



**STATE OF MAINE**  
**STATE AND TEACHERS RETIREE HEALTHCARE PLAN**

June 30, 2013 Interim Actuarial Valuation  
Final Valuation Results

**Bartel Associates, LLC**  
John E. Bartel, President  
Joseph R. D'Onofrio, Assistant Vice President  
Catherine A. Wandro, Assistant Vice President

**November 22, 2013**

**AGENDA**

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## BENEFIT SUMMARY

### ■ Eligibility

- MainePERS normal retirement:
  - Regular Plan:
    - Normal retirement age and 1 year of service:
      - 60 if  $\geq 10$  years of service on 7/1/93 (Tier 1)
      - 62 if  $< 10$  years of service on 7/1/93 or hire  $\geq 7/1/93$  (Tier 2)
      - 65 if  $< 5$  years of service on 7/1/11 or hire  $\geq 7/1/11$  (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

| State Cash Subsidy      |                               |                   |                               |                   |
|-------------------------|-------------------------------|-------------------|-------------------------------|-------------------|
| DOH $\leq 7/1/91$       | 7/1/91 < Hired < 7/1/11       |                   | DOH $\geq 7/1/11$             |                   |
| 100% of Retiree Premium | Years in Medical <sup>1</sup> | % Retiree Premium | Years in Medical <sup>1</sup> | % Retiree Premium |
|                         | $< 5$                         | 0%                | $< 10$                        | 0%                |
|                         | 5                             | 50%               | 10-14                         | 50%               |
|                         | 6                             | 60%               | 15-19                         | 75%               |
|                         | 7                             | 70%               | $\geq 20$                     | 100%              |
|                         | 8                             | 80%               |                               |                   |
|                         | 9                             | 90%               |                               |                   |
|                         | $\geq 10$                     | 100%              |                               |                   |

- No cash subsidy until retiree reaches normal retirement age for non-special plan service retirements  $\geq 1/1/12$  (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

<sup>1</sup> Continuous years of group health plan participation before retirement.



## BENEFIT SUMMARY

|  |   |
|--|---|
| <ul style="list-style-type: none"> <li>■ Teachers Medical Benefit</li> </ul> | <ul style="list-style-type: none"> <li>● State cash subsidy is 45% of retiree premium based on:                             <ul style="list-style-type: none"> <li>➢ Single rate for single and employee + child(ren) coverage</li> <li>➢ 50% of 2-party rate for 2-party and family coverage</li> </ul> </li> <li>● No State cash subsidy until retiree reaches normal retirement age for retirements <math>\geq</math> 7/1/12</li> <li>● Waived retirees not allowed to rejoin medical plan</li> <li>● The State's total cost for retired Teachers premiums is budgeted at \$24 million for 2013/14 and \$26 million for 2014/15 per LD 1509</li> </ul> |
| <ul style="list-style-type: none"> <li>■ Self-Pay</li> </ul>                 | <ul style="list-style-type: none"> <li>● Retirees not eligible for State cash subsidy can participate by paying full premium for themselves, spouses, and dependents</li> <li>● Surviving spouses and surviving dependents can participate by paying full premium</li> </ul>  |
| <ul style="list-style-type: none"> <li>■ Other OPEB</li> </ul>               | <ul style="list-style-type: none"> <li>● No State contribution for dental, vision, life insurance, Medicare Part B premium, or pre-retirement death benefit</li> </ul>  |



## BENEFIT SUMMARY

| <ul style="list-style-type: none"> <li>■ Pay-As-You-Go Cost (000's)</li> </ul> | <ul style="list-style-type: none"> <li>● Benefit payments plus administrative expenses:</li> </ul> <table style="margin-left: 40px; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"></th> <th colspan="3" style="text-align: center; border-bottom: 1px solid black;">State</th> <th style="text-align: center; border-bottom: 1px solid black;">Teachers</th> <th style="text-align: left;"></th> </tr> <tr> <th style="text-align: left;"><u>Year</u></th> <th style="text-align: right;"><u>Cash</u></th> <th style="text-align: right;"><u>IS</u></th> <th style="text-align: right;"><u>Total</u></th> <th style="text-align: right;"><u>Cash</u></th> <th style="text-align: left;"><u>Source</u></th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td style="text-align: right;">\$52,344</td> <td style="text-align: right;">\$14,000</td> <td style="text-align: right;">\$66,344</td> <td style="text-align: right;">\$24,973</td> <td style="text-align: left;">State</td> </tr> <tr> <td>2011/12</td> <td style="text-align: right;">44,765</td> <td style="text-align: right;">22,000</td> <td style="text-align: right;">66,765</td> <td style="text-align: right;">21,762</td> <td style="text-align: left;">State</td> </tr> <tr> <td>2010/11</td> <td style="text-align: right;">48,632</td> <td style="text-align: right;">22,000</td> <td style="text-align: right;">70,632</td> <td style="text-align: right;">18,375</td> <td style="text-align: left;">State</td> </tr> </tbody> </table><br><table style="margin-left: 40px; border-collapse: collapse;"> <thead> <tr> <th colspan="6" style="text-align: center;">Maine Educational Center for the Deaf and Hard of Hearing</th> </tr> <tr> <th style="text-align: left;"></th> <th colspan="3" style="text-align: center; border-bottom: 1px solid black;">State</th> <th style="text-align: left;"></th> </tr> <tr> <th style="text-align: left;"><u>Year</u></th> <th style="text-align: right;"><u>Cash</u></th> <th style="text-align: right;"><u>IS</u></th> <th style="text-align: right;"><u>Total</u></th> <th style="text-align: left;"><u>Source</u></th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td style="text-align: right;">\$97</td> <td style="text-align: right;">\$30</td> <td style="text-align: right;">\$127</td> <td style="text-align: left;">State</td> </tr> <tr> <td>2011/12</td> <td style="text-align: right;">102</td> <td style="text-align: right;">43</td> <td style="text-align: right;">145</td> <td style="text-align: left;">State</td> </tr> <tr> <td>2010/11</td> <td style="text-align: right;">105</td> <td style="text-align: right;">37</td> <td style="text-align: right;">142</td> <td style="text-align: left;">State</td> </tr> </tbody> </table><br><table style="margin-left: 40px; border-collapse: collapse;"> <thead> <tr> <th colspan="5" style="text-align: center;">Northern New England Passenger Rail Authority</th> </tr> <tr> <th style="text-align: left;"></th> <th colspan="3" style="text-align: center; border-bottom: 1px solid black;">State</th> <th style="text-align: left;"></th> </tr> <tr> <th style="text-align: left;"><u>Year</u></th> <th style="text-align: right;"><u>Cash</u></th> <th style="text-align: right;"><u>IS</u></th> <th style="text-align: right;"><u>Total</u></th> <th style="text-align: left;"><u>Source</u></th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td style="text-align: right;">\$3</td> <td style="text-align: right;">\$0</td> <td style="text-align: right;">\$3</td> <td style="text-align: left;">State</td> </tr> <tr> <td>2011/12</td> <td style="text-align: right;">6</td> <td style="text-align: right;">0</td> <td style="text-align: right;">6</td> <td style="text-align: left;">State</td> </tr> <tr> <td>2010/11</td> <td style="text-align: right;">2</td> <td style="text-align: right;">0</td> <td style="text-align: right;">2</td> <td style="text-align: left;">State</td> </tr> </tbody> </table> |           | State        |               |               | Teachers |  | <u>Year</u> | <u>Cash</u> | <u>IS</u> | <u>Total</u> | <u>Cash</u> | <u>Source</u> | 2012/13 | \$52,344 | \$14,000 | \$66,344 | \$24,973 | State | 2011/12 | 44,765 | 22,000 | 66,765 | 21,762 | State | 2010/11 | 48,632 | 22,000 | 70,632 | 18,375 | State | Maine Educational Center for the Deaf and Hard of Hearing |  |  |  |  |  |  | State |  |  |  | <u>Year</u> | <u>Cash</u> | <u>IS</u> | <u>Total</u> | <u>Source</u> | 2012/13 | \$97 | \$30 | \$127 | State | 2011/12 | 102 | 43 | 145 | State | 2010/11 | 105 | 37 | 142 | State | Northern New England Passenger Rail Authority |  |  |  |  |  | State |  |  |  | <u>Year</u> | <u>Cash</u> | <u>IS</u> | <u>Total</u> | <u>Source</u> | 2012/13 | \$3 | \$0 | \$3 | State | 2011/12 | 6 | 0 | 6 | State | 2010/11 | 2 | 0 | 2 | State |
|--|--|-----------|--------------|---------------|---------------|----------|--|-------------|-------------|-----------|--------------|-------------|---------------|---------|----------|----------|----------|----------|-------|---------|--------|--------|--------|--------|-------|---------|--------|--------|--------|--------|-------|---|--|--|--|--|--|--|-------|--|--|--|-------------|-------------|-----------|--------------|---------------|---------|------|------|-------|-------|---------|-----|----|-----|-------|---------|-----|----|-----|-------|---|--|--|--|--|--|-------|--|--|--|-------------|-------------|-----------|--------------|---------------|---------|-----|-----|-----|-------|---------|---|---|---|-------|---------|---|---|---|-------|
|  | State  |           |              | Teachers      |               |          |  |             |             |           |              |             |               |         |          |          |          |          |       |         |        |        |        |        |       |         |        |        |        |        |       |   |  |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |      |      |       |       |         |     |    |     |       |         |     |    |     |       |   |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |     |     |     |       |         |   |   |   |       |         |   |   |   |       |
| <u>Year</u>  | <u>Cash</u>  | <u>IS</u> | <u>Total</u> | <u>Cash</u>   | <u>Source</u> |          |  |             |             |           |              |             |               |         |          |          |          |          |       |         |        |        |        |        |       |         |        |        |        |        |       |   |  |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |      |      |       |       |         |     |    |     |       |         |     |    |     |       |   |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |     |     |     |       |         |   |   |   |       |         |   |   |   |       |
| 2012/13  | \$52,344   | \$14,000  | \$66,344     | \$24,973      | State         |          |  |             |             |           |              |             |               |         |          |          |          |          |       |         |        |        |        |        |       |         |        |        |        |        |       |   |  |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |      |      |       |       |         |     |    |     |       |         |     |    |     |       |   |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |     |     |     |       |         |   |   |   |       |         |   |   |   |       |
| 2011/12  | 44,765   | 22,000    | 66,765       | 21,762        | State         |          |  |             |             |           |              |             |               |         |          |          |          |          |       |         |        |        |        |        |       |         |        |        |        |        |       |   |  |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |      |      |       |       |         |     |    |     |       |         |     |    |     |       |   |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |     |     |     |       |         |   |   |   |       |         |   |   |   |       |
| 2010/11  | 48,632   | 22,000    | 70,632       | 18,375        | State         |          |  |             |             |           |              |             |               |         |          |          |          |          |       |         |        |        |        |        |       |         |        |        |        |        |       |   |  |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |      |      |       |       |         |     |    |     |       |         |     |    |     |       |   |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |     |     |     |       |         |   |   |   |       |         |   |   |   |       |
| Maine Educational Center for the Deaf and Hard of Hearing                      |  |           |              |               |               |          |  |             |             |           |              |             |               |         |          |          |          |          |       |         |        |        |        |        |       |         |        |        |        |        |       |   |  |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |      |      |       |       |         |     |    |     |       |         |     |    |     |       |   |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |     |     |     |       |         |   |   |   |       |         |   |   |   |       |
|  | State  |           |              |               |               |          |  |             |             |           |              |             |               |         |          |          |          |          |       |         |        |        |        |        |       |         |        |        |        |        |       |   |  |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |      |      |       |       |         |     |    |     |       |         |     |    |     |       |   |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |     |     |     |       |         |   |   |   |       |         |   |   |   |       |
| <u>Year</u>  | <u>Cash</u>  | <u>IS</u> | <u>Total</u> | <u>Source</u> |               |          |  |             |             |           |              |             |               |         |          |          |          |          |       |         |        |        |        |        |       |         |        |        |        |        |       |   |  |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |      |      |       |       |         |     |    |     |       |         |     |    |     |       |   |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |     |     |     |       |         |   |   |   |       |         |   |   |   |       |
| 2012/13  | \$97   | \$30      | \$127        | State         |               |          |  |             |             |           |              |             |               |         |          |          |          |          |       |         |        |        |        |        |       |         |        |        |        |        |       |   |  |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |      |      |       |       |         |     |    |     |       |         |     |    |     |       |   |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |     |     |     |       |         |   |   |   |       |         |   |   |   |       |
| 2011/12  | 102  | 43        | 145          | State         |               |          |  |             |             |           |              |             |               |         |          |          |          |          |       |         |        |        |        |        |       |         |        |        |        |        |       |   |  |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |      |      |       |       |         |     |    |     |       |         |     |    |     |       |   |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |     |     |     |       |         |   |   |   |       |         |   |   |   |       |
| 2010/11  | 105  | 37        | 142          | State         |               |          |  |             |             |           |              |             |               |         |          |          |          |          |       |         |        |        |        |        |       |         |        |        |        |        |       |   |  |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |      |      |       |       |         |     |    |     |       |         |     |    |     |       |   |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |     |     |     |       |         |   |   |   |       |         |   |   |   |       |
| Northern New England Passenger Rail Authority                                  |  |           |              |               |               |          |  |             |             |           |              |             |               |         |          |          |          |          |       |         |        |        |        |        |       |         |        |        |        |        |       |   |  |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |      |      |       |       |         |     |    |     |       |         |     |    |     |       |   |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |     |     |     |       |         |   |   |   |       |         |   |   |   |       |
|  | State  |           |              |               |               |          |  |             |             |           |              |             |               |         |          |          |          |          |       |         |        |        |        |        |       |         |        |        |        |        |       |   |  |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |      |      |       |       |         |     |    |     |       |         |     |    |     |       |   |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |     |     |     |       |         |   |   |   |       |         |   |   |   |       |
| <u>Year</u>  | <u>Cash</u>  | <u>IS</u> | <u>Total</u> | <u>Source</u> |               |          |  |             |             |           |              |             |               |         |          |          |          |          |       |         |        |        |        |        |       |         |        |        |        |        |       |   |  |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |      |      |       |       |         |     |    |     |       |         |     |    |     |       |   |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |     |     |     |       |         |   |   |   |       |         |   |   |   |       |
| 2012/13  | \$3  | \$0       | \$3          | State         |               |          |  |             |             |           |              |             |               |         |          |          |          |          |       |         |        |        |        |        |       |         |        |        |        |        |       |   |  |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |      |      |       |       |         |     |    |     |       |         |     |    |     |       |   |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |     |     |     |       |         |   |   |   |       |         |   |   |   |       |
| 2011/12  | 6  | 0         | 6            | State         |               |          |  |             |             |           |              |             |               |         |          |          |          |          |       |         |        |        |        |        |       |         |        |        |        |        |       |   |  |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |      |      |       |       |         |     |    |     |       |         |     |    |     |       |   |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |     |     |     |       |         |   |   |   |       |         |   |   |   |       |
| 2010/11  | 2  | 0         | 2            | State         |               |          |  |             |             |           |              |             |               |         |          |          |          |          |       |         |        |        |        |        |       |         |        |        |        |        |       |   |  |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |      |      |       |       |         |     |    |     |       |         |     |    |     |       |   |  |  |  |  |  |       |  |  |  |             |             |           |              |               |         |     |     |     |       |         |   |   |   |       |         |   |   |   |       |



## FUNDING POLICY

### State Employees

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

| Fiscal Year | Funding Policy Contribution<br>(Reflects Actual PayGo) | Trust Pre-Funding (\$millions) |         |
|-------------|--|--------------------------------|---------|
|             |  | 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 + 40% x (ARC – PayGo)                            | 10.8                           | 1.8     |
| 2013/14     | PayGo + 50% x (ARC – PayGo)                            | n/a                            | n/a     |
| ↓           | ↓  | ↓                              | ↓       |
| 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 24-year periods from 6/30/13
- Plan changes amortized over fixed 24-year periods from 6/30/13



November 22, 2013

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## FUNDING POLICY

### Teachers

- Phase into full ARC funding over an 8-year period beginning 2015/16:

| Fiscal Year        | Contribution                            |
|--------------------|---|
| 2007/08 to 2012/13 | PayGo                                   |
| 2013/14            | PayGo (\$24 million budget per LD 1509) |
| 2014/15            | PayGo (\$26 million budget per LD 1509) |
| 2015/16            | PayGo + 12.5% x (ARC – PayGo)           |
| 2016/17            | PayGo + 25.0% x (ARC – PayGo)           |
| 2017/18            | PayGo + 37.5% x (ARC – PayGo)           |
| 2018/19            | PayGo + 50.0% x (ARC – PayGo)           |
| 2019/20            | PayGo + 62.5% x (ARC – PayGo)           |
| 2020/21            | PayGo + 75.0% x (ARC – PayGo)           |
| 2021/22            | PayGo + 87.5% x (ARC – PayGo)           |
| 2022/23+           | 100% of ARC                             |

- Benefit payments assumed paid from State Cash Pool until at least 2023

- Amortization:

- Experience gains & losses amortized over fixed 15-year periods
- Contribution losses amortized over fixed 15-year periods
- Assumption changes amortized over fixed 24-year periods from 6/30/13
- Plan changes amortized over fixed 24-year periods from 6/30/13



November 22, 2013

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**DATA SUMMARY**

**Participant Statistics**  
**June 30, 2012**

|                            | State<br>Employees <sup>2</sup> | Teachers            | Maine<br>Educational<br>Center<br>for the Deaf | Northern<br>New England<br>Passenger<br>Rail Authority |
|----------------------------|---------------------------------|---------------------|--|--|
| <b>■ Actives</b>           |                                 |                     |  |  |
| • Count                    | 12,419                          | 28,375 <sup>3</sup> | 57   | 6  |
| • Average Age              | 48.0                            | 46.3                | 47.4   | 45.4   |
| • Average Service          | 14.1                            | 14.9                | 10.0   | 6.0  |
| • Average Pay <sup>4</sup> | \$40,417                        | \$40,744            | \$42,705                                       | \$62,531   |
| • Total Payroll (000's)    | 501,935                         | 1,156,122           | 2,434  | 375  |
| <b>■ Retirees</b>          |                                 |                     |  |  |
| • Count                    | 9,587                           | 9,520               | 11   | 2  |
| • Average Age              | 70.4                            | 70.1                | 62.6   | 69.4   |

<sup>2</sup> 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.

<sup>3</sup> 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 inactive and 257 terminated vested with the active Teacher data.

<sup>4</sup> 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 <sup>5</sup> |               |               |              | Teachers      |               |               |              |
|-------------------|------------------------------|---------------|---------------|--------------|---------------|---------------|---------------|--------------|
|                   | <u>Tier 1</u>                | <u>Tier 2</u> | <u>Tier 3</u> | <u>Total</u> | <u>Tier 1</u> | <u>Tier 2</u> | <u>Tier 3</u> | <u>Total</u> |
| <b>■ Actives</b>  |                              |               |               |              |               |               |               |              |
| <b>• Counts</b>   |                              |               |               |              |               |               |               |              |
| ➤ Covered         | 1,127                        | 7,612         | 2,863         | 11,602       | 2,648         | 13,040        | 3,040         | 18,728       |
| ➤ Waived          | <u>18</u>                    | <u>296</u>    | <u>503</u>    | <u>817</u>   | <u>484</u>    | <u>5,640</u>  | <u>3,523</u>  | <u>9,647</u> |
| ➤ Total           | 1,145                        | 7,908         | 3,366         | 12,419       | 3,132         | 18,680        | 6,563         | 28,375       |
| • Percent         | 9%                           | 64%           | 27%           | 100%         | 11%           | 66%           | 23%           | 100%         |
| • 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         |

<sup>5</sup> 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).



**STATE PLAN ASSETS**

**State Employees Trust Fund – Market Value of Assets**

**Fiscal Year 2012/13**

(Amounts in Thousands)

| Market Value of Assets    | State<br>OPEB Trust | State<br>Cash Pool <sup>6</sup> | Total      |
|---------------------------|---------------------|---------------------------------|------------|
| ■ June 30, 2012           | \$ 139,897          | \$ -                            | \$ 139,897 |
| • Contributions           | 1,840 <sup>7</sup>  | 52,344                          | 54,184     |
| • Investment Return       | 18,754              | -                               | 18,754     |
| • Benefit Payments        | 0                   | (52,344)                        | (52,344)   |
| • Investment Expenses     | (47)                | -                               | (47)       |
| • Administrative Expenses | (94)                | -                               | (94)       |
| ■ June 30, 2013           | 160,350             | -                               | 160,350    |
| ■ Approximate Return      | 13.3%               | -                               | 13.3%      |

<sup>6</sup> Cash subsidy plus administrative expenses.

<sup>7</sup> Contribution receivable as of 6/30/13. Actual contribution was made 8/30/13 for 2012/13 fiscal year.



