ }^{26}$ Gains and losses amortized over 15-year fixed (closed) periods for ARC. NOO amortized over average weighted ARC gain and loss amortization period.

[^11]:    ${ }^{27}$ Total amortization payment cannot be less than the UAAL amortized over 30 years.

[^12]:    ${ }^{30}$ Gains and losses amortized over 15-year fixed (closed) periods for ARC. NOO amortized over average weighted remaining ARC gain and loss amortization period.

[^13]:    ${ }^{31}$ Total amortization payment cannot be less than the UAAL amortized over 30 years.

[^14]:    ${ }^{34}$ Gains and losses amortized over 15-year fixed (closed) periods for ARC. NOO amortized over average weighted remaining ARC gain and loss amortization period.

[^15]:    ${ }^{37}$ State employees or retirees married to other State employees or retirees and valued as single coverage.
    ${ }^{38}$ Included with HMO Choice for purposes of the valuation.

[^16]:    ${ }^{39}$ State employees or retirees married to other State employees or retirees and valued as single coverage.
    ${ }^{40}$ Included with HMO Choice for purposes of the valuation.
    ${ }^{41}$ Medical coverage election not provided for State retirees in Medicare PFFS plan.
    ${ }^{42}$ Included with Group Companion for purposes of the valuation.

[^17]:    ${ }^{43}$ Excludes actives with missing hire dates.

[^18]:    ${ }^{45}$ Includes actives with missing hire dates.

