NORTH CAROLINA COMMITTEE ON ACTUARIAL VALUATION OF RETIRED EMPLOYEES’ HEALTH BENEFITS

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OPEB Actuarial Valuation Update Topics

1. Valuation Purpose
2. Valuation Process
3. Key Valuation Calculation Components (Methods and Assumptions)
4. Other Items and Committee Concerns
5. Data Needed for Valuation
6. Timing—Milestones
Valuation Purpose

➢ GASB 45 (GASB 75 next year)
  • Measure State Obligations to provide other postemployment benefits (OPEB)
  • Determine the Annual Required Contribution (ARC) and annual OPEB cost (AOC) for fiscal 2017, and the basis for the Actuarially Determined Contribution (ADC) and OPEB Expense for fiscal 2018
  • Provide exhibits useful for preparing required financial statement recognition and disclosure items
  • Provide exhibits useful for OPEB plan reporting (GASB 74 this year)

➢ Financial Projections
  • Project assets, obligations, benefit payments, contributions for up to ten future years

➢ Valuation Measurement Dates
  • Prior valuation: December 31, 2015 (the “2015 valuation”)
  • This valuation: December 31, 2016 (the “2016 valuation”)
Fiscal 2017 OPEB Expense

- Still based on GASB 45
- We will measure the expense for fiscal 2018 on a different method based on this valuation as well

<table>
<thead>
<tr>
<th>GASB 45 Balance Sheet</th>
<th>GASB 75 Balance Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/30/2016 Net OPEB Obligation</td>
<td>6/30/2016 Net OPEB Liability</td>
</tr>
<tr>
<td>Less Employer Contributions</td>
<td>Less Employer Contributions</td>
</tr>
<tr>
<td>Plus Expense</td>
<td>Plus Expense</td>
</tr>
<tr>
<td></td>
<td>Plus Deferrals</td>
</tr>
<tr>
<td>6/30/2017 Net OPEB Obligation</td>
<td>6/30/2017 Net OPEB Liability</td>
</tr>
<tr>
<td></td>
<td>Recognized one year in arrears</td>
</tr>
</tbody>
</table>
GASB 74/75 Implementation Timeline

GASB 74: Plan Reporting for the Year, Measurement and Reporting Date at FYE

FYE 6/30

- 6-30-16
- 12-31-16 Valuation
- 6-30-17 Measurement Reporting Date
- 6-30-18

GASB 75: Employer Reporting for Fiscal 2018

FYE 6/30

- 12-31-15
- 6-30-16 Valuation
- 12-31-16 Valuation Basis for 6-30-16
- 6-30-17 Valuation Basis for 6-30-17
- 12-31-17 Reporting Date
- 6-30-18
Valuation Process

OPEB VALUATION BASICS

Member Data

- Federal & State Requirements
- Plan Provisions
- GASB Rules

Budgeting Methods
- Actuarial Cost
- Asset Valuation
- Amortization

Financial Data
- Claims Experience
- Medicare Provisions
- Actuarial Assumptions

Actuarial Valuation

RESULTS
Key Valuation Calculation Components

▶ Budgeting Methods for Expense
  • Actuarial cost method
    – Projected Unit Credit for fiscal 2017
    – Entry Age Normal for fiscal 2018
  • Asset valuation method
    – Market Value for fiscal 2017
    – Gains and losses smoothed for fiscal 2018 expense
  • Unfunded Liability amortization method
    – 30-Year open level percent of pay for fiscal 2017
    – Plan changes are immediate, asset gains and losses are over 5 years, and other changes are over 6 years for fiscal 2018
  • Discount Rate
    – Based on funding policy (and expected long-term return) for fiscal 2017
    – For GASB 74/75, the 20-yr General Obligation Bond Index at the June 30 Measurement Date
  • Some changes in the valuation of benefit liabilities with regard to administrative expenses and the ACA Excise Tax
Economic Assumptions

- Discount rate
  - 2015 valuation: 4.25%
  - **2016 valuation:** Discussion

- Trend rates
  - **2015 valuation:**
    - 6.00% ➞ 5.00% by 2020 for medical coverages
    - 10.50% ➞ 5.00% by 2028 for prescription drug coverages
    - 7.00% ➞ 5.00% by 2024 for Medicare Advantage coverages
  - **2016 valuation**
    - Beginning trend will be determined based on plan changes and calendar 2018 premiums
    - **Suggested** ultimate trend is 4.50%
    - Interim values are coordinated with short-term budget projections
    - Higher initial prescription drug trend is driven by specialty drug, compounded medications and an ever-increasing pipeline
Key Valuation Calculation Components

- Inflation
  - 2015 valuation: 3.50%
  - 2016 valuation: Discussion

- Salary growth
  - New for GASB 74/75

- Payroll growth
  - 2015 valuation: 3.50%
  - 2016 valuation: Discussion (used 2.75% for GASB 68)

- Expense rates
  - 2015 valuation – $301 per participant
  - 2016 valuation – based on recent experience

