State of Maine Retirement Plans Update
Presented to Appropriations Committee
January 14, 2015
Information for Today
What does MainePERS do?
MainePERS Plans Update/Status
How Our Plans Compare to Others
How MainePERS is Managing Risk
Managing Risk in the Future
MainePERS 2015 Special Request Reports
  - ESG Policy
  - Special Plans
What does MainePERS do?

**MainePERS administers**

- State/Teacher Retirement Plan (State)
- Legislative Retirement Plan (State)
- Judicial Retirement Plans (State)
- Governor’s Retirement Plan (State)
- PLD Consolidated Plan (Participating Local Districts eligible by statute)
- Group Life Insurance Program
- MaineStart 401(a) and 457 Plans

**MainePERS invests**

- Trust fund monies for above listed plans
- State retiree health insurance trust fund
MainePERS Scope of Work

Governed by 8 member Board of Trustees

- Administration of plan benefits, including retirement, disability retirement, survivor benefits and group life insurance
- Actuarial assumptions for plan funding
- Investment of trust fund assets
- Supports legislature, state government, PLDs, members/retirees and the public with factual information about the plans
DB and DC Plan Description

**Defined benefit plan** - The member receives a monthly fixed benefit in retirement
  - The employer retains investment risk

**Defined contribution plan** - The participant makes or receives a fixed/variable contribution while working
  - The participant retains the investment risk
# DB and DC Plan Differences

<table>
<thead>
<tr>
<th></th>
<th>DB</th>
<th>DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Risk</td>
<td>Employer</td>
<td>Participant</td>
</tr>
<tr>
<td>Investment Skill</td>
<td>High (Institutional)</td>
<td>Low (Most participants)</td>
</tr>
<tr>
<td>Employer Budgets</td>
<td>Less predictable</td>
<td>Predictable</td>
</tr>
<tr>
<td>Member Budgeting for Retirement</td>
<td>More predictable</td>
<td>Less predictable</td>
</tr>
<tr>
<td>Member Planning for Retirement</td>
<td>No longevity challenges</td>
<td>Longevity uncertainty</td>
</tr>
<tr>
<td>Security in Retirement</td>
<td>Predictable income stream</td>
<td>Less predictable income stream</td>
</tr>
<tr>
<td>Member Budgeting during Retirement</td>
<td>More stable budgeting</td>
<td>Less predictable budgeting</td>
</tr>
</tbody>
</table>
How State Plan Funding Works

Member contribution + employer contributions + investment returns
- benefit payments = trust fund balance

Each year, the actuary determines what it costs to provide the benefits earned in the upcoming year (normal cost)

The actuary also calculates how much will be owed to each member for work through the end of the fiscal year and discounts it back to present value using the long-term investment earnings assumption (7.125%)

- This liability is compared to the actuarial value of assets on hand to determine the over/underfunding of the plan (UAL)

Normal cost and any UAL cost are converted to % to be applied to payroll throughout the year (contributions)

The employer and employee pay these costs as pre-determined
State/Teacher Sample Plan Benefit

Sample retiring State/Teacher employee

- Age 63
- Final average salary - $55,000
- Years of service credit - 18

\[ 18 \times 2\% \times 55,000 = \underline{19,800} \text{ / year} \]
\[ 19,800 / 12 = \underline{1,650} \text{ / month} \]
## Plan Updates at 6-30-14

<table>
<thead>
<tr>
<th></th>
<th>State/Teacher</th>
<th>Legislative</th>
<th>Judicial</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Actives</strong></td>
<td>39,669</td>
<td>181</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total Annual Benefits</strong></td>
<td>$659 M</td>
<td>$.29 M</td>
<td>$3.25 M</td>
</tr>
<tr>
<td><strong>Average Benefit</strong></td>
<td>$20,333</td>
<td>$1,860</td>
<td>$48,519</td>
</tr>
<tr>
<td><strong>Actuarial Assets</strong></td>
<td>$10.02 B</td>
<td>$10.78 M</td>
<td>$55.5 M</td>
</tr>
<tr>
<td><strong>Actuarial Liability</strong></td>
<td>$12.32 B</td>
<td>$7.50 M</td>
<td>$54.6 M</td>
</tr>
<tr>
<td><strong>Actuarial Funding Ratio</strong></td>
<td>81.3%</td>
<td>143.6%</td>
<td>101.6%</td>
</tr>
<tr>
<td><strong>Normal Cost Rate 2016</strong></td>
<td>4.07%</td>
<td>10.25%</td>
<td>15.32%</td>
</tr>
<tr>
<td><strong>UAL Rate - 2016</strong></td>
<td>12.55%</td>
<td>-(15.36)%</td>
<td>-(0.33)%</td>
</tr>
<tr>
<td><strong>Total Rate - 2016</strong></td>
<td>16.62%</td>
<td>-0-%</td>
<td>14.99%</td>
</tr>
<tr>
<td><strong>2016 Contribution</strong></td>
<td>$294.61 M</td>
<td>$0-</td>
<td>$1,023,533</td>
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</tbody>
</table>

1/14/15
State/Teacher Funding History
State/Teacher Contribution History
How Do Defined Benefit Plans become Underfunded?