**STATE PLAN ASSETS**

**State Employees Trust Fund – Actuarial Value of Assets**

**Fiscal Year 2012/13**

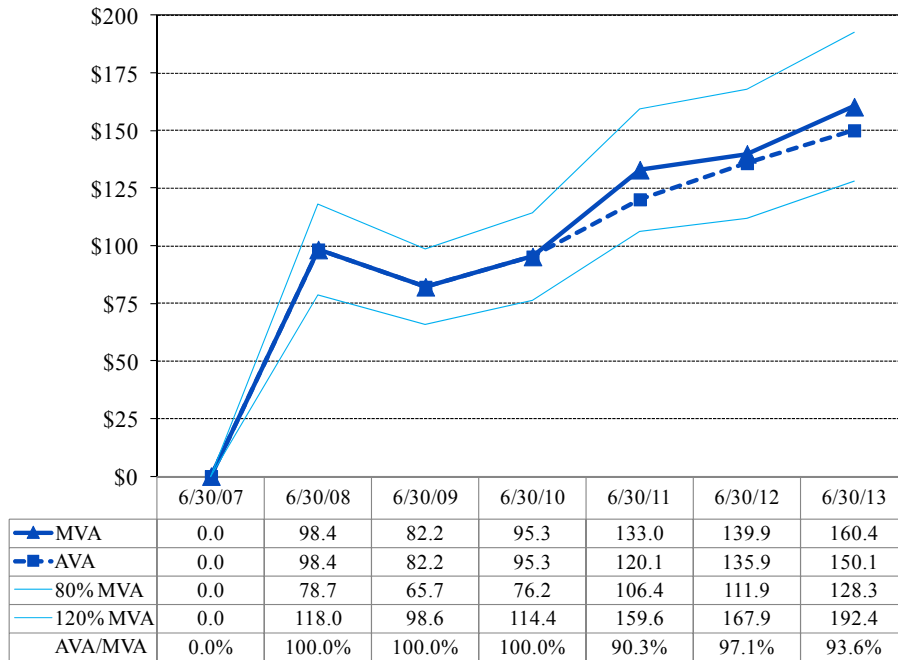
(Amounts in Thousands)

| Actuarial Value of Assets              | June 30, 2013 |
|--|---------------|
| ■ Actuarial Value at Beginning of Year | \$ 135,865    |
| • Contributions                        | 54,184        |
| • Benefit Payments                     | (52,344)      |
| • Expected Investment Return           | 9,850         |
| ■ Expected AVA at End of Year          | 147,555       |
| ■ Market Value at End of Year          | 160,350       |
| ■ MVA – Expected AVA                   | 12,795        |
| ■ 1/5 of (MVA – Expected AVA)          | 2,559         |
| ■ Preliminary AVA                      | 150,114       |
| ■ Minimum AVA (80% of MVA)             | 128,280       |
| ■ Maximum AVA (120% of MVA)            | 192,420       |
| ■ Actuarial Value at End of Year       | 150,114       |
| ■ AVA Net Return                       | 9.1%          |
| ■ AVA/MVA                              | 93.6%         |



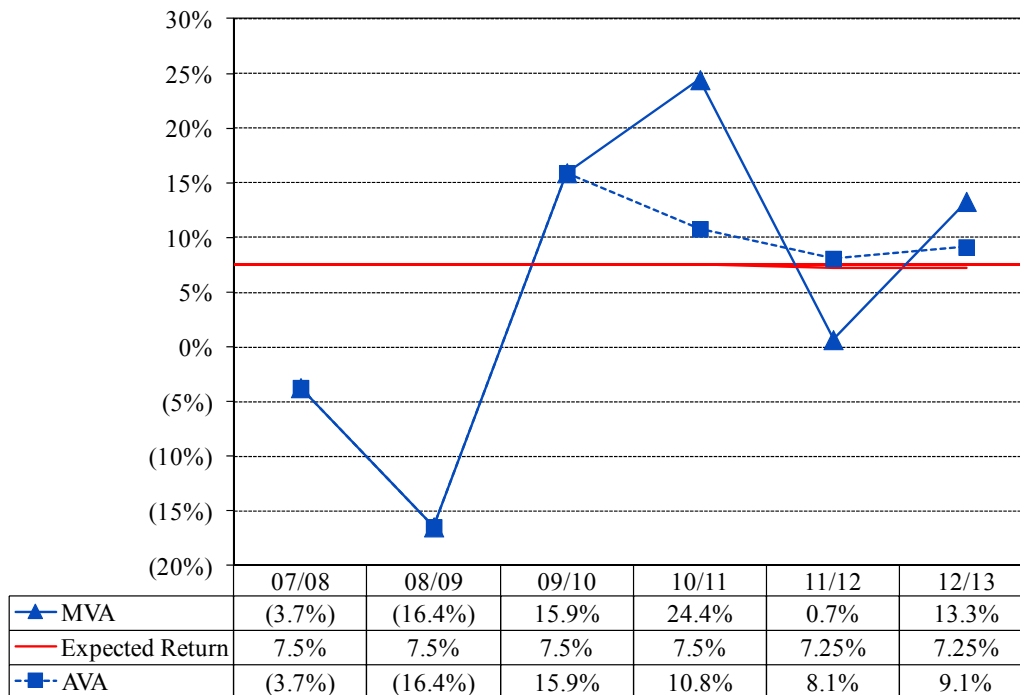
## STATE PLAN ASSETS

### Historical Plan Assets (Amounts in Millions)



## STATE PLAN ASSETS

### Historical Asset Returns



**STATE PLAN ASSETS**

**Asset Allocation**  
(Amounts in Thousands)

| Asset Class            | Target Allocation | 6/30/13 Actual Allocation |      |
|------------------------|-------------------|---------------------------|------|
| ■ US Equity            | 45%               | \$ 75,050                 | 47%  |
| ■ International Equity | 25%               | 38,386                    | 24%  |
| ■ US Fixed Income      | 25%               | 37,298                    | 24%  |
| ■ Real Estate          | 5%                | 7,894                     | 5%   |
| ■ Cash                 | 0%                | 0                         | 0%   |
| ■ Total                | 100%              | 158,628 <sup>8</sup>      | 100% |

<sup>8</sup> Differs from plan asset value of \$160,350,224 which includes a \$118,163 liability and a \$1,840,385 contribution received on 8/30/13.



**STATE PLAN ASSETS**

**Expected Rate of Return Illustration**

| Asset Class   | Expected Real Return <sup>9</sup> | Target Asset 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 <sup>th</sup> Percentile)               |                                   | 7.67%                   |
| ■ 55% Confidence Level Return (45 <sup>th</sup> Percentile) <sup>10</sup> |                                   | 7.42%                   |
| ■ 60% Confidence Level Return (40 <sup>th</sup> Percentile)               |                                   | 7.13%                   |
| ■ Full Pre-Funding Discount Rate  |                                   | 7.25%                   |

<sup>9</sup> Approximate 10-year geometric real rates of return provided by independent investment advisors in May 2010.

<sup>10</sup> “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%.





**STATE EMPLOYEES RESULTS**

**Actuarial Obligations**

(Amounts in Millions)

| Actuarial Obligations                     | 6/30/12 Valuation |                 |              | 6/30/13 Valuation |                 |              |
|---|-------------------|-----------------|--------------|-------------------|-----------------|--------------|
|   | Cash Subsidy      | Implied Subsidy | Total        | Cash Subsidy      | Implied Subsidy | Total        |
| ■ Present Value of Benefits               |                   |                 |              |                   |                 |              |
| • Actives                                 | \$ 541            | \$ 124          | \$ 665       | \$ 492            | \$ 117          | \$ 609       |
| • Retirees                                | <u>624</u>        | <u>184</u>      | <u>808</u>   | <u>525</u>        | <u>168</u>      | <u>693</u>   |
| • Total                                   | 1,165             | 308             | 1,473        | 1,017             | 285             | 1,302        |
| ■ Actuarial Accrued Liability             |                   |                 |              |                   |                 |              |
| • Actives                                 | 401               | 107             | 508          | 372               | 101             | 473          |
| • Retirees                                | <u>624</u>        | <u>184</u>      | <u>808</u>   | <u>525</u>        | <u>168</u>      | <u>693</u>   |
| • Total                                   | 1,025             | 291             | 1,316        | 897               | 269             | 1,166        |
| ■ Actuarial Value of Assets <sup>11</sup> | <u>(106)</u>      | <u>(30)</u>     | <u>(136)</u> | <u>(115)</u>      | <u>(35)</u>     | <u>(150)</u> |
| ■ Unfunded AAL                            | 919               | 261             | 1,180        | 782               | 234             | 1,016        |
| ■ Funded %                                |                   |                 | 10.3%        |                   |                 | 12.9%        |
| ■ Normal Cost                             | 20                | 3               | 23           | 18                | 3               | 21           |
| ■ Normal Cost % Pay                       | 4.0%              | 0.6%            | 4.6%         | 3.5%              | 0.6%            | 4.1%         |

<sup>11</sup> Allocated in proportion to the Actuarial Accrued Liability.



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**STATE EMPLOYEES RESULTS**

**Estimated Actuarial Gains & Losses**

(Amounts in Millions)

| Actuarial Gains & Losses                  | NC%         | AAL      | (AVA)    | UAAL     |
|---|-------------|----------|----------|----------|
| ■ 6/30/12 Actual                          | 4.6%        | \$ 1,316 | \$ (136) | \$ 1,180 |
| ■ 6/30/13 Expected                        | 4.6%        | 1,329    | (167)    | 1,162    |
| ■ Experience Losses (Gains):              |             |          |          |          |
| • Actual versus Expected Healthcare Costs | (0.6%)      | (173)    | -        | (173)    |
| • Demographic, Benefit Payments, & Other  | 0.1%        | 10       | (1)      | 9        |
| • Contribution Loss (Gain)                | -           | -        | 26       | 26       |
| • Investment Loss (Gain)                  | -           | -        | (8)      | (8)      |
| ■ Assumption Changes - None               | <u>0.0%</u> | <u>0</u> | <u>-</u> | <u>0</u> |
| ■ Total Changes                           | (0.5%)      | (163)    | 17       | (146)    |
| ■ 6/30/13 Actual                          | 4.1%        | 1,166    | (150)    | 1,016    |



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**STATE EMPLOYEES RESULTS**

**Annual Required Contribution (ARC)**

**2012/13 & 2013/14 ARCs for Disclosure**

(Amounts in Millions)

| Annual Required Contribution | <u>6/30/12 Valuation</u><br>2012/13 ARC<br>(For Disclosure) |                 |              | <u>6/30/12 Valuation</u><br>2013/14 ARC<br>(For Disclosure) |                 |              |
|------------------------------|---|-----------------|--------------|---|-----------------|--------------|
|                              | Cash Subsidy  | Implied Subsidy | Total        | Cash Subsidy  | Implied Subsidy | Total        |
| ■ ARC - \$                   |   |                 |              |   |                 |              |
| • Normal Cost                | \$ 20   | \$ 3            | \$ 23        | \$ 20   | \$ 3            | \$ 24        |
| • UAAL Amortization          | <u>55</u>   | <u>16</u>       | <u>71</u>    | <u>59</u>   | <u>17</u>       | <u>75</u>    |
| • Total ARC                  | 75  | 19              | 94           | 79  | 20              | 99           |
| ■ Projected Payroll          | 502   | 502             | 502          | 518   | 518             | 518          |
| ■ ARC - %                    |   |                 |              |   |                 |              |
| • Normal Cost                | 4.0%  | 0.6%            | 4.6%         | 4.0%  | 0.6%            | 4.6%         |
| • UAAL Amortization          | <u>10.9%</u>  | <u>3.1%</u>     | <u>14.0%</u> | <u>11.3%</u>  | <u>3.2%</u>     | <u>14.5%</u> |
| • Total ARC                  | 14.9%   | 3.7%            | 18.6%        | 15.2%   | 3.8%            | 19.1%        |



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**STATE EMPLOYEES RESULTS**

**Annual Required Contribution (ARC)**

**2013/14 ARC for Projection**

(Amounts in Millions)

| Annual Required Contribution | <u>6/30/12 Valuation</u><br>2012/13 ARC<br>(For Disclosure) |                 |              | <u>6/30/13 Valuation</u><br>2013/14 ARC<br>(For Projection) |                 |              |
|------------------------------|---|-----------------|--------------|---|-----------------|--------------|
|                              | Cash Subsidy  | Implied Subsidy | Total        | Cash Subsidy  | Implied Subsidy | Total        |
| ■ ARC - \$                   |   |                 |              |   |                 |              |
| • Normal Cost                | \$ 20   | \$ 3            | \$ 23        | \$ 18   | \$ 3            | \$ 21        |
| • UAAL Amortization          | <u>55</u>   | <u>16</u>       | <u>71</u>    | <u>43</u>   | <u>13</u>       | <u>57</u>    |
| • Total ARC                  | 75  | 19              | 94           | 61  | 16              | 78           |
| ■ Projected Payroll          | 502   | 502             | 502          | 518   | 518             | 518          |
| ■ ARC - %                    |   |                 |              |   |                 |              |
| • Normal Cost                | 4.0%  | 0.6%            | 4.6%         | 3.5%  | 0.6%            | 4.1%         |
| • UAAL Amortization          | <u>10.9%</u>  | <u>3.1%</u>     | <u>14.0%</u> | <u>8.4%</u>   | <u>2.5%</u>     | <u>10.9%</u> |
| • Total ARC                  | 14.9%   | 3.7%            | 18.6%        | 11.9%   | 3.1%            | 15.0%        |



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**STATE EMPLOYEES RESULTS**

**Unfunded Actuarial Accrued Liability Amortization Balances**

(Amounts in Millions)

| Amortization Base            | Original Bases |       |          | Remaining Bases<br>6/30/2013 |              | 2013/14<br>Amortization<br>Payment |
|------------------------------|----------------|-------|----------|------------------------------|--------------|------------------------------------|
|                              | Date           | Years | Amount   | Years                        | Balance      |                                    |
| ■ Fresh Start UAAL           | 6/30/08        | 29    | \$ 1,144 | 24                           | \$ 1,116     | \$ 71                              |
| ■ Experience Losses (Gains)  | 6/30/09        | 10    | 83       | 6                            | 58           | 11                                 |
|                              | 6/30/10        | 10    | 99       | 7                            | 77           | 13                                 |
|                              | 6/30/11        | 10    | (34)     | 8                            | (29)         | (4)                                |
|                              | 6/30/12        | 10    | (199)    | 9                            | (185)        | (24)                               |
|                              | 6/30/13        | 10    | (146)    | 10                           | (146)        | (18)                               |
| ■ Assumption Changes         | 6/30/10        | 27    | 35       | 24                           | 32           | 2                                  |
|                              | 6/30/11        | 26    | 266      | 24                           | 260          | 16                                 |
|                              | 6/30/12        | 25    | (32)     | 24                           | (31)         | (2)                                |
| ■ Plan Changes               | 6/30/11        | 26    | (139)    | 24                           | <u>(136)</u> | <u>(9)</u>                         |
| ■ Unfunded AAL               | 6/30/13        |       |          |                              | 1,016        | 56                                 |
| ■ Unfunded AAL <sup>12</sup> | 6/30/13        |       |          | 30                           | 1,016        | 57                                 |

<sup>12</sup> Total amortization payment cannot be less than the UAAL amortized over 30 years.



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**STATE EMPLOYEES RESULTS**

**Estimated Net OPEB Obligation (NOO) Illustration**

(Amounts in Millions)

| Estimated Net OPEB Obligation              | CAFR<br>2008/09 | CAFR<br>2009/10 | CAFR<br>2010/11 | CAFR<br>2011/12 | Estimate<br>2012/13 | Estimate<br>2013/14 |
|--|-----------------|-----------------|-----------------|-----------------|---------------------|---------------------|
| ■ Discount Rate                            | 4.50%           | 4.80%           | 5.10%           | 4.98%           | 4.49%               | 5.63%               |
| ■ NOO at Beginning of Year                 | \$ (55)         | \$ (29)         | \$ 8            | \$ 42           | \$ 92               | \$ 111              |
| ■ Annual OPEB Cost (AOC)                   |                 |                 |                 |                 |                     |                     |
| • Annual Required Contribution             | 77              | 90              | 120             | 126             | 94                  | 99                  |
| • Interest on NOO                          | (2)             | (1)             | 0               | 2               | 4                   | 6                   |
| • NOO Adjustment <sup>13</sup>             | <u>2</u>        | <u>3</u>        | <u>(1)</u>      | <u>(5)</u>      | <u>(11)</u>         | <u>(13)</u>         |
| • Annual OPEB Cost                         | 77              | 92              | 119             | 123             | 87                  | 92                  |
| ■ Contributions                            |                 |                 |                 |                 |                     |                     |
| • Benefit Payments Outside Trust           |                 |                 |                 |                 |                     |                     |
| ➤ Cash Payments & Admin Fees <sup>14</sup> | (38)            | (42)            | (49)            | (45)            | (52)                | (48)                |
| ➤ Implied Subsidy Payments                 | (12)            | (13)            | (22)            | (22)            | (14)                | (13)                |
| ➤ Trust Pre-Funding                        | <u>(0)</u>      | <u>(0)</u>      | <u>(14)</u>     | <u>(6)</u>      | <u>(2)</u>          | <u>(14)</u>         |
| • Total Contributions                      | (50)            | (55)            | (85)            | (73)            | (68)                | (75)                |
| ■ NOO at End of Year                       | (29)            | 8               | 42              | 92              | 111                 | 128                 |

<sup>13</sup> NOO amortized over 29 years for 2008/09, and over 10 years for 2009/10 through 2013/14.

<sup>14</sup> Valuation estimate for 2013/14. Actual amount should be used in CAFR.



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**STATE EMPLOYEES RESULTS**

**Contribution & Expense Projection - June 30, 2012 Valuation**

(Amounts in Millions)

| Fiscal Year | Begin Year NOO <sup>15</sup> | ARC   | Annual OPEB Cost (AOC) | Contribution |             |               | Contrib % of ARC | Payroll | ARC as % of Payroll | Contrib % of Payroll |
|-------------|------------------------------|-------|------------------------|--------------|-------------|---------------|------------------|---------|---------------------|----------------------|
|             |                              |       |                        | Benefit Pmts | Pre Funding | Total Contrib |                  |         |                     |                      |
| 2012/13     | \$ 92                        | \$ 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          | 0           | 100           | 100.0%           | 648     | 15.3%               | 15.3%                |
| 2021/22     | 63                           | 108   | 92                     | 104          | 4           | 108           | 100.0%           | 669     | 16.1%               | 16.1%                |

<sup>15</sup> Gains and losses amortized over 10-year fixed (closed) periods for ARC. NOO amortized over average remaining ARC gain and loss amortization period.



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**STATE EMPLOYEES RESULTS**

**Contribution & Expense Projection - June 30, 2013 Valuation**

(Amounts in Millions)

| Fiscal Year | Begin Year NOO <sup>16</sup> | ARC   | Annual OPEB Cost (AOC) | Contribution |             |               | Contrib % of ARC | Payroll | ARC as % of Payroll | Contrib % of Payroll |
|-------------|------------------------------|-------|------------------------|--------------|-------------|---------------|------------------|---------|---------------------|----------------------|
|             |                              |       |                        | Benefit Pmts | Pre Funding | Total Contrib |                  |         |                     |                      |
| 2012/13     | \$ 92                        | \$ 94 | \$ 87                  | \$ 66        | \$ 2        | \$ 68         | 72.3%            | \$ 502  | 18.7%               | 13.5%                |
| 2013/14     | 111                          | 99    | 92                     | 61           | 14          | 75            | 75.8%            | 518     | 19.1%               | 14.5%                |
| 2014/15     | 128                          | 82    | 74                     | 66           | 10          | 76            | 92.7%            | 535     | 15.3%               | 14.2%                |
| 2015/16     | 126                          | 85    | 76                     | 71           | 10          | 81            | 95.3%            | 553     | 15.4%               | 14.6%                |
| 2016/17     | 121                          | 88    | 79                     | 75           | 10          | 85            | 96.6%            | 571     | 15.4%               | 14.9%                |
| 2017/18     | 115                          | 90    | 81                     | 81           | 8           | 89            | 98.9%            | 589     | 15.3%               | 15.1%                |
| 2018/19     | 106                          | 94    | 84                     | 83           | 11          | 94            | 100.0%           | 608     | 15.5%               | 15.5%                |
| 2019/20     | 96                           | 87    | 75                     | 87           | 0           | 87            | 100.0%           | 628     | 13.9%               | 13.9%                |
| 2020/21     | 84                           | 89    | 76                     | 90           | 0           | 90            | 101.0%           | 648     | 13.9%               | 13.9%                |
| 2021/22     | 70                           | 92    | 77                     | 92           | 0           | 92            | 100.0%           | 669     | 13.8%               | 13.8%                |

<sup>16</sup> Gains and losses amortized over 10-year fixed (closed) periods for ARC. NOO amortized over average remaining ARC gain and loss amortization period.



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**STATE EMPLOYEES RESULTS**

**Funded Status Projection - June 30, 2013 Valuation**

(Amounts in Millions)

| <b>Fiscal Year</b> | <b>Active AAL<sup>17</sup></b> | <b>Retiree AAL<sup>18</sup></b> | <b>Total AAL</b> | <b>Actuarial Assets<sup>19</sup></b> | <b>BOY UAAL</b> | <b>BOY Funded%</b> |
|--------------------|--------------------------------|---------------------------------|------------------|--------------------------------------|-----------------|--------------------|
| 2013/14            | \$ 473                         | \$ 693                          | \$ 1,166         | \$ 150                               | \$ 1,016        | 12.9%              |
| 2014/15            | 521                            | 672                             | 1,193            | 177                                  | 1,016           | 14.8%              |
| 2015/16            | 566                            | 652                             | 1,218            | 202                                  | 1,016           | 16.6%              |
| 2016/17            | 612                            | 632                             | 1,244            | 228                                  | 1,016           | 18.3%              |
| 2017/18            | 659                            | 613                             | 1,272            | 256                                  | 1,016           | 20.1%              |
| 2018/19            | 709                            | 591                             | 1,300            | 284                                  | 1,016           | 21.8%              |
| 2019/20            | 760                            | 574                             | 1,334            | 317                                  | 1,017           | 23.8%              |
| 2020/21            | 812                            | 555                             | 1,367            | 341                                  | 1,026           | 24.9%              |
| 2021/22            | 865                            | 534                             | 1,399            | 366                                  | 1,033           | 26.2%              |
| 2022/23            | 918                            | 515                             | 1,433            | 393                                  | 1,040           | 27.4%              |
| 2023/24            | 973                            | 494                             | 1,467            | 441                                  | 1,026           | 30.1%              |
| 2024/25            | 1,028                          | 474                             | 1,502            | 532                                  | 970             | 35.4%              |

<sup>17</sup> Closed group, does not include future hires, includes AAL for future retirees from 6/30/12 actives.