- Employer contribution growth (for projections)
  - 2015 valuation: Track payroll growth
  - 2016 valuation: Track payroll growth -- assuming 5.82% of pay State contribution
Key Valuation Calculation Components continued

- Salary growth
  - Mirrors the Pension Valuation
  - Separate rates based on job classification and service

<table>
<thead>
<tr>
<th>Service</th>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>Ultimate</th>
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</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>7.55%</td>
<td>6.05%</td>
<td>5.10%</td>
<td>4.35%</td>
<td>3.65%</td>
<td>3.55%</td>
</tr>
<tr>
<td>General</td>
<td>5.50%</td>
<td>4.05%</td>
<td>4.00%</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
</tr>
<tr>
<td>Law Enforcement</td>
<td>8.10%</td>
<td>6.10%</td>
<td>4.40%</td>
<td>3.95%</td>
<td>3.65%</td>
<td>3.50%</td>
</tr>
</tbody>
</table>
Key Valuation Calculation Components continued

➢ Demographic Assumptions—Derived From Pension Valuations
  • Pre-retirement mortality
  • Post-retirement mortality
  • Turnover
  • Disability
  • Retirement
  • Percent married
  • Spouse age difference

➢ Last experience update in 2015 based on five years ending December 31, 2014
Health Assumptions

- Claims costs
  - 2015 valuation: Based on experience analysis (adjusted for plan changes)
  - 2016 valuation: Based on experience analysis (adjusted for plan changes)

- Participation rates
  - Retiree – 100%
  - Spouse – 10%

- Expected Medicare status
  - 100% eligible
Key Valuation Calculation Components continued

> Expected Coverage Election

- Prior valuation short-term financial projections:

<table>
<thead>
<tr>
<th>Year</th>
<th>Non-Medicare Retiree</th>
<th>Medicare Retiree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Traditional</td>
<td>CDHP</td>
</tr>
<tr>
<td>2016</td>
<td>37.0%</td>
<td>2.4%</td>
</tr>
<tr>
<td>2017</td>
<td>34.5%</td>
<td>5.6%</td>
</tr>
<tr>
<td>2018</td>
<td>33.5%</td>
<td>6.1%</td>
</tr>
<tr>
<td>2019</td>
<td>32.5%</td>
<td>6.6%</td>
</tr>
<tr>
<td>2020</td>
<td>31.5%</td>
<td>7.1%</td>
</tr>
<tr>
<td>2021</td>
<td>30.5%</td>
<td>7.6%</td>
</tr>
</tbody>
</table>

- 2016 valuation – Migration assumption will be simplified versions of the assumptions used for financial projections
Key Valuation Calculation Components  

- Morbidity
  - 2015 valuation—Segal table
  - 2016 valuation—Segal table

- Retiree contributions
  - 2015 valuation: Grow with trend
  - 2016 valuation: Grow with trend

- 2020 Excise tax exposure
  - 2015 valuation: No provision
  - 2016 valuation: Required for GASB 75
Key Valuation Calculation Components continued

➢ Excise tax details
  • Effective 2020
  • 40% tax on value in excess of thresholds
  • Thresholds
    – $10,900 individual
    – $29,400 family
    – Add $1,650 individual ($3,450 family) for certain Early retirees and high-risk professions
  • Most plans will eventually owe the tax
  • Accounting for this tax is optional under GASB 45 but will be required under the new GASB 75

➢ Plan changes
  • 2017 were included in the prior valuation
  • We will reflect the 2018 changes in this valuation by adjusting the Trend
Other Items and Committee Concerns

➤ Questions or concerns from previous valuations of which Segal should be aware

➤ Other State changes or directions that need to be reflected in this valuation
Data Needed for Valuation

- Census (Retirement Plan Valuation Data received)
- Health Plan Participation (SHP-SAS)
- Claims (SHP-SAS & Claims Reports)
- Enrollment (SHP-SAS & Reports)
- Expenses
- Premiums
- Retiree Contributions
- Employee Contributions
- 12/31/2016 & 6/30/2017 Trust Statements (Retirement System)
- Summary of Plan Provisions
Timing—Milestones

➤ 6/13—meeting with Actuarial Committee
➤ 6/29—all non-financial data acquired by Segal
➤ 8/08—all financial data acquired by Segal
➤ 8/15—draft report
➤ 8/29—final report
➤ September—presentation/discussion with Committee
In June 2015, GASB released two final Statements related to Other Postemployment Benefits (OPEB)

- **Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions (Released as GASB Statement No. 75)**
  - Supersedes the requirements of GASB Statements No. 45 and No. 57
  - Deals with employer reporting
  - Effective for fiscal years beginning after June 15, 2017

- **Financial Reporting for Postemployment Benefits Other Than Pension Plans (Released as GASB Statement No. 74)**
  - Replaces the requirements of GASB Statement No. 43 and No. 57
  - Also includes requirements for defined contribution OPEB plans that would replace the requirements for these plans in GASB Statements No. 25, No. 43, and No. 50
  - Proposes new standards for financial reporting for OPEB benefit plans
  - Effective for fiscal years beginning after June 15, 2016
Questions