Current State

- Most recent valuation date: 6/30/2017
- Funding ratio: 74.7%
- Unfunded Accrued Liability: $4.427 billion
- Employer Contribution Rates (for FY20):
  - Old Plan / New Plan: 24.66%
  - GSEPS: 21.64%
- Active Members and Payroll:
  - 60,906 (current: ~61,000)
  - $2.546 billion
- Retired Members / Beneficiaries and Payroll:
  - 49,475 (current: ~51,000)
  - $1.346 billion
Current State

- Key valuation assumptions:
  - Rate of Return / Discount Rate: 7.40%
    - Will be 7.3% for FY18 and future projections
    - Long-term target assumption 7.0%
  - Amortization Period: 25-year closed
  - Amortization Method: Level Dollar
  - Asset Smoothing: 5 years
  - Active Member Payroll: 6.8% growth
- Investment return, FY18: 9.2%
- Investment return, FYTD19: ~1.5% @ 2/15/19
  - Low point of (-8%) in mid-December
Recent History

Funding Ratio

Recent History

Contribution Rates

- OP_NP
- GSEPS
Recent History
Projections – Baseline

7.30% return on investments in FY 2019
7.30% return on investments in all future years

100% funded ratio projected as of 6/30/2032 valuation
Twenty Years

7.3% discount rate and assumed RoR, all years
Includes 9.2% RoR for FY18
Includes 13th and 14th checks paid 7/1/2018 and 1/1/2019

100% funded ratio projected as of 6/30/2032 valuation
Scenario “S-1”

Changes from Baseline:
0.00% return on investments in FY 2019
7.30% return on investments in all future years

100% funded ratio projected as of 6/30/2036 valuation (S-1)
No change in Contribution Rates
Scenario “S-2”

Changes from Baseline:

(-5.00%) return on investments in FY 2019
7.30% return on investments in all future years

100% funded ratio projected as of 6/30/2038 valuation (S-2)
Contribution Rates final increase of 2.27% ($59 million per year)
Scenario “S-3”

Changes from Baseline:

(-10.00%) return on investments in FY 2019

7.30% return on investments in all future years

100% funded ratio projected as of 6/30/2039 valuation (S-3)

Contribution Rates final increase of 5.27% ($137 million per year)
## Post-Retirement Adjustments – Costs

<table>
<thead>
<tr>
<th>COLA Type</th>
<th>Assumptions ($2.6 billion payroll)</th>
<th>Unfunded Liability (UAL) Change</th>
<th>Amount Amortized over 25 Years</th>
<th>Increase in Employer Contribution Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>3%</td>
<td>No retirement income cap</td>
<td>+$375 million</td>
<td>$33.1 million per year</td>
<td>+1.27%</td>
</tr>
<tr>
<td>1%</td>
<td>No retirement income cap</td>
<td>+$125 million</td>
<td>$11 million per year</td>
<td>+0.42%</td>
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<tr>
<td>3%</td>
<td>Only on income up to $30,000</td>
<td>+$278 million</td>
<td>$24.5 million per year</td>
<td>+0.94%</td>
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<tr>
<td>3%, one-time (“13th check”)</td>
<td>Only on income up to $30,000</td>
<td>+$30.6 million</td>
<td>$2.7 million per year</td>
<td>+0.11%</td>
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<tr>
<td>1%, one-time (“13th check”)</td>
<td>Only on income up to $30,000</td>
<td>+$10.2 million</td>
<td>$900,000 per year</td>
<td>+0.04%</td>
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<tr>
<td>Prefunded 1%</td>
<td>No retirement income cap</td>
<td>+1.26 billion</td>
<td>$111.1 million per year</td>
<td>+4.27%</td>
</tr>
</tbody>
</table>
Next Steps

- Currently working on draft actuarial valuation reports

- Annual Board meetings (all systems): April 18, 2019
  - Review and approve valuation reports
  - Consider payment of post-retirement adjustments

- I’m available, as always, to answer questions