<sup>18</sup> AAL for current retirees on 6/30/12, does not include AAL for expected future retirees.

<sup>19</sup> Benefit payments will be made directly from State assets and not from Trust assets until 2027.



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**STATE EMPLOYEES RESULTS**

**Benefit Payment Projection**

(Amounts in Millions)

| <b>Fiscal Year</b> | <b>Cash Subsidy</b> | <b>Implied Subsidy</b> | <b>Total</b> |
|--------------------|---------------------|------------------------|--------------|
| 2013/14            | \$ 48               | \$ 13                  | \$ 61        |
| 2014/15            | 51                  | 15                     | 66           |
| 2015/16            | 55                  | 16                     | 71           |
| 2016/17            | 58                  | 17                     | 75           |
| 2017/18            | 62                  | 19                     | 81           |
| 2018/19            | 64                  | 19                     | 83           |
| 2019/20            | 67                  | 20                     | 87           |
| 2020/21            | 69                  | 21                     | 90           |
| 2021/22            | 71                  | 21                     | 92           |
| 2022/23            | 73                  | 22                     | 95           |



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**TEACHERS RESULTS**

**Actuarial Obligations**

(Amounts in Millions)

| Actuarial Obligations         | 6/30/12 Valuation |                 |            | 6/30/13 Valuation |                 |            |
|-------------------------------|-------------------|-----------------|------------|-------------------|-----------------|------------|
|                               | Cash Subsidy      | Implied Subsidy | Total      | Cash Subsidy      | Implied Subsidy | Total      |
| ■ Present Value of Benefits   |                   |                 |            |                   |                 |            |
| • Actives                     | \$ 378            | n/a             | \$ 378     | \$ 404            | n/a             | \$ 404     |
| • Retirees                    | <u>356</u>        | <u>n/a</u>      | <u>356</u> | <u>351</u>        | <u>n/a</u>      | <u>351</u> |
| • Total                       | 734               | n/a             | 734        | 755               | n/a             | 755        |
| ■ Actuarial Accrued Liability |                   |                 |            |                   |                 |            |
| • Actives                     | 309               | n/a             | 309        | 334               | n/a             | 334        |
| • Retirees                    | <u>356</u>        | <u>n/a</u>      | <u>356</u> | <u>351</u>        | <u>n/a</u>      | <u>351</u> |
| • Total                       | 665               | n/a             | 665        | 685               | n/a             | 685        |
| ■ Actuarial Value of Assets   | <u>0</u>          | <u>n/a</u>      | <u>0</u>   | <u>0</u>          | <u>n/a</u>      | <u>0</u>   |
| ■ Unfunded AAL                | 665               | n/a             | 665        | 685               | n/a             | 685        |
| ■ Normal Cost                 | 10                | n/a             | 10         | 10                | n/a             | 10         |
| ■ Normal Cost % Pay           | 0.9%              | n/a             | 0.9%       | 0.9%              | n/a             | 0.9%       |



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**TEACHERS RESULTS**

**Estimated Actuarial Gains & Losses**

(Amounts in Millions)

| Actuarial Gains & Losses                  | NC%         | AAL      | (AVA)    | UAAL     |
|---|-------------|----------|----------|----------|
| ■ 6/30/12 Actual                          | 0.9%        | \$ 665   | \$ 0     | \$ 665   |
| ■ 6/30/13 Expected                        | 0.9%        | 681      | (21)     | 660      |
| ■ Experience Losses (Gains):              |             |          |          |          |
| • Actual versus Expected Healthcare Costs | 0.0%        | (6)      | -        | (6)      |
| • Demographic, Benefit Payments, & Other  | 0.0%        | 10       | 2        | 12       |
| • Contribution Loss                       | -           | -        | 19       | 19       |
| ■ Assumption Changes - None               | <u>0.0%</u> | <u>0</u> | <u>-</u> | <u>0</u> |
| ■ Total Changes                           | 0.0%        | 4        | 21       | 25       |
| ■ 6/30/13 Actual                          | 0.9%        | 685      | 0        | 685      |



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**TEACHERS RESULTS**

**Annual Required Contribution (ARC)**  
**2012/13 & 2013/14 ARCs for Disclosure**  
 (Amounts in Millions)

| Annual Required Contribution | <u>6/30/12 Valuation</u><br>2012/13 ARC<br>(For Disclosure) |                 |             | <u>6/30/12 Valuation</u><br>2013/14 ARC<br>(For Disclosure) |                 |             |
|------------------------------|---|-----------------|-------------|---|-----------------|-------------|
|                              | Cash Subsidy  | Implied Subsidy | Total       | Cash Subsidy  | Implied Subsidy | Total       |
| ■ ARC - \$                   |   |                 |             |   |                 |             |
| • Normal Cost                | \$ 10   | n/a             | \$ 10       | \$ 11   | n/a             | \$ 11       |
| • UAAL Amortization          | <u>34</u>   | <u>n/a</u>      | <u>34</u>   | <u>34</u>   | <u>n/a</u>      | <u>34</u>   |
| • Total ARC                  | 44  | n/a             | 44          | 45  | n/a             | 45          |
| ■ Projected Payroll          | 1,156   | n/a             | 1,156       | 1,194   | n/a             | 1,194       |
| ■ ARC - %                    |   |                 |             |   |                 |             |
| • Normal Cost                | 0.9%  | n/a             | 0.9%        | 0.9%  | n/a             | 0.9%        |
| • UAAL Amortization          | <u>2.9%</u>   | <u>n/a</u>      | <u>2.9%</u> | <u>2.9%</u>   | <u>n/a</u>      | <u>2.9%</u> |
| • Total ARC                  | 3.8%  | n/a             | 3.8%        | 3.8%  | n/a             | 3.8%        |



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**TEACHERS RESULTS**

**Annual Required Contribution (ARC)**  
**2013/14 ARC for Projection**  
 (Amounts in Millions)

| Annual Required Contribution | <u>6/30/12 Valuation</u><br>2012/13 ARC<br>(For Disclosure) |                 |             | <u>6/30/13 Valuation</u><br>2013/14 ARC<br>(For Projection) |                 |             |
|------------------------------|---|-----------------|-------------|---|-----------------|-------------|
|                              | Cash Subsidy  | Implied Subsidy | Total       | Cash Subsidy  | Implied Subsidy | Total       |
| ■ ARC - \$                   |   |                 |             |   |                 |             |
| • Normal Cost                | \$ 10   | n/a             | \$ 10       | \$ 10   | n/a             | \$ 10       |
| • UAAL Amortization          | <u>34</u>   | <u>n/a</u>      | <u>34</u>   | <u>36</u>   | <u>n/a</u>      | <u>36</u>   |
| • Total ARC                  | 44  | n/a             | 44          | 46  | n/a             | 46          |
| ■ Projected Payroll          | 1,156   | n/a             | 1,156       | 1,194   | n/a             | 1,194       |
| ■ ARC - %                    |   |                 |             |   |                 |             |
| • Normal Cost                | 0.9%  | n/a             | 0.9%        | 0.9%  | n/a             | 0.9%        |
| • UAAL Amortization          | <u>2.9%</u>   | <u>n/a</u>      | <u>2.9%</u> | <u>3.0%</u>   | <u>n/a</u>      | <u>3.0%</u> |
| • Total ARC                  | 3.8%  | n/a             | 3.8%        | 3.9%  | n/a             | 3.9%        |



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## TEACHERS RESULTS

### Unfunded Actuarial Accrued Liability Amortization Balances

(Amounts in Millions)

| Amortization Base            | Original Bases |       |          | Remaining Bases<br>6/30/2013 |             | 2013/14<br>Amortization<br>Payment |
|------------------------------|----------------|-------|----------|------------------------------|-------------|------------------------------------|
|                              | Date           | Years | Amount   | Years                        | Balance     |                                    |
| ■ Fresh Start UAAL           | 6/30/08        | 29    | \$ 1,044 | 24                           | \$ 1,037    | \$ 62                              |
| ■ Experience Losses (Gains)  | 6/30/09        | 15    | (62)     | 11                           | (53)        | (6)                                |
|                              | 6/30/10        | 15    | (7)      | 12                           | (6)         | (1)                                |
|                              | 6/30/11        | 15    | (10)     | 13                           | (10)        | (1)                                |
|                              | 6/30/12        | 15    | (120)    | 14                           | (115)       | (10)                               |
|                              | 6/30/13        | 15    | 25       | 15                           | 25          | 2                                  |
| ■ Assumption Changes         | 6/30/10        | 27    | 6        | 24                           | 6           | 0                                  |
|                              | 6/30/11        | 26    | (133)    | 24                           | (129)       | (8)                                |
|                              | 6/30/12        | 25    | (13)     | 24                           | (13)        | (1)                                |
| ■ Plan Changes               | 6/30/11        | 26    | (59)     | 24                           | <u>(57)</u> | <u>(3)</u>                         |
| ■ Unfunded AAL               | 6/30/13        |       |          |                              | 685         | 35                                 |
| ■ Unfunded AAL <sup>20</sup> | 6/30/13        |       |          | 30                           | 685         | 36                                 |

<sup>20</sup> Total amortization payment cannot be less than the UAAL amortized over 30 years.



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## TEACHERS RESULTS

### Estimated Net OPEB Obligation (NOO) Illustration

(Amounts in Millions)

| Estimated Net OPEB Obligation              | CAFR<br>2008/09 | CAFR<br>2009/10 | CAFR<br>2010/11 | CAFR<br>2011/12 | Estimate<br>2012/13 | Estimate<br>2013/14 |
|--|-----------------|-----------------|-----------------|-----------------|---------------------|---------------------|
| ■ Discount Rate                            | 4.50%           | 4.50%           | 4.50%           | 4.00%           | 4.00%               | 4.41%               |
| ■ NOO at Beginning of Year                 | \$ 28           | \$ 70           | \$ 107          | \$ 147          | \$ 174              | \$ 186              |
| ■ Annual OPEB Cost (AOC)                   |                 |                 |                 |                 |                     |                     |
| • Annual Required Contribution             | 60              | 58              | 61              | 55              | 44                  | 45                  |
| • Interest on NOO                          | 1               | 3               | 5               | 6               | 7                   | 8                   |
| • NOO Adjustment <sup>21</sup>             | <u>(1)</u>      | <u>(5)</u>      | <u>(8)</u>      | <u>(12)</u>     | <u>(14)</u>         | <u>(15)</u>         |
| • Annual OPEB Cost                         | 60              | 56              | 58              | 49              | 37                  | 38                  |
| ■ Contributions                            |                 |                 |                 |                 |                     |                     |
| • Benefit Payments Outside Trust           |                 |                 |                 |                 |                     |                     |
| ➢ Cash Payments & Admin Fees <sup>22</sup> | (18)            | (19)            | (18)            | (22)            | (25)                | (25)                |
| ➢ Implied Subsidy Payments                 | (0)             | (0)             | (0)             | (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 Contributions                      | (18)            | (19)            | (18)            | (22)            | (25)                | (25)                |
| ■ NOO at End of Year                       | 70              | 107             | 147             | 174             | 186                 | 199                 |

<sup>21</sup> NOO amortized over 29 years for 2008/09, and over 15 years for 2009/10 through 2013/14.

<sup>22</sup> Valuation estimate for 2013/14. Actual amount should be used in CAFR.



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## TEACHERS RESULTS

### Contribution & Expense Projection - June 30 , 2012 Valuation

(Amounts in Millions)

| Fiscal Year | Begin Year NOO <sup>23</sup> | ARC   | Annual OPEB Cost (AOC) | Contribution |             |               | Contrib % of ARC | Payroll  | ARC as % of Payroll | Contrib % of Payroll |
|-------------|------------------------------|-------|------------------------|--------------|-------------|---------------|------------------|----------|---------------------|----------------------|
|             |                              |       |                        | Benefit Pmts | Pre-Funding | Total Contrib |                  |          |                     |                      |
| 2012/13     | \$ 174                       | \$ 44 | \$ 37                  | \$ 23        | \$ 0        | \$ 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%                 |

<sup>23</sup> Gains and losses amortized over 15-year fixed (closed) periods for ARC. NOO amortized over average remaining ARC gain and loss amortization period.



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## TEACHERS RESULTS

### Contribution & Expense Projection - June 30 , 2013 Valuation

(Amounts in Millions)

| Fiscal Year | Begin Year NOO <sup>24</sup> | ARC   | Annual OPEB Cost (AOC) | Contribution |             |               | Contrib % of ARC | Payroll  | ARC as % of Payroll | Contrib % of Payroll |
|-------------|------------------------------|-------|------------------------|--------------|-------------|---------------|------------------|----------|---------------------|----------------------|
|             |                              |       |                        | Benefit Pmts | Pre-Funding | Total Contrib |                  |          |                     |                      |
| 2012/13     | \$ 174                       | \$ 44 | \$ 37                  | \$ 25        | \$ 0        | \$ 25         | 56.8%            | \$ 1,156 | 3.8%                | 2.2%                 |
| 2013/14     | 186                          | 45    | 38                     | 25           | 0           | 25            | 55.6%            | 1,194    | 3.8%                | 2.1%                 |
| 2014/15     | 199                          | 48    | 41                     | 28           | 0           | 28            | 58.3%            | 1,232    | 3.9%                | 2.3%                 |
| 2015/16     | 212                          | 51    | 44                     | 31           | 3           | 34            | 66.7%            | 1,272    | 4.0%                | 2.7%                 |
| 2016/17     | 222                          | 54    | 46                     | 34           | 5           | 39            | 72.2%            | 1,314    | 4.1%                | 3.0%                 |
| 2017/18     | 229                          | 57    | 49                     | 36           | 8           | 44            | 77.2%            | 1,356    | 4.2%                | 3.2%                 |
| 2018/19     | 234                          | 60    | 51                     | 39           | 10          | 49            | 81.7%            | 1,401    | 4.3%                | 3.5%                 |
| 2019/20     | 236                          | 62    | 54                     | 41           | 13          | 54            | 87.1%            | 1,446    | 4.3%                | 3.7%                 |
| 2020/21     | 235                          | 65    | 56                     | 44           | 16          | 60            | 92.3%            | 1,493    | 4.4%                | 4.0%                 |
| 2021/22     | 231                          | 67    | 57                     | 46           | 18          | 64            | 95.5%            | 1,542    | 4.3%                | 4.2%                 |

<sup>24</sup> Gains and losses amortized over 15-year fixed (closed) periods for ARC. NOO amortized over average remaining ARC gain and loss amortization period.



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**TEACHERS RESULTS**

**Benefit Payment Projection**

(Amounts in Millions)

| <b>Fiscal Year</b> | <b>Cash Subsidy</b> | <b>Implied Subsidy</b> | <b>Total</b> |
|--------------------|---------------------|------------------------|--------------|
| 2013/14            | \$ 25               | n/a                    | \$ 25        |
| 2014/15            | 28                  | n/a                    | 28           |
| 2015/16            | 31                  | n/a                    | 31           |
| 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            | 44                  | n/a                    | 44           |
| 2021/22            | 46                  | n/a                    | 46           |
| 2022/23            | 48                  | n/a                    | 48           |



**TEACHERS RESULTS**



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**MAINE EDUCATIONAL CENTER FOR THE DEAF**

**Actuarial Obligations**

(Amounts in Thousands)

| Actuarial Obligations         | 6/30/12 Valuation |                 |              | 6/30/13 Valuation |                 |              |
|-------------------------------|-------------------|-----------------|--------------|-------------------|-----------------|--------------|
|                               | Cash Subsidy      | Implied Subsidy | Total        | Cash Subsidy      | Implied Subsidy | Total        |
| ■ Present Value of Benefits   |                   |                 |              |                   |                 |              |
| • Actives                     | \$ 3,739          | \$ 572          | \$ 4,311     | \$ 3,450          | \$ 550          | \$ 4,000     |
| • Retirees                    | <u>1,504</u>      | <u>438</u>      | <u>1,942</u> | <u>1,272</u>      | <u>398</u>      | <u>1,670</u> |
| • Total                       | 5,243             | 1,010           | 6,253        | 4,722             | 948             | 5,670        |
| ■ Actuarial Accrued Liability |                   |                 |              |                   |                 |              |
| • Actives                     | 2,247             | 475             | 2,722        | 2,131             | 459             | 2,590        |
| • Retirees                    | <u>1,504</u>      | <u>438</u>      | <u>1,942</u> | <u>1,272</u>      | <u>398</u>      | <u>1,670</u> |
| • Total                       | 3,751             | 913             | 4,664        | 3,403             | 857             | 4,260        |
| ■ Actuarial Value of Assets   | <u>0</u>          | <u>0</u>        | <u>0</u>     | <u>0</u>          | <u>0</u>        | <u>0</u>     |
| ■ Unfunded AAL                | 3,751             | 913             | 4,664        | 3,403             | 857             | 4,260        |
| ■ Normal Cost                 | 172               | 15              | 187          | 153               | 13              | 166          |
| ■ Normal Cost % Pay           | 7.1%              | 0.6%            | 7.7%         | 6.1%              | 0.5%            | 6.6%         |



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**Estimated Actuarial Gains & Losses**

(Amounts in Thousands)

| Actuarial Gains & Losses                  | NC%         | AAL      | (AVA)    | UAAL     |
|---|-------------|----------|----------|----------|
| ■ 6/30/12 Actual                          | 7.7%        | \$ 4,664 | \$ 0     | \$ 4,664 |
| ■ 6/30/13 Expected                        | 7.7%        | 4,911    | (270)    | 4,641    |
| ■ Experience Losses (Gains):              |             |          |          |          |
| • Actual versus Expected Healthcare Costs | (1.2%)      | (673)    | -        | (673)    |
| • Demographic, Benefit Payments, & Other  | 0.1%        | 22       | 1        | 23       |
| • Contribution Loss                       | -           | -        | 269      | 269      |
| ■ Assumption Changes - None               | <u>0.0%</u> | <u>0</u> | <u>-</u> | <u>0</u> |
| ■ Total Changes                           | (1.1%)      | (651)    | 270      | (381)    |
| ■ 6/30/13 Actual                          | 6.6%        | 4,260    | 0        | 4,260    |



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**Annual Required Contribution (ARC)**  
**2012/13 & 2013/14 ARCs for Disclosure**  
 (Amounts in Thousands)

| Annual Required Contribution | <u>6/30/12 Valuation</u><br>2012/13 ARC<br>(For Disclosure) |                 |             | <u>6/30/12 Valuation</u><br>2013/14 ARC<br>(For Disclosure) |                 |             |
|------------------------------|---|-----------------|-------------|---|-----------------|-------------|
|                              | Cash Subsidy  | Implied Subsidy | Total       | Cash Subsidy  | Implied Subsidy | Total       |
| ■ ARC - \$                   |   |                 |             |   |                 |             |
| • Normal Cost                | \$ 172  | \$ 15           | \$ 187      | \$ 177  | 15              | \$ 192      |
| • UAAL Amortization          | <u>168</u>  | <u>41</u>       | <u>209</u>  | <u>187</u>  | <u>45</u>       | <u>233</u>  |
| • Total ARC                  | 340   | 56              | 396         | 364   | 61              | 425         |
| ■ Projected Payroll          | 2,434   | 2,434           | 2,434       | 2,513   | 2,513           | 2,513       |
| ■ ARC - %                    |   |                 |             |   |                 |             |
| • Normal Cost                | 7.1%  | 0.6%            | 7.7%        | 7.1%  | 0.6%            | 7.6%        |
| • UAAL Amortization          | <u>6.9%</u>   | <u>1.7%</u>     | <u>8.6%</u> | <u>7.4%</u>   | <u>1.8%</u>     | <u>9.3%</u> |
| • Total ARC                  | 14.0%   | 2.3%            | 16.3%       | 14.5%   | 2.4%            | 16.9%       |



**Annual Required Contribution (ARC)**  
**2013/14 ARC for Projection**  
 (Amounts in Thousands)

| Annual Required Contribution | <u>6/30/12 Valuation</u><br>2012/13 ARC<br>(For Disclosure) |                 |             | <u>6/30/13 Valuation</u><br>2013/14 ARC<br>(For Projection) |                 |             |
|------------------------------|---|-----------------|-------------|---|-----------------|-------------|
|                              | Cash Subsidy  | Implied Subsidy | Total       | Cash Subsidy  | Implied Subsidy | Total       |
| ■ ARC - \$                   |   |                 |             |   |                 |             |
| • Normal Cost                | \$ 172  | \$ 15           | \$ 187      | \$ 153  | \$ 13           | \$ 166      |
| • UAAL Amortization          | <u>168</u>  | <u>41</u>       | <u>209</u>  | <u>151</u>  | <u>38</u>       | <u>189</u>  |
| • Total ARC                  | 340   | 56              | 396         | 304   | 51              | 355         |
| ■ Projected Payroll          | 2,434   | 2,434           | 2,434       | 2,513   | 2,513           | 2,513       |
| ■ ARC - %                    |   |                 |             |   |                 |             |
| • Normal Cost                | 7.1%  | 0.6%            | 7.7%        | 6.1%  | 0.5%            | 6.6%        |
| • UAAL Amortization          | <u>6.9%</u>   | <u>1.7%</u>     | <u>8.6%</u> | <u>6.0%</u>   | <u>1.5%</u>     | <u>7.5%</u> |
| • Total ARC                  | 14.0%   | 2.3%            | 16.3%       | 12.1%   | 2.0%            | 14.1%       |



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**Unfunded Actuarial Accrued Liability Amortization Balances**

(Amounts in Thousands)

| Amortization Base            | Original Bases       |         |          | Remaining Bases<br>6/30/2013 |              | 2013/14<br>Amortization<br>Payment |
|------------------------------|----------------------|---------|----------|------------------------------|--------------|------------------------------------|
|                              | Date                 | Years   | Amount   | Years                        | Balance      |                                    |
| ■ Initial UAAL               | 6/30/07              | 30      | \$ 3,814 | 24                           | \$ 3,860     | \$ 182                             |
| ■ Experience Losses (Gains)  | 6/30/08              | 15      | (127)    | 10                           | (104)        | (11)                               |
|                              | 6/30/09              | 15      | 474      | 11                           | 406          | 40                                 |
|                              | 6/30/10              | 15      | 597      | 12                           | 532          | 48                                 |
|                              | 6/30/11              | 15      | 114      | 13                           | 106          | 9                                  |
|                              | 6/30/12              | 15      | (1,453)  | 14                           | (1,405)      | (109)                              |
|                              | 6/30/13              | 15      | (381)    | 15                           | (381)        | (28)                               |
|                              | ■ Assumption Changes | 6/30/08 | 29       | 511                          | 24           | 489                                |
| 6/30/10                      |                      | 27      | 251      | 24                           | 245          | 11                                 |
| 6/30/11                      |                      | 26      | 1,218    | 24                           | 1,207        | 57                                 |
| 6/30/12                      |                      | 25      | (184)    | 24                           | (183)        | (9)                                |
| ■ Plan Changes               | 6/30/11              | 26      | (517)    | 24                           | <u>(512)</u> | <u>(24)</u>                        |
| ■ Unfunded AAL               | 6/30/13              |         |          |                              | 4,260        | 189                                |
| ■ Unfunded AAL <sup>25</sup> | 6/30/13              |         |          | 30                           | 4,260        | 164                                |

<sup>25</sup> Total amortization payment cannot be less than the UAAL amortized over 30 years.