Four ways a defined benefit plan can become underfunded or be at risk

1. The employer does not fully pay the annual cost calculated by the actuary
2. The employer grants more benefit enhancements than they can fund
3. Changes in actuarial experience factors such as life expectancy
4. The investment returns are lower than expected
The Exceptional Growth Path of the State/Teacher Plan Funding

A commitment to fully fund the State/Teacher Plan in the early 1990s was made by the Governor, Legislature and employees/retirees

1995 Constitutional amendment mitigated all of the ways a plan can become underfunded

1. The state is required to fully fund the normal costs each year
2. The 1995 UAL must be fully amortized by 2028
3. No new unfunded liabilities may be created
   - For example, any new benefit must be fully funded in the year it is awarded, and may not be amortized over time
4. Experience losses must be amortized over 10 years
   - This is why the 2008-09 recession impacted the State/Teacher Plan more severely than other states that amortize losses over 25-30 years, doubling the required State contribution until the 2011 changes were implemented
How MainePERS Invests

MainePERS is a long-term investor
We set a long-term asset allocation target
  - Considers yield and risk
We consider our greatest risk contribution rate volatility
  - Greater volatility creates more volatile employer contribution rates

MainePERS Long-Term Target Asset Allocation
December 31, 2013

June 30, 2014 Actual
- 32% domestic common stock
- 26% foreign common stock
- 24% domestic bonds
- 7% real estate
- 3% infrastructure
- 3% private equity
- 5% other
Investment Research and Decisions

11 Investment professionals on staff
- Advising Board of Trustees on strategic asset allocation
- Monitoring, researching, and performing due diligence on investments
- Tracking and monitoring investment performance
- Working with consultants

3 External Board of Trustee Consultants
- General investment consultant
- Private markets consultant
- Real estate consultant

Board of Trustees
- Approves asset allocation
- Monitors investment performance
- Participates in final due diligence on investments
- Final approval on investments
## Comparative Investment Returns
Demonstrates Market Volatility

<table>
<thead>
<tr>
<th></th>
<th>6/30/2009</th>
<th>6/30/10</th>
<th>6/30/11</th>
<th>6/30/12</th>
<th>6/30/13</th>
<th>6/30/14</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Year</td>
<td>-18.8%</td>
<td>11.1%</td>
<td>22.4%</td>
<td>0.6%</td>
<td>11.1%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Five Year</td>
<td>1.8%</td>
<td>1.8%</td>
<td>4.4%</td>
<td>1.5%</td>
<td>4.3%</td>
<td>12.2%</td>
</tr>
<tr>
<td>Ten Year</td>
<td>2.3%</td>
<td>2.5%</td>
<td>5.4%</td>
<td>6.3%</td>
<td>6.9%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Thirty Year</td>
<td>NA</td>
<td>9.4%</td>
<td>9.6%</td>
<td>9.7%</td>
<td>8.7%</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

7.25% Long-term Earnings Assumption
7.125% as of 6/30/14
How Do State Plans Compare to Detroit?

Detroit’s plan faced the significant problem of a declining active population due to a dramatic decrease in the size of the city and city personnel.

The auditors used new assumptions to calculate the liabilities, increasing them by approximately $3B:

- The auditors changed the earnings assumption from 8% to 7% (MainePERS uses 7.125%)
- The auditors used market value of assets instead of 7 year smoothing (MainePERS uses a conservative 3 year smoothing)
- When the liabilities were calculated, the auditors did not include the 2013 market gains

MainePERS uses similar methodology to the new (higher) methodology used to re-calculate Detroit’s higher liability
Summary

Like most retirement plans, large market fluctuations will create funding problems. Mechanisms are in place to mitigate economic downturns. Because they are defined benefit plans, the employer is still at risk for market fluctuations.
ESG Policy Report

In response to PL 2013, Chapter 602 Part C

- MainePERS created a task force with Environment, Social and Governance (ESG) experts to assist in the completion of an ESG Policy
- The task force identified the principles a public retirement system should meet
- Over 7 meetings assisted in creating a policy focused on enhancing ESG due diligence
- Approved by MainePERS Trustees 1/8/15
ESG Task Force Members

Hon. Richard A. Bennett
Hon. John Brautigam
Sandy Matheson (Chair)
Brian Rice - CalSTRS
Andrew Sawyer, MainePERS CIO
Cynthia Simon - Senior Mgr, CDP
Deborah Spaulding - Deputy CIO Connecticut
Special Plan Report

In response to P & S Law Chapter 30

- Determined the number of active MainePERS members in the requested Special Plan category
- Deferred writing implementing language until further direction
- Determined cost relating to specific request
- Provided written report to the Committee