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**Estimated Net OPEB Obligation (NOO) Illustration**

(Amounts in Thousands)

| Estimated Net OPEB Obligation              | Estimate<br>2008/09 | Estimate<br>2009/10 | Estimate<br>2010/11 | Estimate<br>2011/12 | Estimate<br>2012/13 | Estimate<br>2013/14 |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| ■ Discount Rate                            | 4.50%               | 4.50%               | 4.50%               | 4.00%               | 4.00%               | 4.00%               |
| ■ NOO at Beginning of Year                 | \$ 358              | \$ 645              | \$ 950              | \$ 1,284            | \$ 1,678            | \$ 1,891            |
| ■ Annual OPEB Cost (AOC)                   |                     |                     |                     |                     |                     |                     |
| • Annual Required Contribution             | 353                 | 416                 | 505                 | 582                 | 396                 | 425                 |
| • Interest on NOO                          | 16                  | 29                  | 43                  | 51                  | 67                  | 76                  |
| • NOO Adjustment <sup>26</sup>             | <u>(24)</u>         | <u>(46)</u>         | <u>(72)</u>         | <u>(94)</u>         | <u>(123)</u>        | <u>(138)</u>        |
| • Annual OPEB Cost                         | 345                 | 399                 | 476                 | 539                 | 340                 | 363                 |
| ■ Contributions                            |                     |                     |                     |                     |                     |                     |
| • Benefit Payments Outside Trust           |                     |                     |                     |                     |                     |                     |
| ➢ Cash Payments & Admin Fees <sup>27</sup> | (45)                | (78)                | (105)               | (102)               | (97)                | (79)                |
| ➢ Implied Subsidy Payments                 | (13)                | (16)                | (37)                | (43)                | (30)                | (23)                |
| ➢ Trust Pre-Funding                        | <u>(0)</u>          | <u>(0)</u>          | <u>(0)</u>          | <u>(0)</u>          | <u>(0)</u>          | <u>(0)</u>          |
| • Total Contribution                       | (58)                | (94)                | (142)               | (145)               | (127)               | (102)               |
| ■ NOO at End of Year                       | 645                 | 950                 | 1,284               | 1,678               | 1,891               | 2,152               |

<sup>26</sup> NOO amortized over 15 years.

<sup>27</sup> OPEB footnotes not available. Valuation estimate for 2013/14. Actual amount should be used in CAFR.



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**MAINE EDUCATIONAL CENTER FOR THE DEAF**

**Contribution & Expense Projection – June 30, 2012 Valuation**

(Amounts in Thousands)

| Fiscal Year | Begin Year NOO <sup>28</sup> | ARC    | Annual OPEB Cost (AOC) | Contribution |             |               | Contrib % of ARC | Payroll  | ARC as % of Payroll | Contrib % of Payroll |
|-------------|------------------------------|--------|------------------------|--------------|-------------|---------------|------------------|----------|---------------------|----------------------|
|             |                              |        |                        | Benefit Pmts | Pre-Funding | Total Contrib |                  |          |                     |                      |
| 2012/13     | \$ 1,678                     | \$ 396 | \$ 340                 | \$ 126       | \$ 0        | \$ 126        | 31.8%            | \$ 2,434 | 16.3%               | 5.2%                 |
| 2013/14     | 1,892                        | 425    | 358                    | 127          | 0           | 127           | 29.9%            | 2,513    | 16.9%               | 5.1%                 |
| 2014/15     | 2,123                        | 457    | 376                    | 158          | 0           | 158           | 34.6%            | 2,595    | 17.6%               | 6.1%                 |
| 2015/16     | 2,342                        | 490    | 394                    | 177          | 0           | 177           | 36.1%            | 2,679    | 18.3%               | 6.6%                 |
| 2016/17     | 2,559                        | 524    | 413                    | 166          | 0           | 166           | 31.7%            | 2,766    | 18.9%               | 6.0%                 |
| 2017/18     | 2,806                        | 564    | 433                    | 202          | 0           | 202           | 35.8%            | 2,856    | 19.7%               | 7.1%                 |
| 2018/19     | 3,037                        | 605    | 453                    | 215          | 0           | 215           | 35.5%            | 2,949    | 20.5%               | 7.3%                 |
| 2019/20     | 3,274                        | 650    | 473                    | 236          | 0           | 236           | 36.3%            | 3,045    | 21.3%               | 7.8%                 |
| 2020/21     | 3,511                        | 698    | 493                    | 239          | 0           | 239           | 34.2%            | 3,144    | 22.2%               | 7.6%                 |
| 2021/22     | 3,766                        | 751    | 515                    | 251          | 0           | 251           | 33.4%            | 3,246    | 23.1%               | 7.7%                 |

<sup>28</sup> Gains and losses amortized over 15-year fixed (closed) periods for ARC. NOO amortized over average remaining ARC gain and loss amortization period.



November 22, 2013



**MAINE EDUCATIONAL CENTER FOR THE DEAF**

**Contribution & Expense Projection – June 30, 2013 Valuation**

(Amounts in Thousands)

| Fiscal Year | Begin Year NOO <sup>29</sup> | ARC    | Annual OPEB Cost (AOC) | Contribution |             |               | Contrib % of ARC | Payroll  | ARC as % of Payroll | Contrib % of Payroll |
|-------------|------------------------------|--------|------------------------|--------------|-------------|---------------|------------------|----------|---------------------|----------------------|
|             |                              |        |                        | Benefit Pmts | Pre-Funding | Total Contrib |                  |          |                     |                      |
| 2012/13     | \$ 1,678                     | \$ 396 | \$ 340                 | \$ 127       | \$ 0        | \$ 127        | 32.1%            | \$ 2,434 | 16.3%               | 5.2%                 |
| 2013/14     | 1,891                        | 425    | 363                    | 102          | 0           | 102           | 24.0%            | 2,513    | 16.9%               | 4.1%                 |
| 2014/15     | 2,152                        | 386    | 310                    | 132          | 0           | 132           | 34.2%            | 2,595    | 14.9%               | 5.1%                 |
| 2015/16     | 2,330                        | 413    | 325                    | 153          | 0           | 153           | 37.0%            | 2,679    | 15.4%               | 5.7%                 |
| 2016/17     | 2,501                        | 440    | 339                    | 144          | 0           | 144           | 32.7%            | 2,766    | 15.9%               | 5.2%                 |
| 2017/18     | 2,696                        | 472    | 354                    | 180          | 0           | 180           | 38.1%            | 2,856    | 16.5%               | 6.3%                 |
| 2018/19     | 2,871                        | 504    | 369                    | 192          | 0           | 192           | 38.1%            | 2,949    | 17.1%               | 6.5%                 |
| 2019/20     | 3,048                        | 538    | 385                    | 211          | 0           | 211           | 39.2%            | 3,045    | 17.7%               | 6.9%                 |
| 2020/21     | 3,222                        | 575    | 400                    | 213          | 0           | 213           | 37.0%            | 3,144    | 18.3%               | 6.8%                 |
| 2021/22     | 3,410                        | 615    | 417                    | 223          | 0           | 223           | 36.3%            | 3,246    | 18.9%               | 6.9%                 |

<sup>29</sup> Gains and losses amortized over 15-year fixed (closed) periods for ARC. NOO amortized over average remaining ARC gain and loss amortization period.



November 22, 2013



**Benefit Payment Projection**  
(Amounts in Thousands)

| Fiscal Year | Cash Subsidy | Implied Subsidy | Total  |
|-------------|--------------|-----------------|--------|
| 2013/14     | \$ 79        | \$ 23           | \$ 102 |
| 2014/15     | 101          | 31              | 132    |
| 2015/16     | 114          | 39              | 153    |
| 2016/17     | 115          | 29              | 144    |
| 2017/18     | 141          | 39              | 180    |
| 2018/19     | 153          | 39              | 192    |
| 2019/20     | 169          | 42              | 211    |
| 2020/21     | 170          | 43              | 213    |
| 2021/22     | 178          | 45              | 223    |
| 2022/23     | 196          | 50              | 246    |



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**Actuarial Obligations**

(Amounts in Thousands)

| Actuarial Obligations         | 6/30/12 Valuation |                 |            | 6/30/13 Valuation |                 |            |
|-------------------------------|-------------------|-----------------|------------|-------------------|-----------------|------------|
|                               | Cash Subsidy      | Implied Subsidy | Total      | Cash Subsidy      | Implied Subsidy | Total      |
| ■ Present Value of Benefits   |                   |                 |            |                   |                 |            |
| • Actives                     | \$ 326            | \$ 12           | \$ 338     | \$ 298            | \$ 12           | \$ 310     |
| • Retirees                    | <u>137</u>        | <u>0</u>        | <u>137</u> | <u>113</u>        | <u>0</u>        | <u>113</u> |
| • Total                       | 463               | 12              | 475        | 411               | 12              | 423        |
| ■ Actuarial Accrued Liability |                   |                 |            |                   |                 |            |
| • Actives                     | 139               | 3               | 142        | 135               | 4               | 139        |
| • Retirees                    | <u>137</u>        | <u>0</u>        | <u>137</u> | <u>113</u>        | <u>0</u>        | <u>113</u> |
| • Total                       | 276               | 3               | 279        | 248               | 4               | 252        |
| ■ Actuarial Value of Assets   | <u>0</u>          | <u>0</u>        | <u>0</u>   | <u>0</u>          | <u>0</u>        | <u>0</u>   |
| ■ Unfunded AAL                | 276               | 3               | 279        | 248               | 4               | 252        |
| ■ Normal Cost                 | 21                | 1               | 22         | 19                | 1               | 20         |
| ■ Normal Cost % Pay           | 5.5%              | 0.3%            | 5.8%       | 4.8%              | 0.3%            | 5.1%       |



**Estimated Actuarial Gains & Losses**

(Amounts in Thousands)

| Actuarial Gains & Losses                  | NC%         | AAL      | (AVA)    | UAAL     |
|---|-------------|----------|----------|----------|
| ■ 6/30/12 Actual                          | 5.8%        | \$ 279   | \$ 0     | \$ 279   |
| ■ 6/30/13 Expected                        | 5.8%        | 304      | (29)     | 275      |
| ■ Experience Losses (Gains):              |             |          |          |          |
| • Actual versus Expected Healthcare Costs | (0.8%)      | (53)     | -        | (53)     |
| • Demographic, Benefit Payments, & Other  | 0.1%        | 1        | (5)      | (4)      |
| • Contribution Loss                       | -           | -        | 34       | 34       |
| ■ Assumption Changes - None               | <u>0.0%</u> | <u>0</u> | <u>-</u> | <u>0</u> |
| ■ Total Changes                           | (0.7%)      | (52)     | 29       | (23)     |
| ■ 6/30/13 Actual                          | 5.1%        | 252      | 0        | 252      |





**Annual Required Contribution (ARC)**  
**2012/13 & 2013/14 ARCs for Disclosure**  
 (Amounts in Thousands)

| Annual Required Contribution | <u>6/30/12 Valuation</u><br>2012/13 ARC<br>(For Disclosure) |                 |             | <u>6/30/12 Valuation</u><br>2013/14 ARC<br>(For Disclosure) |                 |             |
|------------------------------|---|-----------------|-------------|---|-----------------|-------------|
|                              | Cash Subsidy  | Implied Subsidy | Total       | Cash Subsidy  | Implied Subsidy | Total       |
| ■ ARC - \$                   |   |                 |             |   |                 |             |
| • Normal Cost                | \$ 21   | \$ 1            | \$ 22       | \$ 21   | \$ 1            | \$ 23       |
| • UAAL Amortization          | <u>15</u>   | <u>0</u>        | <u>15</u>   | <u>18</u>   | <u>0</u>        | <u>18</u>   |
| • Total ARC                  | 36  | 1               | 37          | 39  | 1               | 41          |
| ■ Projected Payroll          | 375   | 375             | 375         | 387   | 387             | 387         |
| ■ ARC - %                    |   |                 |             |   |                 |             |
| • Normal Cost                | 5.5%  | 0.3%            | 5.8%        | 5.5%  | 0.3%            | 5.8%        |
| • UAAL Amortization          | <u>4.1%</u>   | <u>0.0%</u>     | <u>4.1%</u> | <u>4.6%</u>   | <u>0.0%</u>     | <u>4.6%</u> |
| • Total ARC                  | 9.6%  | 0.3%            | 9.9%        | 10.1%   | 0.3%            | 10.5%       |



**Annual Required Contribution (ARC)**  
**2013/14 ARC for Projection**  
 (Amounts in Thousands)

| Annual Required Contribution | <u>6/30/12 Valuation</u><br>2012/13 ARC<br>(For Disclosure) |                 |             | <u>6/30/13 Valuation</u><br>2013/14 ARC<br>(For Projection) |                 |             |
|------------------------------|---|-----------------|-------------|---|-----------------|-------------|
|                              | Cash Subsidy  | Implied Subsidy | Total       | Cash Subsidy  | Implied Subsidy | Total       |
| ■ ARC - \$                   |   |                 |             |   |                 |             |
| • Normal Cost                | \$ 21   | \$ 1            | \$ 22       | \$ 19   | \$ 1            | \$ 20       |
| • UAAL Amortization          | <u>15</u>   | <u>0</u>        | <u>15</u>   | <u>14</u>   | <u>0</u>        | <u>14</u>   |
| • Total ARC                  | 36  | 1               | 37          | 33  | 1               | 34          |
| ■ Projected Payroll          | 375   | 375             | 375         | 387   | 387             | 387         |
| ■ ARC - %                    |   |                 |             |   |                 |             |
| • Normal Cost                | 5.5%  | 0.3%            | 5.8%        | 4.8%  | 0.3%            | 5.1%        |
| • UAAL Amortization          | <u>4.1%</u>   | <u>0.0%</u>     | <u>4.1%</u> | <u>3.7%</u>   | <u>0.0%</u>     | <u>3.7%</u> |
| • Total ARC                  | 9.6%  | 0.3%            | 9.9%        | 8.5%  | 0.3%            | 8.8%        |



**Unfunded Actuarial Accrued Liability Amortization Balances**

(Amounts in Thousands)

| Amortization Base            | Original Bases       |         |        | Remaining Bases<br>6/30/2013 |              | 2013/14<br>Amortization<br>Payment |
|------------------------------|----------------------|---------|--------|------------------------------|--------------|------------------------------------|
|                              | Date                 | Years   | Amount | Years                        | Balance      |                                    |
| ■ Initial UAAL               | 6/30/07              | 30      | \$ 130 | 24                           | \$ 131.3     | \$ 6.2                             |
| ■ Experience Losses (Gains)  | 6/30/08              | 15      | 119    | 10                           | 97.3         | 10.5                               |
|                              | 6/30/09              | 15      | 35     | 11                           | 29.5         | 2.9                                |
|                              | 6/30/10              | 15      | (198)  | 12                           | (176.3)      | (15.9)                             |
|                              | 6/30/11              | 15      | 34     | 13                           | 31.8         | 2.7                                |
|                              | 6/30/12              | 15      | 72     | 14                           | 69.6         | 5.4                                |
|                              | 6/30/13              | 15      | (23)   | 15                           | (22.7)       | (1.7)                              |
|                              | ■ Assumption Changes | 6/30/08 | 29     | 60                           | 24           | 57.5                               |
|                              | 6/30/10              | 27      | 9      | 24                           | 8.5          | 0.4                                |
|                              | 6/30/11              | 26      | 29     | 24                           | 28.1         | 1.3                                |
|                              | 6/30/12              | 25      | 5      | 24                           | 4.9          | 0.2                                |
| ■ Plan Changes               | 6/30/11              | 26      | (8)    | 24                           | <u>(7.5)</u> | <u>(0.3)</u>                       |
| ■ Unfunded AAL               | 6/30/13              |         |        |                              | 252.0        | 14.4                               |
| ■ Unfunded AAL <sup>30</sup> | 6/30/13              |         |        | 30                           | 252.0        | 9.7                                |

<sup>30</sup> Total amortization payment cannot be less than the UAAL amortized over 30 years.



**Estimated Net OPEB Obligation (NOO) Illustration**

(Amounts in Thousands)

| Estimated Net OPEB Obligation              | Estimate<br>2008/09 | Estimate<br>2009/10 | Estimate<br>2010/11 | Estimate<br>2011/12 | Estimate<br>2012/13 | Estimate<br>2013/14 |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| ■ Discount Rate                            | 4.50%               | 4.50%               | 4.50%               | 4.00%               | 4.00%               | 4.00%               |
| ■ NOO at Beginning of Year                 | \$ 13               | \$ 36               | \$ 63               | \$ 82               | \$ 104              | \$ 134              |
| ■ Annual OPEB Cost (AOC)                   |                     |                     |                     |                     |                     |                     |
| • Annual Required Contribution             | 29                  | 33                  | 23                  | 31                  | 37                  | 41                  |
| • Interest on NOO                          | 1                   | 2                   | 3                   | 3                   | 4                   | 5                   |
| • NOO Adjustment <sup>31</sup>             | <u>(1)</u>          | <u>(2)</u>          | <u>(5)</u>          | <u>(6)</u>          | <u>(8)</u>          | <u>(9)</u>          |
| • Annual OPEB Cost                         | 28                  | 32                  | 21                  | 28                  | 33                  | 37                  |
| ■ Contributions                            |                     |                     |                     |                     |                     |                     |
| • Benefit Payments Outside Trust           |                     |                     |                     |                     |                     |                     |
| ➢ Cash Payments & Admin Fees <sup>32</sup> | (5)                 | (3)                 | (2)                 | (6)                 | (3)                 | (7)                 |
| ➢ Implied Subsidy Payments                 | (1)                 | (1)                 | (0)                 | (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                       | (6)                 | (4)                 | (2)                 | (6)                 | (3)                 | (7)                 |
| ■ NOO at End of Year                       | 36                  | 63                  | 82                  | 104                 | 134                 | 164                 |

<sup>31</sup> NOO amortized over 15 years.

<sup>32</sup> OPEB footnotes not available. Valuation estimate for 2013/14. Actual amount should be used in CAFR.



**Contribution & Expense Projection – June 30, 2012 Valuation**

(Amounts in Thousands)

| Fiscal Year | Begin Year NOO <sup>33</sup> | ARC   | Annual OPEB Cost (AOC) | Contribution |             |               | Contrib % of ARC | Payroll | ARC as % of Payroll | Contrib % of Payroll |
|-------------|------------------------------|-------|------------------------|--------------|-------------|---------------|------------------|---------|---------------------|----------------------|
|             |                              |       |                        | Benefit Pmts | Pre-Funding | Total Contrib |                  |         |                     |                      |
| 2012/13     | \$ 104                       | \$ 37 | \$ 33                  | \$ 8         | \$ 0        | \$ 8          | 21.6%            | \$ 375  | 9.9%                | 2.1%                 |
| 2013/14     | 129                          | 41    | 36                     | 9            | 0           | 9             | 22.0%            | 387     | 10.5%               | 2.3%                 |
| 2014/15     | 157                          | 44    | 38                     | 10           | 0           | 10            | 22.7%            | 400     | 11.0%               | 2.5%                 |
| 2015/16     | 185                          | 48    | 40                     | 12           | 0           | 12            | 25.0%            | 413     | 11.6%               | 2.9%                 |
| 2016/17     | 213                          | 52    | 42                     | 13           | 0           | 13            | 25.0%            | 426     | 12.2%               | 3.1%                 |
| 2017/18     | 242                          | 56    | 45                     | 15           | 0           | 15            | 26.8%            | 440     | 12.7%               | 3.4%                 |
| 2018/19     | 272                          | 61    | 47                     | 15           | 0           | 15            | 24.6%            | 454     | 13.4%               | 3.3%                 |
| 2019/20     | 304                          | 66    | 49                     | 16           | 0           | 16            | 24.2%            | 469     | 14.1%               | 3.4%                 |
| 2020/21     | 337                          | 72    | 52                     | 16           | 0           | 16            | 22.2%            | 484     | 14.9%               | 3.3%                 |
| 2021/22     | 373                          | 78    | 55                     | 17           | 0           | 17            | 21.8%            | 500     | 15.6%               | 3.4%                 |

<sup>33</sup> Gains and losses amortized over 15-year fixed (closed) periods for ARC. NOO amortized over average remaining ARC gain and loss amortization period.



**Contribution & Expense Projection – June 30, 2013 Valuation**

(Amounts in Thousands)

| Fiscal Year | Begin Year NOO <sup>34</sup> | ARC   | Annual OPEB Cost (AOC) | Contribution |             |               | Contrib % of ARC | Payroll | ARC as % of Payroll | Contrib % of Payroll |
|-------------|------------------------------|-------|------------------------|--------------|-------------|---------------|------------------|---------|---------------------|----------------------|
|             |                              |       |                        | Benefit Pmts | Pre-Funding | Total Contrib |                  |         |                     |                      |
| 2012/13     | \$ 104                       | \$ 37 | \$ 33                  | \$ 3         | \$ 0        | \$ 3          | 8.1%             | \$ 375  | 9.9%                | 0.8%                 |
| 2013/14     | 134                          | 41    | 37                     | 7            | 0           | 7             | 17.1%            | 387     | 10.5%               | 1.8%                 |
| 2014/15     | 164                          | 37    | 32                     | 8            | 0           | 8             | 21.6%            | 400     | 9.3%                | 2.0%                 |
| 2015/16     | 187                          | 41    | 33                     | 9            | 0           | 9             | 22.0%            | 413     | 9.9%                | 2.2%                 |
| 2016/17     | 212                          | 44    | 35                     | 10           | 0           | 10            | 22.7%            | 426     | 10.3%               | 2.3%                 |
| 2017/18     | 237                          | 47    | 37                     | 12           | 0           | 12            | 25.5%            | 440     | 10.7%               | 2.7%                 |
| 2018/19     | 262                          | 51    | 39                     | 13           | 0           | 13            | 25.5%            | 454     | 11.2%               | 2.9%                 |
| 2019/20     | 288                          | 56    | 41                     | 13           | 0           | 13            | 23.2%            | 469     | 11.9%               | 2.8%                 |
| 2020/21     | 316                          | 60    | 43                     | 14           | 0           | 14            | 23.3%            | 484     | 12.4%               | 2.9%                 |
| 2021/22     | 345                          | 65    | 45                     | 14           | 0           | 14            | 21.5%            | 500     | 13.0%               | 2.8%                 |

<sup>34</sup> Gains and losses amortized over 15-year fixed (closed) periods for ARC. NOO amortized over average remaining ARC gain and loss amortization period.



**Benefit Payment Projection**

(Amounts in Thousands)

| Fiscal Year | Cash Subsidy | Implied Subsidy | Total |
|-------------|--------------|-----------------|-------|
| 2013/14     | \$ 7         | \$ 0            | \$ 7  |
| 2014/15     | 8            | 0               | 8     |
| 2015/16     | 9            | 0               | 9     |
| 2016/17     | 10           | 0               | 10    |
| 2017/18     | 12           | 0               | 12    |
| 2018/19     | 13           | 0               | 13    |
| 2019/20     | 13           | 0               | 13    |
| 2020/21     | 14           | 0               | 14    |
| 2021/22     | 14           | 0               | 14    |
| 2022/23     | 14           | 0               | 14    |



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## ACTUARIAL CERTIFICATION

This report presents the State of Maine Retiree Healthcare Plan for State Employees and Teachers ("Plan") June 30, 2013 interim actuarial valuation. The purpose of this valuation is to provide a June 30, 2013 update of the following amounts determined by the June 30, 2012 full actuarial valuation:

- Governmental Accounting Standards Board Statement Nos. 43 and 45 June 30, 2013 Benefit Obligations, and
- The Plan's June 30, 2013 Funded Status.

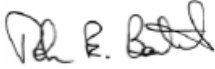
The 2013/14 Annual Required Contribution was determined by the June 30, 2012 actuarial valuation.

The report provides information intended for internal plan management purposes but may be used for reporting under GASB 43 and 45 and may not be appropriate for other purposes. 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, and asset information provided by the State as summarized in this report, which we relied on and did not audit. The June 30, 2012 census data provided for the June 30, 2012 full actuarial valuation was used for the June 30, 2013 interim valuation. 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.

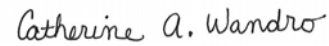
Respectfully submitted,



John E. Bartel, ASA, MAAA, FCA  
President  
Bartel Associates, LLC  
November 22, 2013



Joseph R. D'Onofrio, FSA, EA, MAAA, FCA  
Assistant Vice President  
Bartel Associates, LLC  
November 22, 2013



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Assistant Vice President  
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November 22, 2013



November 22, 2013

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## EXHIBITS

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November 22, 2013

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**PREMIUMS**

**State Employees' Health Plans**  
**Monthly Premiums**

**Actives and Non-Medicare Eligible Retirees**

| <b>Medical Plan</b> | <b>Year</b> | <b>Single</b> | <b>2-Party</b> | <b>Family</b> | <b>Participant w/Child(ren)</b> |
|---------------------|-------------|---------------|----------------|---------------|---------------------------------|
| 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                        |
|                     | 2013/14     | 727.54        | 1,521.78       | 1,810.70      | 1,196.90                        |



**PREMIUMS**

**State Employees' Health Plans**  
**Monthly Premiums**

**Medicare Eligible Retirees**

| <b>Medical Plan</b>          | <b>Year</b> | <b>Single</b> | <b>2-Party</b> | <b>Family</b> | <b>Participant w/Child(ren)</b> |
|------------------------------|-------------|---------------|----------------|---------------|---------------------------------|
| 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                             |
| Aetna Medicare Advantage PPO | 2013        | 259.02        | 510.54         | n/a           | n/a                             |



**PREMIUMS**

**Teachers' Health Plans**  
**Monthly Premiums**

**Active and Non-Medicare Eligible Retirees**

| Medical Plan                    | Year                  | Rate Band | Single   | 2-Party    | Family     | Participant w/Child(ren) |
|---------------------------------|-----------------------|-----------|----------|------------|------------|--------------------------|
| MEA Choice Plus<br>(HMO Choice) | 2008/09               | n/a       | \$528.40 | \$1,190.91 | \$1,449.51 | \$935.16                 |
|                                 | 2009/10               | n/a       | 528.40   | 1,190.91   | 1,449.51   | 935.16                   |
|                                 | 2010/11               | n/a       | 538.97   | 1,214.73   | 1,478.50   | 953.86                   |
|                                 | 2011/12               | n/a       | 574.00   | 1,293.69   | 1,574.60   | 1,015.86                 |
|                                 | 2012/13               | n/a       | 596.96   | 1,345.44   | 1,637.58   | 1,056.49                 |
|                                 | 2013/14 <sup>35</sup> | 1         | 596.96   | 1,345.44   | 1,637.58   | 1,056.49                 |
|                                 |                       | 2         | 614.87   | 1,385.80   | 1,686.71   | 1,088.18                 |
|                                 |                       | 3         | 632.78   | 1,426.17   | 1,735.83   | 1,119.88                 |
|                                 |                       | 4         | 644.72   | 1,453.08   | 1,768.59   | 1,141.01                 |
|                                 |                       | 5         | 662.63   | 1,493.44   | 1,817.71   | 1,172.70                 |
|                                 |                       | 6         | 674.56   | 1,520.35   | 1,850.47   | 1,193.83                 |

<sup>35</sup> Starting 2013/14, school district premiums are separated into 6 rate bands determined by local experience factors.



**PREMIUMS**

**Teachers' Health Plans**  
**Monthly Premiums**

**Active and Non-Medicare Eligible Retirees**

| Medical Plan                            | Year                  | Rate Band | Single   | 2-Party    | Family     | Participant w/Child(ren) |
|---|-----------------------|-----------|----------|------------|------------|--------------------------|
| MEA Standard Plan<br>(Blue Choice \$15) | 2008/09               | n/a       | \$570.61 | \$1,286.19 | \$1,565.47 | \$1,009.96               |
|   | 2009/10               | n/a       | 570.61   | 1,286.19   | 1,565.47   | 1,009.96                 |
|   | 2010/11               | n/a       | 582.02   | 1,311.91   | 1,596.78   | 1,030.16                 |
|   | 2011/12               | n/a       | 619.85   | 1,397.18   | 1,700.75   | 1,097.12                 |
|   | 2012/13               | n/a       | 644.64   | 1,453.07   | 1,768.59   | 1,141.00                 |
|   | 2013/14 <sup>36</sup> | 1         | 644.64   | 1,453.07   | 1,768.59   | 1,141.00                 |
|   |                       | 2         | 663.98   | 1,496.66   | 1,821.65   | 1,175.23                 |
|   |                       | 3         | 683.32   | 1,540.25   | 1,874.71   | 1,209.46                 |
|   |                       | 4         | 696.21   | 1,569.32   | 1,910.08   | 1,232.28                 |
|   |                       | 5         | 715.55   | 1,612.91   | 1,963.13   | 1,266.51                 |
|   |                       | 6         | 728.44   | 1,641.97   | 1,998.51   | 1,289.33                 |

<sup>36</sup> Starting 2013/14, school district premiums are separated into 6 rate bands determined by local experience factors.



**PREMIUMS**

**Teachers' Health Plans**  
**Monthly Premiums**

**Active and Non-Medicare Eligible Retirees**

| Medical Plan                           | Year                  | Rate Band | Single   | 2-Party    | Family     | Participant w/Child(ren) |
|--|-----------------------|-----------|----------|------------|------------|--------------------------|
| MEA Standard                           | 2012/13               | n/a       | \$567.11 | \$1,278.17 | \$1,555.70 | \$1,003.67               |
| \$500 Deductible<br>(Blue Choice \$20) | 2013/14 <sup>37</sup> | 1         | 567.11   | 1,278.17   | 1,555.70   | 1,003.67                 |
|  |                       | 2         | 584.12   | 1,316.52   | 1,602.37   | 1,033.78                 |
|  |                       | 3         | 601.14   | 1,354.86   | 1,649.04   | 1,063.89                 |
|  |                       | 4         | 612.48   | 1,380.42   | 1,680.16   | 1,083.96                 |
|  |                       | 5         | 629.49   | 1,418.77   | 1,726.83   | 1,114.07                 |
|  |                       | 6         | 640.83   | 1,444.33   | 1,757.94   | 1,134.15                 |

<sup>37</sup> Starting 2013/14, school district premiums are separated into 6 rate bands determined by local experience factors.



**PREMIUMS**

**Teachers' Health Plans**  
**Monthly Premiums**

**Active and Non-Medicare Eligible Retirees**

| Medical Plan                             | Year                  | Rate Band | Single   | 2-Party    | Family     | Participant w/Child(ren) |
|--|-----------------------|-----------|----------|------------|------------|--------------------------|
| MEA Standard                             | 2012/13               | n/a       | \$540.85 | \$1,218.97 | \$1,483.65 | \$957.18                 |
| \$1,000 Deductible<br>(Blue Choice \$20) | 2013/14 <sup>38</sup> | 1         | 540.85   | 1,218.97   | 1,483.65   | 957.18                   |
|  |                       | 2         | 557.08   | 1,255.54   | 1,528.16   | 985.90                   |
|  |                       | 3         | 573.30   | 1,292.11   | 1,572.67   | 1,014.61                 |
|  |                       | 4         | 584.12   | 1,316.49   | 1,602.34   | 1,033.75                 |
|  |                       | 5         | 600.34   | 1,353.06   | 1,646.85   | 1,062.47                 |
|  |                       | 6         | 611.16   | 1,377.44   | 1,676.52   | 1,081.61                 |

<sup>38</sup> Starting 2013/14, school district premiums are separated into 6 rate bands determined by local experience factors.





**PREMIUMS**

**Teachers' Health Plans**  
**Monthly Premiums**

**Medicare Eligible Retirees**

| Medical Plan    | Year    | Single   | 2-Party  | Family | Participant 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                      |
|                 | 2013/14 | 368.17   | 772.80   | n/a    | n/a                      |



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**PARTICIPANT STATISTICS**

**Active Employee Plan & Coverage Elections**  
**June 30, 2012**

**State Employees**

| Medical Plan            | Single     | 2-Party    | Family     | EE + Child(ren) | FLES <sup>39</sup> | Waived     | Total      |
|-------------------------|------------|------------|------------|-----------------|--------------------|------------|------------|
| HMO Choice              | 5,640      | 1,469      | 2,128      | 1,674           | 641                | -          | 11,552     |
| Comp Care <sup>40</sup> | 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>         | <u>817</u> | <u>817</u> |
| Total                   | 5,679      | 1,471      | 2,128      | 1,681           | 643                | 817        | 12,419     |

**Teachers**

| Medical Plan                   | Single     | 2-Party    | Family     | EE + 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 <sup>41</sup> | 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> | <u>9,647</u> | <u>9,647</u> |
| Total                          | 7,683      | 2,737      | 5,161      | 3,147           | n/a        | 9,647        | 28,375       |

<sup>39</sup> State employees or retirees married to other State employees or retirees and valued as single coverage.

<sup>40</sup> Included with HMO Choice for purposes of the valuation.

<sup>41</sup> Assumed to be in MEA Standard \$500 Deductible Plan for purposes of the valuation.



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**PARTICIPANT STATISTICS**

**Retiree Plan & Coverage Elections**

**June 30, 2012**

**State Employees**

| Medical Plan            | Single     | 2-Party    | Family     | EE +<br>Child(ren) | FLES <sup>42</sup> | Total        |
|-------------------------|------------|------------|------------|--------------------|--------------------|--------------|
| HMO Choice              | 3,329      | 277        | 27         | 49                 | 53                 | 3,735        |
| Comp Care <sup>43</sup> | 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>         | <u>5,693</u> |
| Total                   | 3,482      | 281        | 27         | 49                 | 55                 | 9,587        |

**Teachers**

| Medical Plan                   | Single   | 2-Party  | Family   | EE +<br>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 <sup>44</sup> | 7        | 2        | -        | -                  | n/a        | 9        |
| Group Companion                | 4,640    | 1,109    | -        | -                  | n/a        | 5,749    |
| Medigap B                      | <u>5</u> | <u>1</u> | <u>-</u> | <u>-</u>           | <u>n/a</u> | <u>6</u> |
| Total                          | 7,925    | 1,524    | 30       | 41                 | n/a        | 9,520    |

<sup>42</sup> State employees or retirees married to other State employees or retirees and valued as single coverage.

<sup>43</sup> Included with HMO Choice for purposes of the valuation.

<sup>44</sup> Assumed to be in MEA Standard \$500 Deductible Plan for purposes of the valuation.



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**PARTICIPANT STATISTICS**

**Teachers by Premium Rate Band<sup>45</sup>**

**Rate Bands as of June 30, 2013 and June 30, 2012 Participant Data**

| Rate Band             | Increase over Band #1 | Actives      | Retirees < 65 | Retirees ≥ 65 | Total        | % of Total |
|-----------------------|-----------------------|--------------|---------------|---------------|--------------|------------|
| 1                     | 0%                    | 2,608        | 361           | 706           | 3,675        | 13%        |
| 2                     | 3%                    | 2,044        | 380           | 789           | 3,213        | 11%        |
| 3                     | 6%                    | 2,485        | 410           | 945           | 3,840        | 14%        |
| 4                     | 8%                    | 3,560        | 510           | 1,114         | 5,184        | 18%        |
| 5                     | 11%                   | 2,065        | 379           | 842           | 3,286        | 12%        |
| 6                     | 13%                   | 5,966        | 977           | 2,107         | 9,050        | 32%        |
| Unknown <sup>46</sup> | n/a                   | <u>9,647</u> | <u>0</u>      | <u>0</u>      | <u>9,647</u> | <u>n/a</u> |
| Total                 | 8%                    | 28,375       | 3,017         | 6,503         | 37,895       | 100%       |

<sup>45</sup> Starting 2013/14, school district premiums are separated into 6 rate bands determined by local experience factors. Rate band was determined based on school district information provided in census data.

<sup>46</sup> Waived active Teacher data did not include school district information so rate band could not be determined. Valuation assumes waived active Teachers are in rate band 4.



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**PARTICIPANT STATISTICS**

**State Actives by Age and Service<sup>47</sup>**  
**June 30, 2012**

| Age          | Service    |              |              |              |              |              |              | Total         |
|--------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
|              | < 1        | 1-4          | 5-9          | 10-14        | 15-19        | 20-24        | ≥ 25         |               |
| < 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           |
| <b>Total</b> | <b>696</b> | <b>2,062</b> | <b>2,510</b> | <b>2,361</b> | <b>1,143</b> | <b>1,429</b> | <b>2,218</b> | <b>12,419</b> |

<sup>47</sup> Including actives with assumed birth and hire dates.



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**PARTICIPANT STATISTICS**

**Teacher Actives by Age and Service**  
**June 30, 2012**

| Age          | Service      |              |              |              |              |              |              | Total         |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
|              | < 1          | 1-4          | 5-9          | 10-14        | 15-19        | 20-24        | ≥ 25         |               |
| < 25         | 368          | 470          | 51           | -            | -            | -            | -            | 889           |
| 25-29        | 298          | 943          | 920          | 60           | -            | -            | -            | 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           |
| <b>Total</b> | <b>1,455</b> | <b>3,869</b> | <b>5,440</b> | <b>5,023</b> | <b>4,141</b> | <b>3,204</b> | <b>5,243</b> | <b>28,375</b> |



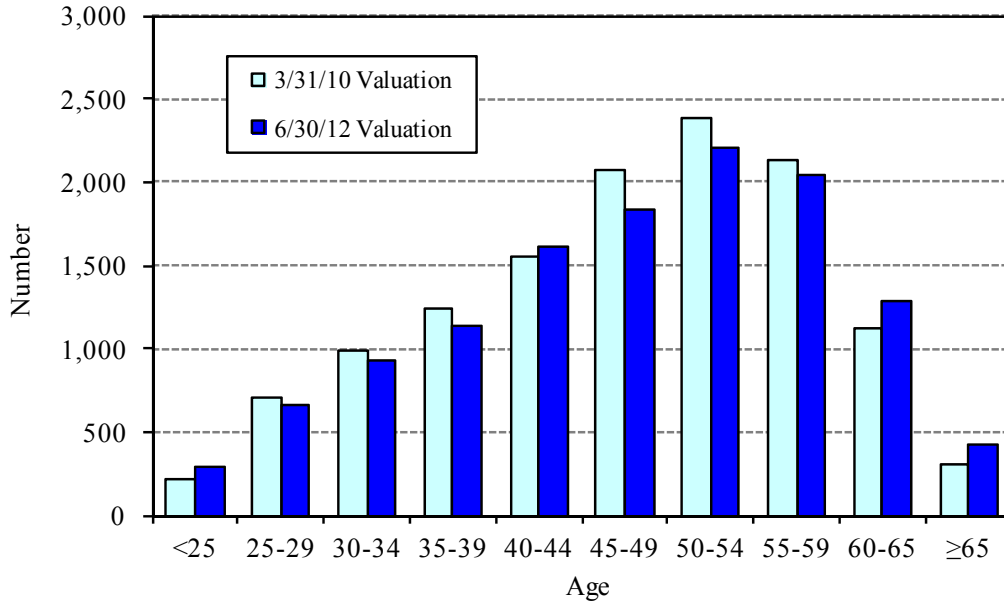
November 22, 2013

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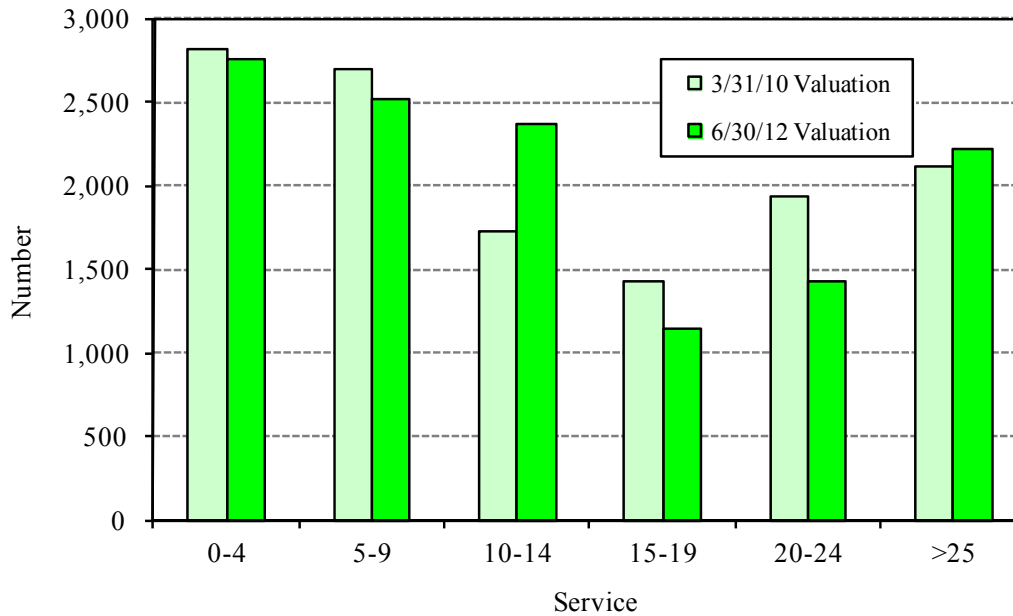
PARTICIPANT STATISTICS

**Active Age Distribution  
State Employees**



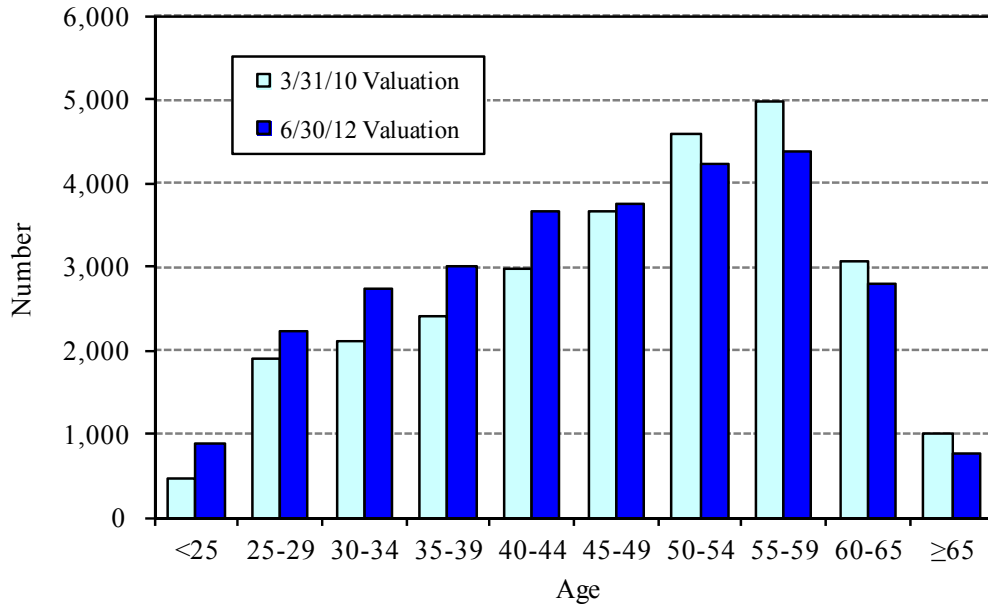
PARTICIPANT STATISTICS

**Active Service Distribution  
State Employees**



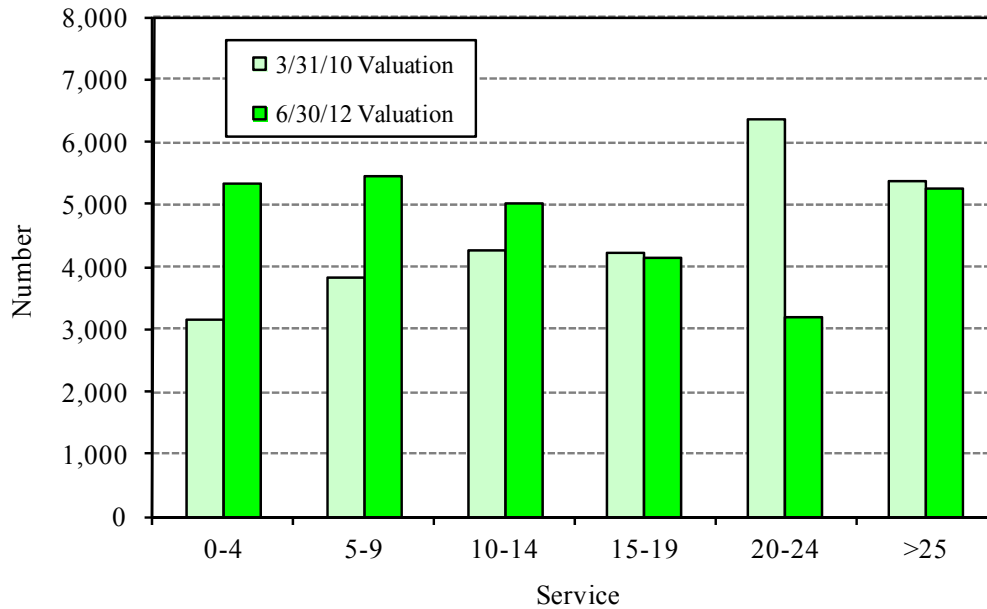
## PARTICIPANT STATISTICS

### Active Age Distribution Teachers



## PARTICIPANT STATISTICS

### Active Service Distribution Teachers



**PARTICIPANT STATISTICS**

**State Retiree Healthcare Coverage by Age Group**

**June 30, 2012**

| Age          | Single       | 2-Party    | Family    | FLES      | PFFS <sup>48</sup> | 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          |
| <b>Total</b> | <b>3,482</b> | <b>281</b> | <b>76</b> | <b>55</b> | <b>5,693</b>       | <b>9,587</b> |

|                         |            |           |           |           |            |             |
|-------------------------|------------|-----------|-----------|-----------|------------|-------------|
| 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%        |
| <b>Total Election %</b> | <b>36%</b> | <b>3%</b> | <b>1%</b> | <b>1%</b> | <b>59%</b> | <b>100%</b> |

<sup>48</sup> Medical coverage election not provided for State retirees in Medicare PFFS plan.



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**PARTICIPANT STATISTICS**

**Teachers Retiree Healthcare Coverage by Age Group**

**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          |
| <b>Total</b> | <b>7,925</b> | <b>1,524</b> | <b>71</b> | <b>9,520</b> |

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



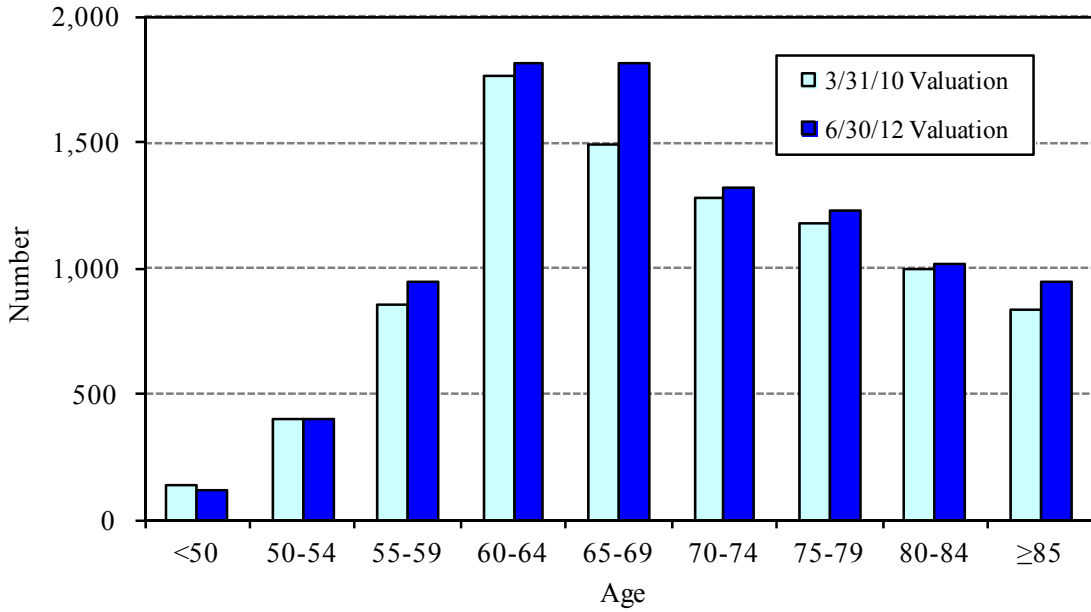
November 22, 2013

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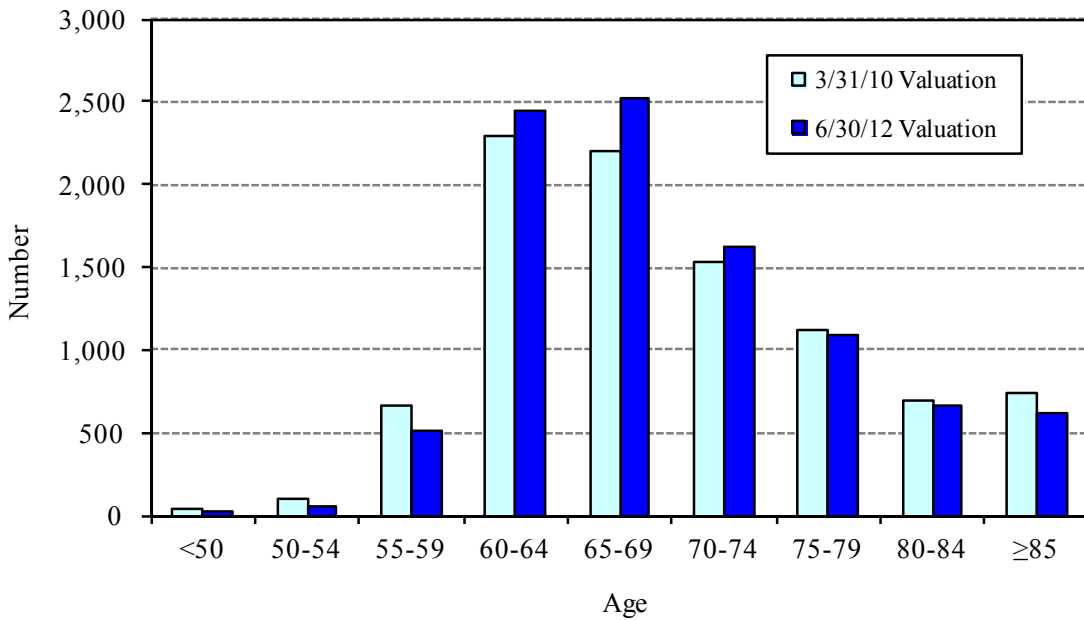
PARTICIPANT STATISTICS

**Retiree Age Distribution  
State Employees**



PARTICIPANT STATISTICS

**Retiree Age Distribution  
Teachers**



**ACTUARIAL ASSUMPTIONS**

| <b>Assumption</b>     | <b>June 30, 2012 Valuation</b>   | <b>June 30, 2013 Valuation</b>   |
|-----------------------|--|--|
| ■ Valuation Date      | <ul style="list-style-type: none"> <li>• June 30, 2012</li> <li>• Full valuation</li> <li>• 2012/13 and 2013/14 ARCs for reporting purposes</li> </ul> | <ul style="list-style-type: none"> <li>• June 30, 2013</li> <li>• Interim valuation</li> <li>• 2013/14 ARC for internal use and projection purposes</li> </ul> |
| ■ Valuation Method    | <ul style="list-style-type: none"> <li>• 6/30/12 census data</li> <li>• 6/30/12 assets</li> <li>• 2012/13 premiums</li> </ul>                          | <ul style="list-style-type: none"> <li>• 6/30/12 census data</li> <li>• 6/30/13 assets</li> <li>• 2013/14 premiums</li> </ul>                                  |
| ■ Discount Rate Basis | <ul style="list-style-type: none"> <li>• No pre-funding rate - 4.00%</li> <li>• Full pre-funding rate - 7.25%</li> </ul>                               | <ul style="list-style-type: none"> <li>• Same</li> <li>• Discount rate may change for 6/30/14 valuation if funding policy has changed</li> </ul>               |



**ACTUARIAL ASSUMPTIONS**

| <b>Assumption</b>               | <b>June 30, 2012 Valuation</b>  | <b>June 30, 2013 Valuation</b> |             |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
|---------------------------------|---|--------------------------------|-------------|-------------|-------------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|----------|-------|---------|-------|----------|-------|--|-------------|-------------|-------------|---|-------------|-------------|-------------|-------------|---------|-------|---------|-------|---------|-------|----------|-------|---------|-------|---------|-------|---------|-------|----------|-------|---------|-------|--|--|
| ■ Discount Rate State Employees | <ul style="list-style-type: none"> <li>• Select &amp; ultimate discount rates based on ARC phase-in funding policy:</li> </ul> <table border="1"> <thead> <tr> <th><u>Year</u></th> <th><u>Rate</u></th> <th><u>Year</u></th> <th><u>Rate</u></th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>4.49%</td> <td>2016/17</td> <td>6.60%</td> </tr> <tr> <td>2013/14</td> <td>5.63%</td> <td>2017/18</td> <td>6.93%</td> </tr> <tr> <td>2014/15</td> <td>5.95%</td> <td>2018/19+</td> <td>7.25%</td> </tr> <tr> <td>2015/16</td> <td>6.28%</td> <td></td> <td></td> </tr> </tbody> </table>  | <u>Year</u>                    | <u>Rate</u> | <u>Year</u> | <u>Rate</u> | 2012/13 | 4.49% | 2016/17 | 6.60% | 2013/14 | 5.63% | 2017/18 | 6.93% | 2014/15 | 5.95% | 2018/19+ | 7.25% | 2015/16 | 6.28% |          |       | <ul style="list-style-type: none"> <li>• Same discount rates assuming no change in funding policy</li> </ul> <table border="1"> <thead> <tr> <th><u>Year</u></th> <th><u>Rate</u></th> <th><u>Year</u></th> <th><u>Rate</u></th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>n/a</td> <td>2016/17</td> <td>6.60%</td> </tr> <tr> <td>2013/14</td> <td>5.63%</td> <td>2017/18</td> <td>6.93%</td> </tr> <tr> <td>2014/15</td> <td>5.95%</td> <td>2018/19+</td> <td>7.25%</td> </tr> <tr> <td>2015/16</td> <td>6.28%</td> <td></td> <td></td> </tr> </tbody> </table> | <u>Year</u> | <u>Rate</u> | <u>Year</u> | <u>Rate</u>   | 2012/13     | n/a         | 2016/17     | 6.60%       | 2013/14 | 5.63% | 2017/18 | 6.93% | 2014/15 | 5.95% | 2018/19+ | 7.25% | 2015/16 | 6.28% |         |       |         |       |          |       |         |       |  |  |
| <u>Year</u>                     | <u>Rate</u>   | <u>Year</u>                    | <u>Rate</u> |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| 2012/13                         | 4.49%   | 2016/17                        | 6.60%       |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| 2013/14                         | 5.63%   | 2017/18                        | 6.93%       |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| 2014/15                         | 5.95%   | 2018/19+                       | 7.25%       |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| 2015/16                         | 6.28%   |                                |             |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| <u>Year</u>                     | <u>Rate</u>   | <u>Year</u>                    | <u>Rate</u> |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| 2012/13                         | n/a   | 2016/17                        | 6.60%       |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| 2013/14                         | 5.63%   | 2017/18                        | 6.93%       |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| 2014/15                         | 5.95%   | 2018/19+                       | 7.25%       |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| 2015/16                         | 6.28%   |                                |             |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| ■ Discount Rate Teachers        | <ul style="list-style-type: none"> <li>• Select &amp; ultimate discount rates based on ARC phase-in funding policy:</li> </ul> <table border="1"> <thead> <tr> <th><u>Year</u></th> <th><u>Rate</u></th> <th><u>Year</u></th> <th><u>Rate</u></th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>4.00%</td> <td>2017/18</td> <td>6.03%</td> </tr> <tr> <td>2013/14</td> <td>4.41%</td> <td>2018/19</td> <td>6.44%</td> </tr> <tr> <td>2014/15</td> <td>4.81%</td> <td>2019/20</td> <td>6.84%</td> </tr> <tr> <td>2015/16</td> <td>5.22%</td> <td>2020/21+</td> <td>7.25%</td> </tr> <tr> <td>2016/17</td> <td>5.63%</td> <td></td> <td></td> </tr> </tbody> </table> | <u>Year</u>                    | <u>Rate</u> | <u>Year</u> | <u>Rate</u> | 2012/13 | 4.00% | 2017/18 | 6.03% | 2013/14 | 4.41% | 2018/19 | 6.44% | 2014/15 | 4.81% | 2019/20  | 6.84% | 2015/16 | 5.22% | 2020/21+ | 7.25% | 2016/17  | 5.63%       |             |             | <ul style="list-style-type: none"> <li>• Same discount rates assuming no change in funding policy</li> </ul> <table border="1"> <thead> <tr> <th><u>Year</u></th> <th><u>Rate</u></th> <th><u>Year</u></th> <th><u>Rate</u></th> </tr> </thead> <tbody> <tr> <td>2012/13</td> <td>n/a</td> <td>2017/18</td> <td>6.03%</td> </tr> <tr> <td>2013/14</td> <td>4.41%</td> <td>2018/19</td> <td>6.44%</td> </tr> <tr> <td>2014/15</td> <td>4.81%</td> <td>2019/20</td> <td>6.84%</td> </tr> <tr> <td>2015/16</td> <td>5.22%</td> <td>2020/21+</td> <td>7.25%</td> </tr> <tr> <td>2016/17</td> <td>5.63%</td> <td></td> <td></td> </tr> </tbody> </table> | <u>Year</u> | <u>Rate</u> | <u>Year</u> | <u>Rate</u> | 2012/13 | n/a   | 2017/18 | 6.03% | 2013/14 | 4.41% | 2018/19  | 6.44% | 2014/15 | 4.81% | 2019/20 | 6.84% | 2015/16 | 5.22% | 2020/21+ | 7.25% | 2016/17 | 5.63% |  |  |
| <u>Year</u>                     | <u>Rate</u>   | <u>Year</u>                    | <u>Rate</u> |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| 2012/13                         | 4.00%   | 2017/18                        | 6.03%       |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| 2013/14                         | 4.41%   | 2018/19                        | 6.44%       |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| 2014/15                         | 4.81%   | 2019/20                        | 6.84%       |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| 2015/16                         | 5.22%   | 2020/21+                       | 7.25%       |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| 2016/17                         | 5.63%   |                                |             |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| <u>Year</u>                     | <u>Rate</u>   | <u>Year</u>                    | <u>Rate</u> |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| 2012/13                         | n/a   | 2017/18                        | 6.03%       |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| 2013/14                         | 4.41%   | 2018/19                        | 6.44%       |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| 2014/15                         | 4.81%   | 2019/20                        | 6.84%       |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| 2015/16                         | 5.22%   | 2020/21+                       | 7.25%       |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |
| 2016/17                         | 5.63%   |                                |             |             |             |         |       |         |       |         |       |         |       |         |       |          |       |         |       |          |       |  |             |             |             |   |             |             |             |             |         |       |         |       |         |       |          |       |         |       |         |       |         |       |          |       |         |       |  |  |





**ACTUARIAL ASSUMPTIONS**

| <b>Assumption</b>                | <b>June 30, 2012 Valuation</b>   | <b>June 30, 2013 Valuation</b>                           |
|----------------------------------|--|--|
| ■ Discount Rate Ancillary Groups | <ul style="list-style-type: none"> <li>• 4.0%</li> </ul>   | <ul style="list-style-type: none"> <li>• Same</li> </ul> |
| ■ General Inflation              | <ul style="list-style-type: none"> <li>• 3% annually</li> <li>• Basis for aggregate payroll and discount rate assumptions</li> </ul>                   | <ul style="list-style-type: none"> <li>• Same</li> </ul> |
| ■ Aggregate Payroll Increases    | <ul style="list-style-type: none"> <li>• 3.25%</li> <li>• Inflation plus 0.25%</li> <li>• For Normal Cost calculation and UAAL amortization</li> </ul> | <ul style="list-style-type: none"> <li>• Same</li> </ul> |



**ACTUARIAL ASSUMPTIONS**

| <b>Assumption</b>                   | <b>June 30, 2012 Valuation</b>  | <b>June 30, 2013 Valuation</b> |              |                 |   |       |        |   |       |       |    |       |       |    |       |       |    |       |       |     |       |       |  |
|-------------------------------------|---|--------------------------------|--------------|-----------------|---|-------|--------|---|-------|-------|----|-------|-------|----|-------|-------|----|-------|-------|-----|-------|-------|--|
| ■ Merit and Longevity Pay Increases | <ul style="list-style-type: none"> <li>• MainePERS 6/30/11 Valuation sample rates: <table border="1" data-bbox="519 1323 893 1575"> <thead> <tr> <th><u>Service</u></th> <th><u>State</u></th> <th><u>Teachers</u></th> </tr> </thead> <tbody> <tr> <td>0</td> <td>7.00%</td> <td>10.00%</td> </tr> <tr> <td>5</td> <td>2.50%</td> <td>2.75%</td> </tr> <tr> <td>10</td> <td>1.00%</td> <td>1.50%</td> </tr> <tr> <td>15</td> <td>0.45%</td> <td>1.00%</td> </tr> <tr> <td>20</td> <td>0.20%</td> <td>0.20%</td> </tr> <tr> <td>25+</td> <td>0.00%</td> <td>0.00%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• 0.0% for Legislative</li> <li>• 0.0% for Judicial</li> <li>• Added to aggregate payroll increase assumption and used for Normal Cost calculation</li> </ul> </li> </ul> | <u>Service</u>                 | <u>State</u> | <u>Teachers</u> | 0 | 7.00% | 10.00% | 5 | 2.50% | 2.75% | 10 | 1.00% | 1.50% | 15 | 0.45% | 1.00% | 20 | 0.20% | 0.20% | 25+ | 0.00% | 0.00% | <ul style="list-style-type: none"> <li>• Same for MainePERS 6/30/12 valuation</li> </ul> |
| <u>Service</u>                      | <u>State</u>  | <u>Teachers</u>                |              |                 |   |       |        |   |       |       |    |       |       |    |       |       |    |       |       |     |       |       |  |
| 0                                   | 7.00%   | 10.00%                         |              |                 |   |       |        |   |       |       |    |       |       |    |       |       |    |       |       |     |       |       |  |
| 5                                   | 2.50%   | 2.75%                          |              |                 |   |       |        |   |       |       |    |       |       |    |       |       |    |       |       |     |       |       |  |
| 10                                  | 1.00%   | 1.50%                          |              |                 |   |       |        |   |       |       |    |       |       |    |       |       |    |       |       |     |       |       |  |
| 15                                  | 0.45%   | 1.00%                          |              |                 |   |       |        |   |       |       |    |       |       |    |       |       |    |       |       |     |       |       |  |
| 20                                  | 0.20%   | 0.20%                          |              |                 |   |       |        |   |       |       |    |       |       |    |       |       |    |       |       |     |       |       |  |
| 25+                                 | 0.00%   | 0.00%                          |              |                 |   |       |        |   |       |       |    |       |       |    |       |       |    |       |       |     |       |       |  |



**ACTUARIAL ASSUMPTIONS**

| Assumption   | June 30, 2012 Valuation  |            |       |               | June 30, 2013 Valuation  |            |       |               |
|--|--------------------------|------------|-------|---------------|--------------------------|------------|-------|---------------|
|  | Increase from Prior Year |            |       |               | Increase from Prior Year |            |       |               |
| ■ Healthcare Cost Increases State Employees and Ancillary Groups | Year                     | HMO Choice | Year  | Medicare Plan | Year                     | HMO Choice | Year  | Medicare Plan |
|  | 2012/13                  | Premium    | 2012  | Premium       | 2012/13                  | n/a        | 2012  | n/a           |
|  | 2013/14                  | 8.5%       | 2013  | 8.9%          | 2013/14                  | Premium    | 2013  | Premium       |
|  | 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%          |



**ACTUARIAL ASSUMPTIONS**

| Assumption                           | June 30, 2012 Valuation   |            |             |               | June 30, 2013 Valuation  |            |             |               |
|--------------------------------------|---------------------------|------------|-------------|---------------|--------------------------|------------|-------------|---------------|
|                                      | Increase from Prior Year* |            |             |               | Increase from Prior Year |            |             |               |
| ■ Healthcare Cost Increases Teachers | Year                      | HMO Choice | Blue Choice | Medicare Plan | Year                     | HMO Choice | Blue Choice | Medicare Plan |
|                                      | 2012/13                   | Premium    | Premium     | Premium       | 2012/13                  | n/a        | n/a         | n/a           |
|                                      | 2013/14                   | 8.5%       | 8.5%        | 8.9%          | 2013/14                  | Premium    | Premium     | Premium       |
|                                      | 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%          |

\* LD 1043 caps State cost for Teachers non-Medicare premiums for 2011/12 and 2012/13 at the 2010/11 funding level. Multiplied State paid cash subsidy by 93.8% for 2012/13 so as not to exceed budgeted \$23 million.



**ACTUARIAL ASSUMPTIONS**

| <b>Assumption</b>                              | <b>June 30, 2012 Valuation</b>  | <b>June 30, 2013 Valuation</b> |  |  |                               |  |  |            |             |               |    |        |        |    |     |     |    |     |     |    |       |     |    |       |       |    |       |       |   |
|--|---|--------------------------------|--|--|-------------------------------|--|--|------------|-------------|---------------|----|--------|--------|----|-----|-----|----|-----|-----|----|-------|-----|----|-------|-------|----|-------|-------|---|
| <p>■ State Average Monthly Net Claims Cost</p> | <ul style="list-style-type: none"> <li>• Average HMO Choice net claims cost:                             <ul style="list-style-type: none"> <li>➢ Based on 2012/13 premiums</li> <li>➢ Assumes medical plan is modified to net unchanged premiums for 2012/13</li> </ul> </li> <li>• Claims cost by age:                             <table border="0" style="margin-left: 20px;"> <tr> <td colspan="3" style="text-align: center;">HMO Choice</td> </tr> <tr> <td colspan="3" style="text-align: center;"><u>Retiree Monthly Claims</u></td> </tr> <tr> <td style="text-align: center;"><u>Age</u></td> <td style="text-align: center;"><u>Male</u></td> <td style="text-align: center;"><u>Female</u></td> </tr> <tr> <td style="text-align: center;">50</td> <td style="text-align: center;">\$ 586</td> <td style="text-align: center;">\$ 763</td> </tr> <tr> <td style="text-align: center;">55</td> <td style="text-align: center;">758</td> <td style="text-align: center;">777</td> </tr> <tr> <td style="text-align: center;">60</td> <td style="text-align: center;">963</td> <td style="text-align: center;">829</td> </tr> <tr> <td style="text-align: center;">65</td> <td style="text-align: center;">1,177</td> <td style="text-align: center;">987</td> </tr> <tr> <td style="text-align: center;">70</td> <td style="text-align: center;">1,492</td> <td style="text-align: center;">1,215</td> </tr> <tr> <td style="text-align: center;">75</td> <td style="text-align: center;">1,801</td> <td style="text-align: center;">1,454</td> </tr> </table> </li> </ul> | HMO Choice                     |  |  | <u>Retiree Monthly Claims</u> |  |  | <u>Age</u> | <u>Male</u> | <u>Female</u> | 50 | \$ 586 | \$ 763 | 55 | 758 | 777 | 60 | 963 | 829 | 65 | 1,177 | 987 | 70 | 1,492 | 1,215 | 75 | 1,801 | 1,454 | <ul style="list-style-type: none"> <li>• Same:                             <ul style="list-style-type: none"> <li>➢ 2013/14 premiums are same as 2012/13 premiums</li> <li>➢ Assumes medical plan is modified to result in unchanged premiums for 2013/14</li> <li>➢ Assumes claims costs by age are the same for 6/30/13 actives and retirees as for 6/30/12 actives and retirees</li> </ul> </li> </ul> |
| HMO Choice                                     |   |                                |  |  |                               |  |  |            |             |               |    |        |        |    |     |     |    |     |     |    |       |     |    |       |       |    |       |       |   |
| <u>Retiree Monthly Claims</u>                  |   |                                |  |  |                               |  |  |            |             |               |    |        |        |    |     |     |    |     |     |    |       |     |    |       |       |    |       |       |   |
| <u>Age</u>                                     | <u>Male</u>   | <u>Female</u>                  |  |  |                               |  |  |            |             |               |    |        |        |    |     |     |    |     |     |    |       |     |    |       |       |    |       |       |   |
| 50   | \$ 586  | \$ 763                         |  |  |                               |  |  |            |             |               |    |        |        |    |     |     |    |     |     |    |       |     |    |       |       |    |       |       |   |
| 55   | 758   | 777                            |  |  |                               |  |  |            |             |               |    |        |        |    |     |     |    |     |     |    |       |     |    |       |       |    |       |       |   |
| 60   | 963   | 829                            |  |  |                               |  |  |            |             |               |    |        |        |    |     |     |    |     |     |    |       |     |    |       |       |    |       |       |   |
| 65   | 1,177   | 987                            |  |  |                               |  |  |            |             |               |    |        |        |    |     |     |    |     |     |    |       |     |    |       |       |    |       |       |   |
| 70   | 1,492   | 1,215                          |  |  |                               |  |  |            |             |               |    |        |        |    |     |     |    |     |     |    |       |     |    |       |       |    |       |       |   |
| 75   | 1,801   | 1,454                          |  |  |                               |  |  |            |             |               |    |        |        |    |     |     |    |     |     |    |       |     |    |       |       |    |       |       |   |



**ACTUARIAL ASSUMPTIONS**

| <b>Assumption</b>                                       | <b>June 30, 2012 Valuation</b>  | <b>June 30, 2013 Valuation</b> |  |  |                           |  |  |            |             |               |       |     |     |       |     |     |       |     |     |       |      |      |       |      |      |       |      |      |       |      |      |  |
|---|---|--------------------------------|--|--|---------------------------|--|--|------------|-------------|---------------|-------|-----|-----|-------|-----|-----|-------|-----|-----|-------|------|------|-------|------|------|-------|------|------|-------|------|------|--|
| <p>■ State Relative Age-Related Claims Cost Factors</p> | <table border="0" style="margin-left: 20px;"> <tr> <td colspan="3" style="text-align: center;">HMO Choice</td> </tr> <tr> <td colspan="3" style="text-align: center;"><u>Retiree and Spouse</u></td> </tr> <tr> <td style="text-align: center;"><u>Age</u></td> <td style="text-align: center;"><u>Male</u></td> <td style="text-align: center;"><u>Female</u></td> </tr> <tr> <td style="text-align: center;">50-55</td> <td style="text-align: center;">51%</td> <td style="text-align: center;">71%</td> </tr> <tr> <td style="text-align: center;">55-60</td> <td style="text-align: center;">66%</td> <td style="text-align: center;">73%</td> </tr> <tr> <td style="text-align: center;">60-65</td> <td style="text-align: center;">83%</td> <td style="text-align: center;">80%</td> </tr> <tr> <td style="text-align: center;">65-70</td> <td style="text-align: center;">100%</td> <td style="text-align: center;">100%</td> </tr> <tr> <td style="text-align: center;">70-75</td> <td style="text-align: center;">130%</td> <td style="text-align: center;">122%</td> </tr> <tr> <td style="text-align: center;">75-80</td> <td style="text-align: center;">151%</td> <td style="text-align: center;">144%</td> </tr> <tr> <td style="text-align: center;">80-85</td> <td style="text-align: center;">160%</td> <td style="text-align: center;">160%</td> </tr> </table> <ul style="list-style-type: none"> <li>• Used to allocate average net claims cost by age and gender</li> </ul> | HMO Choice                     |  |  | <u>Retiree and Spouse</u> |  |  | <u>Age</u> | <u>Male</u> | <u>Female</u> | 50-55 | 51% | 71% | 55-60 | 66% | 73% | 60-65 | 83% | 80% | 65-70 | 100% | 100% | 70-75 | 130% | 122% | 75-80 | 151% | 144% | 80-85 | 160% | 160% | <ul style="list-style-type: none"> <li>• Same</li> </ul> |
| HMO Choice  |   |                                |  |  |                           |  |  |            |             |               |       |     |     |       |     |     |       |     |     |       |      |      |       |      |      |       |      |      |       |      |      |  |
| <u>Retiree and Spouse</u>                               |   |                                |  |  |                           |  |  |            |             |               |       |     |     |       |     |     |       |     |     |       |      |      |       |      |      |       |      |      |       |      |      |  |
| <u>Age</u>  | <u>Male</u>   | <u>Female</u>                  |  |  |                           |  |  |            |             |               |       |     |     |       |     |     |       |     |     |       |      |      |       |      |      |       |      |      |       |      |      |  |
| 50-55   | 51%   | 71%                            |  |  |                           |  |  |            |             |               |       |     |     |       |     |     |       |     |     |       |      |      |       |      |      |       |      |      |       |      |      |  |
| 55-60   | 66%   | 73%                            |  |  |                           |  |  |            |             |               |       |     |     |       |     |     |       |     |     |       |      |      |       |      |      |       |      |      |       |      |      |  |
| 60-65   | 83%   | 80%                            |  |  |                           |  |  |            |             |               |       |     |     |       |     |     |       |     |     |       |      |      |       |      |      |       |      |      |       |      |      |  |
| 65-70   | 100%  | 100%                           |  |  |                           |  |  |            |             |               |       |     |     |       |     |     |       |     |     |       |      |      |       |      |      |       |      |      |       |      |      |  |
| 70-75   | 130%  | 122%                           |  |  |                           |  |  |            |             |               |       |     |     |       |     |     |       |     |     |       |      |      |       |      |      |       |      |      |       |      |      |  |
| 75-80   | 151%  | 144%                           |  |  |                           |  |  |            |             |               |       |     |     |       |     |     |       |     |     |       |      |      |       |      |      |       |      |      |       |      |      |  |
| 80-85   | 160%  | 160%                           |  |  |                           |  |  |            |             |               |       |     |     |       |     |     |       |     |     |       |      |      |       |      |      |       |      |      |       |      |      |  |



**ACTUARIAL ASSUMPTIONS**

| <b>Assumption</b>                    | <b>June 30, 2012 Valuation</b>  | <b>June 30, 2013 Valuation</b> |                 |               |                 |  |             |               |             |               |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |  |
|--------------------------------------|---|--------------------------------|-----------------|---------------|-----------------|--|-------------|---------------|-------------|---------------|----|-------|-------|-------|-------|----|-------|-------|-------|-------|----|-------|-------|-------|-------|----|-------|-------|-------|-------|----|-------|-------|-------|-------|----|-------|-------|-------|-------|----|-------|-------|-------|-------|----|-------|-------|-------|-------|----|-------|-------|-------|-------|----|-------|-------|-------|-------|----|-------|-------|-------|-------|--|
| <p>■ Mortality for Healthy Lives</p> | <ul style="list-style-type: none"> <li>• MainePERS 6/30/11 valuation assumption                             <ul style="list-style-type: none"> <li>➢ State, Legislative &amp; Judicial - RP2000 projected to 2015 using Scale AA</li> <li>➢ Teachers - RP2000 projected to 2015 using Scale AA setback 2 years</li> </ul> </li> </ul> <table border="1" style="margin-left: 40px; border-collapse: collapse; width: 80%;"> <thead> <tr> <th rowspan="2"><u>Age</u></th> <th colspan="2"><u>State</u></th> <th colspan="2"><u>Teachers</u></th> </tr> <tr> <th><u>Male</u></th> <th><u>Female</u></th> <th><u>Male</u></th> <th><u>Female</u></th> </tr> </thead> <tbody> <tr><td>20</td><td>0.03%</td><td>0.01%</td><td>0.02%</td><td>0.02%</td></tr> <tr><td>25</td><td>0.03%</td><td>0.02%</td><td>0.03%</td><td>0.02%</td></tr> <tr><td>30</td><td>0.04%</td><td>0.02%</td><td>0.04%</td><td>0.02%</td></tr> <tr><td>35</td><td>0.07%</td><td>0.04%</td><td>0.06%</td><td>0.03%</td></tr> <tr><td>40</td><td>0.10%</td><td>0.06%</td><td>0.09%</td><td>0.05%</td></tr> <tr><td>45</td><td>0.12%</td><td>0.09%</td><td>0.11%</td><td>0.07%</td></tr> <tr><td>50</td><td>0.16%</td><td>0.13%</td><td>0.15%</td><td>0.11%</td></tr> <tr><td>55</td><td>0.27%</td><td>0.24%</td><td>0.22%</td><td>0.18%</td></tr> <tr><td>60</td><td>0.53%</td><td>0.47%</td><td>0.41%</td><td>0.36%</td></tr> <tr><td>65</td><td>1.03%</td><td>0.90%</td><td>0.81%</td><td>0.71%</td></tr> <tr><td>70</td><td>1.77%</td><td>1.55%</td><td>1.45%</td><td>1.25%</td></tr> </tbody> </table> | <u>Age</u>                     | <u>State</u>    |               | <u>Teachers</u> |  | <u>Male</u> | <u>Female</u> | <u>Male</u> | <u>Female</u> | 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% | <ul style="list-style-type: none"> <li>• Same for MainePERS 6/30/12 valuation</li> </ul> |
| <u>Age</u>                           | <u>State</u>  |                                | <u>Teachers</u> |               |                 |  |             |               |             |               |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |  |
|                                      | <u>Male</u>   | <u>Female</u>                  | <u>Male</u>     | <u>Female</u> |                 |  |             |               |             |               |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |  |
| 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%         |                 |  |             |               |             |               |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |    |       |       |       |       |  |



**ACTUARIAL ASSUMPTIONS**

| <b>Assumption</b>                     | <b>June 30, 2012 Valuation</b>  | <b>June 30, 2013 Valuation</b> |                             |  |             |               |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |  |
|---------------------------------------|---|--------------------------------|-----------------------------|--|-------------|---------------|----|-------|-------|----|-------|-------|----|-------|-------|----|-------|-------|----|-------|-------|----|-------|-------|----|-------|-------|----|-------|-------|----|-------|-------|----|-------|-------|--|
| <p>■ Mortality for Disabled Lives</p> | <ul style="list-style-type: none"> <li>• MainePERS 6/30/11 valuation assumption</li> </ul> <table border="1" style="margin-left: 40px; border-collapse: collapse; width: 80%;"> <thead> <tr> <th rowspan="2"><u>Age</u></th> <th colspan="2"><u>State &amp; Teachers</u></th> </tr> <tr> <th><u>Male</u></th> <th><u>Female</u></th> </tr> </thead> <tbody> <tr><td>25</td><td>0.92%</td><td>0.72%</td></tr> <tr><td>30</td><td>1.12%</td><td>0.89%</td></tr> <tr><td>35</td><td>1.34%</td><td>1.09%</td></tr> <tr><td>40</td><td>1.60%</td><td>1.26%</td></tr> <tr><td>45</td><td>1.93%</td><td>1.44%</td></tr> <tr><td>50</td><td>2.36%</td><td>1.65%</td></tr> <tr><td>55</td><td>2.95%</td><td>1.91%</td></tr> <tr><td>60</td><td>3.62%</td><td>2.26%</td></tr> <tr><td>65</td><td>4.46%</td><td>2.72%</td></tr> <tr><td>70</td><td>5.76%</td><td>3.31%</td></tr> </tbody> </table> | <u>Age</u>                     | <u>State &amp; Teachers</u> |  | <u>Male</u> | <u>Female</u> | 25 | 0.92% | 0.72% | 30 | 1.12% | 0.89% | 35 | 1.34% | 1.09% | 40 | 1.60% | 1.26% | 45 | 1.93% | 1.44% | 50 | 2.36% | 1.65% | 55 | 2.95% | 1.91% | 60 | 3.62% | 2.26% | 65 | 4.46% | 2.72% | 70 | 5.76% | 3.31% | <ul style="list-style-type: none"> <li>• Same for MainePERS 6/30/12 valuation</li> </ul> |
| <u>Age</u>                            | <u>State &amp; Teachers</u>   |                                |                             |  |             |               |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |  |
|                                       | <u>Male</u>   | <u>Female</u>                  |                             |  |             |               |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |  |
| 25                                    | 0.92%   | 0.72%                          |                             |  |             |               |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |  |
| 30                                    | 1.12%   | 0.89%                          |                             |  |             |               |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |  |
| 35                                    | 1.34%   | 1.09%                          |                             |  |             |               |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |  |
| 40                                    | 1.60%   | 1.26%                          |                             |  |             |               |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |  |
| 45                                    | 1.93%   | 1.44%                          |                             |  |             |               |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |  |
| 50                                    | 2.36%   | 1.65%                          |                             |  |             |               |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |  |
| 55                                    | 2.95%   | 1.91%                          |                             |  |             |               |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |  |
| 60                                    | 3.62%   | 2.26%                          |                             |  |             |               |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |  |
| 65                                    | 4.46%   | 2.72%                          |                             |  |             |               |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |  |
| 70                                    | 5.76%   | 3.31%                          |                             |  |             |               |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |    |       |       |  |



**ACTUARIAL ASSUMPTIONS**

| <b>Assumption</b> | <b>June 30, 2012 Valuation</b>           | <b>June 30, 2013 Valuation</b>         |                 |
|-------------------|--|--|-----------------|
| ■ Termination     | • MainePERS 6/30/11 valuation assumption | • Same for MainePERS 6/30/12 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%                                   |                 |



**ACTUARIAL ASSUMPTIONS**

| <b>Assumption</b>      | <b>June 30, 2012 Valuation</b>           | <b>June 30, 2013 Valuation</b>         |                 |                                   |
|------------------------|--|--|-----------------|-----------------------------------|
| ■ Disability Incidence | • MainePERS 6/30/11 valuation assumption | • Same for MainePERS 6/30/12 valuation |                 |                                   |
|                        | <u>Age</u>                               | <u>State</u>                           | <u>Teachers</u> | <u>Legislative &amp; Judicial</u> |
|                        | 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%                              |



**ACTUARIAL ASSUMPTIONS**

| <b>Assumption</b>  | <b>June 30, 2012 Valuation</b>  | <b>June 30, 2013 Valuation</b> |               |               |               |               |
|--|---|--------------------------------|---------------|---------------|---------------|---------------|
| <b>■ Service Retirement - State Regular Plan Adjusted MainePERS Assumption</b> | <b>• MainePERS 2010 Experience Study Tier 1 assumption*</b>   | <b>• Same</b>                  |               |               |               |               |
|  | <u>Pension</u>  |                                | <u>OPEB</u>   |               |               |               |
|  | <u>Age</u>  |                                | <u>Tier 1</u> | <u>Tier 1</u> | <u>Tier 2</u> | <u>Tier 3</u> |
|  | 45  |                                | 1.0%          | 1.0%          | 1.0%          | 1.0%          |
|  | 50  |                                | 7.5%          | 7.5%          | 7.5%          | 1.0%          |
|  | 55  |                                | 7.5%          | 6.6%          | 6.5%          | 7.5%          |
|  | 56  |                                | 10.0%         | 9.0%          | 6.2%          | 7.1%          |
|  | 57  |                                | 14.0%         | 12.7%         | 5.8%          | 6.6%          |
|  | 58  |                                | 15.0%         | 13.6%         | 8.0%          | 6.1%          |
|  | 59  |                                | 23.0%         | 21.0%         | 11.4%         | 5.5%          |
|  | 60  |                                | 30.0%         | 36.3%         | 12.4%         | 5.0%          |
|  | 61  |                                | 30.0%         | 30.0%         | 19.3%         | 7.0%          |
|  | 62  |                                | 27.0%         | 27.0%         | 41.6%         | 10.3%         |
|  | 63  |                                | 27.0%         | 27.0%         | 30.0%         | 11.3%         |
|  | 64  |                                | 25.0%         | 25.0%         | 27.0%         | 17.8%         |
| 65   | 25.0%   | 25.0%                          | 27.0%         | 46.1%         |               |               |
| 70   | 100%  | 100%                           | 100%          | 100%          |               |               |
|  | * Tier 1 rates set back 2 years for Tier 2 and 5 years for Tier 3 and adjusted for OPEB as stated below |                                |               |               |               |               |



**ACTUARIAL ASSUMPTIONS**

| <b>Assumption</b>  | <b>June 30, 2012 Valuation</b>  | <b>June 30, 2013 Valuation</b> |               |               |               |               |
|--|---|--------------------------------|---------------|---------------|---------------|---------------|
| <b>■ Service Retirement - Teachers Adjusted MainePERS Assumption</b> | <b>• MainePERS 2010 Experience Study Tier 1 assumption*</b>   | <b>• Same</b>                  |               |               |               |               |
|  | <u>Pension</u>  |                                | <u>OPEB</u>   |               |               |               |
|  | <u>Age</u>  |                                | <u>Tier 1</u> | <u>Tier 1</u> | <u>Tier 2</u> | <u>Tier 3</u> |
|  | 45  |                                | 1.8%          | 1.8%          | 1.8%          | 1.8%          |
|  | 50  |                                | 3.9%          | 3.9%          | 2.9%          | 1.8%          |
|  | 55  |                                | 10.6%         | 9.4%          | 4.5%          | 3.9%          |
|  | 56  |                                | 11.6%         | 10.4%         | 4.8%          | 3.7%          |
|  | 57  |                                | 12.9%         | 11.7%         | 8.3%          | 4.1%          |
|  | 58  |                                | 14.4%         | 13.2%         | 9.3%          | 4.1%          |
|  | 59  |                                | 20.0%         | 18.3%         | 10.6%         | 4.3%          |
|  | 60  |                                | 22.5%         | 29.0%         | 12.0%         | 7.2%          |
|  | 61  |                                | 23.0%         | 23.0%         | 16.9%         | 8.2%          |
|  | 62  |                                | 25.0%         | 25.0%         | 34.4%         | 9.5%          |
|  | 63  |                                | 26.0%         | 26.0%         | 23.0%         | 11.0%         |
|  | 64  |                                | 27.0%         | 27.0%         | 25.0%         | 15.6%         |
| 65   | 30.0%   | 30.0%                          | 26.0%         | 39.1%         |               |               |
| 70   | 100%  | 100%                           | 100%          | 100%          |               |               |
|  | * Tier 1 rates set back 2 years for Tier 2 and 5 years for Tier 3 and adjusted for OPEB as stated below |                                |               |               |               |               |



**ACTUARIAL ASSUMPTIONS**

| <b>Assumption</b>   | <b>June 30, 2012 Valuation</b>  | <b>June 30, 2013 Valuation</b> |               |               |               |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    |    |    |     |    |    |    |     |     |    |    |     |     |    |    |     |     |    |     |    |     |    |     |    |     |    |     |     |     |    |     |     |     |    |     |     |    |  |
|---|---|--------------------------------|---------------|---------------|---------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|----|----|----|-----|----|----|----|-----|-----|----|----|-----|-----|----|----|-----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|-----|-----|----|-----|-----|-----|----|-----|-----|----|--|
| <ul style="list-style-type: none"> <li>■ Service Retirement State Regular Plan and Teachers OPEB Assumption Adjustment</li> </ul> | <ul style="list-style-type: none"> <li>• Retirement rates above include an additional percentage of retirees who defer retirement until NRA since no cash subsidy before NRA</li> </ul> <table border="1" style="margin-left: 20px;"> <thead> <tr> <th><u>Age</u></th> <th><u>Tier 1</u></th> <th><u>Tier 2</u></th> <th><u>Tier 3</u></th> </tr> </thead> <tbody> <tr><td>51</td><td>2%</td><td>0%</td><td>0%</td></tr> <tr><td>52</td><td>4%</td><td>0%</td><td>0%</td></tr> <tr><td>53</td><td>6%</td><td>4%</td><td>0%</td></tr> <tr><td>54</td><td>8%</td><td>8%</td><td>0%</td></tr> <tr><td>55</td><td>10%</td><td>12%</td><td>0%</td></tr> <tr><td>56</td><td>8%</td><td>16%</td><td>6%</td></tr> <tr><td>57</td><td>6%</td><td>20%</td><td>12%</td></tr> <tr><td>58</td><td>4%</td><td>16%</td><td>18%</td></tr> <tr><td>59</td><td>2%</td><td>12%</td><td>24%</td></tr> <tr><td>60</td><td>n/a</td><td>8%</td><td>30%</td></tr> <tr><td>61</td><td>n/a</td><td>4%</td><td>24%</td></tr> <tr><td>62</td><td>n/a</td><td>n/a</td><td>18%</td></tr> <tr><td>63</td><td>n/a</td><td>n/a</td><td>12%</td></tr> <tr><td>64</td><td>n/a</td><td>n/a</td><td>6%</td></tr> </tbody> </table> | <u>Age</u>                     | <u>Tier 1</u> | <u>Tier 2</u> | <u>Tier 3</u> | 51 | 2% | 0% | 0% | 52 | 4% | 0% | 0% | 53 | 6% | 4% | 0% | 54 | 8% | 8% | 0% | 55 | 10% | 12% | 0% | 56 | 8% | 16% | 6% | 57 | 6% | 20% | 12% | 58 | 4% | 16% | 18% | 59 | 2% | 12% | 24% | 60 | n/a | 8% | 30% | 61 | n/a | 4% | 24% | 62 | n/a | n/a | 18% | 63 | n/a | n/a | 12% | 64 | n/a | n/a | 6% | <ul style="list-style-type: none"> <li>• Same</li> </ul> |
| <u>Age</u>  | <u>Tier 1</u>   | <u>Tier 2</u>                  | <u>Tier 3</u> |               |               |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    |    |    |     |    |    |    |     |     |    |    |     |     |    |    |     |     |    |     |    |     |    |     |    |     |    |     |     |     |    |     |     |     |    |     |     |    |  |
| 51  | 2%  | 0%                             | 0%            |               |               |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    |    |    |     |    |    |    |     |     |    |    |     |     |    |    |     |     |    |     |    |     |    |     |    |     |    |     |     |     |    |     |     |     |    |     |     |    |  |
| 52  | 4%  | 0%                             | 0%            |               |               |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    |    |    |     |    |    |    |     |     |    |    |     |     |    |    |     |     |    |     |    |     |    |     |    |     |    |     |     |     |    |     |     |     |    |     |     |    |  |
| 53  | 6%  | 4%                             | 0%            |               |               |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    |    |    |     |    |    |    |     |     |    |    |     |     |    |    |     |     |    |     |    |     |    |     |    |     |    |     |     |     |    |     |     |     |    |     |     |    |  |
| 54  | 8%  | 8%                             | 0%            |               |               |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    |    |    |     |    |    |    |     |     |    |    |     |     |    |    |     |     |    |     |    |     |    |     |    |     |    |     |     |     |    |     |     |     |    |     |     |    |  |
| 55  | 10%   | 12%                            | 0%            |               |               |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    |    |    |     |    |    |    |     |     |    |    |     |     |    |    |     |     |    |     |    |     |    |     |    |     |    |     |     |     |    |     |     |     |    |     |     |    |  |
| 56  | 8%  | 16%                            | 6%            |               |               |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    |    |    |     |    |    |    |     |     |    |    |     |     |    |    |     |     |    |     |    |     |    |     |    |     |    |     |     |     |    |     |     |     |    |     |     |    |  |
| 57  | 6%  | 20%                            | 12%           |               |               |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    |    |    |     |    |    |    |     |     |    |    |     |     |    |    |     |     |    |     |    |     |    |     |    |     |    |     |     |     |    |     |     |     |    |     |     |    |  |
| 58  | 4%  | 16%                            | 18%           |               |               |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    |    |    |     |    |    |    |     |     |    |    |     |     |    |    |     |     |    |     |    |     |    |     |    |     |    |     |     |     |    |     |     |     |    |     |     |    |  |
| 59  | 2%  | 12%                            | 24%           |               |               |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    |    |    |     |    |    |    |     |     |    |    |     |     |    |    |     |     |    |     |    |     |    |     |    |     |    |     |     |     |    |     |     |     |    |     |     |    |  |
| 60  | n/a   | 8%                             | 30%           |               |               |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    |    |    |     |    |    |    |     |     |    |    |     |     |    |    |     |     |    |     |    |     |    |     |    |     |    |     |     |     |    |     |     |     |    |     |     |    |  |
| 61  | n/a   | 4%                             | 24%           |               |               |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    |    |    |     |    |    |    |     |     |    |    |     |     |    |    |     |     |    |     |    |     |    |     |    |     |    |     |     |     |    |     |     |     |    |     |     |    |  |
| 62  | n/a   | n/a                            | 18%           |               |               |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    |    |    |     |    |    |    |     |     |    |    |     |     |    |    |     |     |    |     |    |     |    |     |    |     |    |     |     |     |    |     |     |     |    |     |     |    |  |
| 63  | n/a   | n/a                            | 12%           |               |               |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    |    |    |     |    |    |    |     |     |    |    |     |     |    |    |     |     |    |     |    |     |    |     |    |     |    |     |     |     |    |     |     |     |    |     |     |    |  |
| 64  | n/a   | n/a                            | 6%            |               |               |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    |    |    |     |    |    |    |     |     |    |    |     |     |    |    |     |     |    |     |    |     |    |     |    |     |    |     |     |     |    |     |     |     |    |     |     |    |  |



**ACTUARIAL ASSUMPTIONS**

| <b>Assumption</b>   | <b>June 30, 2012 Valuation</b>  | <b>June 30, 2013 Valuation</b>   |
|---|---|--|
| <ul style="list-style-type: none"> <li>■ Service Retirement Legislative and Judicial Plans</li> </ul> | <ul style="list-style-type: none"> <li>• Maine Legislative and Judicial 6/30/11 valuation assumptions</li> <li>• Legislative: Tier 1 - Age 60, Tier 2 - Age 62, Tier 3 - Age 65</li> <li>• Judicial: Tier 1 - Age 60, Tier 2 - 50%/year starting at 62, Tier 3 - 50%/year starting at 65</li> </ul> | <ul style="list-style-type: none"> <li>• Same for Maine Legislative and Judicial 6/30/12 valuations</li> </ul> |
| <ul style="list-style-type: none"> <li>■ Service Retirement State Special Plans</li> </ul>            | <ul style="list-style-type: none"> <li>• MainePERS 6/30/11 valuation assumption for all Special Plans                             <ul style="list-style-type: none"> <li>➢ 50% per year once eligibility for unreduced benefits is reached</li> </ul> </li> </ul>                                   | <ul style="list-style-type: none"> <li>• Same for MainePERS 6/30/12 valuation</li> </ul>                       |



**ACTUARIAL ASSUMPTIONS**

| <b>Assumption</b>   | <b>June 30, 2012 Valuation</b>   | <b>June 30, 2013 Valuation</b>                           |                 |            |              |    |    |              |    |    |              |    |    |                 |    |    |                 |    |    |                 |    |    |  |
|---|--|--|-----------------|------------|--------------|----|----|--------------|----|----|--------------|----|----|-----------------|----|----|-----------------|----|----|-----------------|----|----|--|
| <ul style="list-style-type: none"> <li>■ Expected Retirement Age</li> </ul> | <p align="center">Assumed</p> <table border="1"> <thead> <tr> <th><u>Group</u></th> <th><u>Hire Age</u></th> <th><u>ERA</u></th> </tr> </thead> <tbody> <tr> <td>State Tier 1</td> <td align="center">25</td> <td align="center">57</td> </tr> <tr> <td>State Tier 2</td> <td align="center">25</td> <td align="center">58</td> </tr> <tr> <td>State Tier 3</td> <td align="center">25</td> <td align="center">60</td> </tr> <tr> <td>Teachers Tier 1</td> <td align="center">25</td> <td align="center">58</td> </tr> <tr> <td>Teachers Tier 2</td> <td align="center">25</td> <td align="center">60</td> </tr> <tr> <td>Teachers Tier 3</td> <td align="center">25</td> <td align="center">62</td> </tr> </tbody> </table> | <u>Group</u>   | <u>Hire Age</u> | <u>ERA</u> | 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 | <ul style="list-style-type: none"> <li>• Same</li> </ul> |
| <u>Group</u>  | <u>Hire Age</u>  | <u>ERA</u>   |                 |            |              |    |    |              |    |    |              |    |    |                 |    |    |                 |    |    |                 |    |    |  |
| 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   |                 |            |              |    |    |              |    |    |              |    |    |                 |    |    |                 |    |    |                 |    |    |  |
| <ul style="list-style-type: none"> <li>■ Medicare Eligible Rate</li> </ul>  | <ul style="list-style-type: none"> <li>• Future retirees:                             <ul style="list-style-type: none"> <li>➢ Hired &lt; 4/1/86 - 75%</li> <li>➢ Hired ≥ 4/1/86 - 100%</li> </ul> </li> <li>• Current retirees &lt; 65 - 94%</li> <li>• Current retirees ≥ 65 - actual data (88% in Medicare Plans)</li> </ul>  | <ul style="list-style-type: none"> <li>• Same</li> </ul> |                 |            |              |    |    |              |    |    |              |    |    |                 |    |    |                 |    |    |                 |    |    |  |



**ACTUARIAL ASSUMPTIONS**

| <b>Assumption</b>  | <b>June 30, 2012 Valuation</b>  | <b>June 30, 2013 Valuation</b>                           |
|--|---|--|
| <ul style="list-style-type: none"> <li>■ Medical Plan at Retirement</li> </ul> | <ul style="list-style-type: none"> <li>• Medicare eligible:                             <ul style="list-style-type: none"> <li>➢ Current plan election &lt; 65</li> <li>➢ Medicare plan ≥ 65</li> </ul> </li> <li>• Non Medicare eligible                             <ul style="list-style-type: none"> <li>➢ Current plan election</li> </ul> </li> <li>• State employees have one plan option</li> </ul> | <ul style="list-style-type: none"> <li>• Same</li> </ul> |
| <ul style="list-style-type: none"> <li>■ Marital Status</li> </ul>             | <ul style="list-style-type: none"> <li>• Currently covered - based on current coverage election</li> <li>• Currently waived - 80%</li> </ul>  | <ul style="list-style-type: none"> <li>• Same</li> </ul> |





**ACTUARIAL ASSUMPTIONS**

| <b>Assumption</b>                    | <b>June 30, 2012 Valuation</b>   | <b>June 30, 2013 Valuation</b>                           |
|--------------------------------------|--|--|
| <p>■ Participation at Retirement</p> | <ul style="list-style-type: none"> <li>• State:                             <ul style="list-style-type: none"> <li>➢ Currently covered - 95% for future retirees and 20% for spouses</li> <li>➢ 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</li> </ul> </li> <li>• Teachers:                             <ul style="list-style-type: none"> <li>➢ Currently covered - 75% for future retirees</li> <li>➢ Currently waived - 1/3 will elect medical</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Same</li> </ul> |



**ACTUARIAL ASSUMPTIONS**

| <b>Assumption</b>            | <b>June 30, 2012 Valuation</b>   | <b>June 30, 2013 Valuation</b>                           |
|------------------------------|--|--|
| <p>■ Spouse Age</p>          | <ul style="list-style-type: none"> <li>• Current actives - males 3 years older than females</li> <li>• Current retirees - males 3 years older than females if no retiree spouse birth date provided</li> </ul>                         | <ul style="list-style-type: none"> <li>• Same</li> </ul> |
| <p>■ Ineligible Teachers</p> | <ul style="list-style-type: none"> <li>• Ineligible Teachers assumed equal to 10% of all Teachers</li> <li>• 1/3 of ineligible Teachers assumed to receive State contribution at retirement</li> <li>• Assumption per State</li> </ul> | <ul style="list-style-type: none"> <li>• Same</li> </ul> |



## ACTUARIAL ASSUMPTIONS

| Assumption                | June 30, 2012 Valuation   | June 30, 2013 Valuation  |
|---------------------------|---|--|
| <p>■ Data Assumptions</p> | <ul style="list-style-type: none"> <li>• 152 State employees missing hire dates - average service by age group</li> <li>• 101 State waived employees missing birth date - average age by service group</li> <li>• Ineligible State elected officials - assume none in data</li> <li>• Active employees with waived health insurance coverage - included in valuation</li> </ul> | <ul style="list-style-type: none"> <li>• 152 State employees missing hire dates - average service by age group</li> <li>• 101 State waived employees missing birth date - average age by service group</li> <li>• Ineligible State elected officials - assume none in data</li> <li>• Active employees with waived health insurance coverage - included in valuation</li> <li>• 9,647 waived Teachers missing school district - assume in rate band 4</li> </ul> |



## ACTUARIAL METHODS

| Method                             | June 30, 2012 Valuation   | June 30, 2013 Valuation                                  |
|------------------------------------|---|--|
| <p>■ Cost Method</p>               | <ul style="list-style-type: none"> <li>• Entry Age Normal</li> <li>• Normal Cost is a level percentage of payroll</li> </ul>  | <ul style="list-style-type: none"> <li>• Same</li> </ul> |
| <p>■ Actuarial Value of Assets</p> | <ul style="list-style-type: none"> <li>• Investment gains and losses spread over a 5-year period</li> <li>• Not less than 80% nor more than 120% of market value</li> </ul> | <ul style="list-style-type: none"> <li>• Same</li> </ul> |
| <p>■ Amortization Method</p>       | <ul style="list-style-type: none"> <li>• Level percent of payroll</li> </ul>  | <ul style="list-style-type: none"> <li>• Same</li> </ul> |



**ACTUARIAL METHODS**

| <b>Method</b>  | <b>June 30, 2012 Valuation</b>  | <b>June 30, 2013 Valuation</b>  |
|--|---|---|
| <ul style="list-style-type: none"> <li>■ Amortization Periods State Employees</li> </ul>               | <ul style="list-style-type: none"> <li>• 30-year fixed (closed) period from 6/30/07 for initial UAAL, assumption and plan changes (25 years remaining on 6/30/12)</li> <li>• 10-year fixed (closed) periods for experience gains and losses</li> <li>• Maximum 30-year combined period</li> </ul> | <ul style="list-style-type: none"> <li>• 30-year fixed (closed) period from 6/30/07 for initial UAAL, assumption and plan changes (24 years remaining on 6/30/13)</li> <li>• 10-year fixed (closed) periods for experience gains and losses</li> <li>• Maximum 30-year combined period</li> </ul> |
| <ul style="list-style-type: none"> <li>■ Amortization Periods Teachers and Ancillary Groups</li> </ul> | <ul style="list-style-type: none"> <li>• 30-year fixed (closed) period from 6/30/07 for initial UAAL, assumption and plan changes (25 years remaining on 6/30/12)</li> <li>• 15-year fixed (closed) periods for experience gains and losses</li> <li>• Maximum 30-year combined period</li> </ul> | <ul style="list-style-type: none"> <li>• 30-year fixed (closed) period from 6/30/07 for initial UAAL, assumption and plan changes (24 years remaining on 6/30/13)</li> <li>• 15-year fixed (closed) periods for experience gains and losses</li> <li>• Maximum 30-year combined period</li> </ul> |



**ACTUARIAL METHODS**

| <b>Method</b>   | <b>June 30, 2012 Valuation</b>  | <b>June 30, 2013 Valuation</b> |
|---|---|--------------------------------|
| <ul style="list-style-type: none"> <li>■ Implied Subsidy</li> </ul>     | <ul style="list-style-type: none"> <li>• Employer cost for allowing non-Medicare eligible retirees to participate at active rates</li> <li>• 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</li> <li>• 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</li> </ul> |                                |
| <ul style="list-style-type: none"> <li>■ Future New Entrants</li> </ul> | <ul style="list-style-type: none"> <li>• Valuation Results – closed group, no new hires</li> <li>• Projections – simplified open group projection:                             <ul style="list-style-type: none"> <li>➢ Actives – total pay increased with aggregate payroll assumption</li> <li>➢ Retirees – no additional retirees from new hires over projection period</li> </ul> </li> </ul>   |                                |



## DEFINITIONS

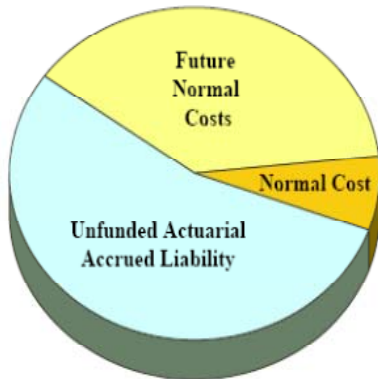
|   |   |
|---|---|
| <p>■ GASB 45<br/>Accrual<br/>Accounting</p> | <ul style="list-style-type: none"> <li>● Project future employer-provided benefit cash flow for current active employees and current retirees</li> <li>● Discount projected cash flow to valuation date using discount rate and actuarial assumptions to determine present value of benefits (PVB)</li> <li>● Discount rate is expected long-term return on plan assets</li> <li>● Allocate PVB to past, current, and future periods</li> <li>● Normal Cost is portion of PVB allocated to current fiscal year</li> <li>● Actuarial cost method used for valuation is Entry Age Normal Cost method which determines Normal Cost as a level percent of payroll</li> <li>● Actuarial Accrued Liability (AAL) is portion of PVB allocated to prior service with the employer</li> <li>● Unfunded AAL (UAAL) is AAL less Plan Assets</li> <li>● Assets must be in segregated and restricted trust to be considered Plan Assets for GASB 45</li> </ul> |
| <p>■ PayGo Cost</p>                         | <ul style="list-style-type: none"> <li>● Cash subsidy is employer pay-as-you-go benefit payments for retirees</li> <li>● Implied subsidy is difference between actual cost of retiree benefits and retiree premiums subsidized by active employee premiums</li> </ul>   |



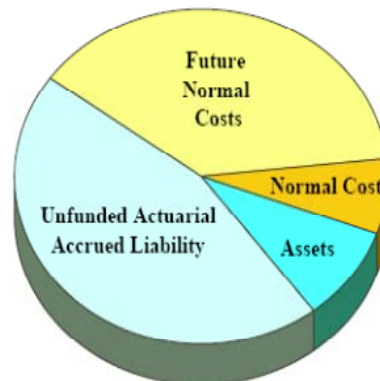
## DEFINITIONS

### 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: <ul style="list-style-type: none"><li>➢ Initial UAAL and AAL for plan, assumption, and method changes</li><li>➢ Experience gains and losses (difference between actual experience and that expected from assumptions)</li><li>➢ Contribution gains and losses (difference between ARC and actual contributions)</li></ul> |
| ■ Net OPEB Obligation (NOO)          | ● NOO is accumulated amounts expensed but not funded<br>● Net OPEB Asset if amounts funded exceed those expensed  |
| ■ Annual OPEB Cost (AOC)             | ● Expense for current period including: <ul style="list-style-type: none"><li>➢ ARC</li><li>➢ Interest on NOO</li><li>➢ Adjustment of NOO</li></ul> ● Adjustment of NOO prevents double counting of expense since ARCs include amortization of prior contribution gains and losses previously expensed  |



## DEFINITIONS



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