

# **GASB 45 Alternative Measurement Method**

## **Workbook User Guide**

### **DISCLAIMER**

The Fiscal Management of the Local Government Division has developed (1) an example worksheet of the Alternative Method under GASB 45 – Memo # 1101-B (2) an Excel worksheet that can be used to calculate OPEB Liability under GASB 45 Alternative Measurement – Memo # 1101-C and (3) Instructions on use of the worksheet – Memo #1101-A. The link below will take you to the NC Treasurer’s website, where you will click OPEB Resources.

<http://www.nctreasurer.com/dsthome/StateAndLocalGov/AuditingAndReporting/>.

The calculations performed in this workbook are based on the simplified assumptions and methodology permitted under the Alternative Measurement Method as set forth in GASB Statements 43 and 45. They were tested with data and assumptions in the illustrations contained in the “Guide to Implementation of GASB Statements 43 and 45 on Other Postemployment Benefits” and the results were materially consistent with that guide. Since the Alternative Measurement Method incorporates certain simplifying assumptions we recommend that units consider having an initial actuarial study made by a professional actuary as a baseline for future alternative measurement method calculations. Also, units nearing 100 members in their postemployment benefit plan should not use the alternative method, but should contract the service of an actuary to perform the OPEB valuation. Also, professional guidance should be sought from your independent auditor or other CPA in using this workbook. Your auditor cannot make decisions on assumptions due to independence issues but can be used as an advisor in the use of this method.

### **WORKSHEET USING THE ALTERNATIVE MEASUREMENT METHOD**

This workbook developed by the LGC staff replicates the calculations from Illustrations 2 through 13 from the “Guide to Implementation of GASB Statements 43 and 45 on Other Postemployment Benefits” that, if applicable, are required for plans and employers that apply the alternative measurement method provisions of paragraphs 38-40 of Statement No. 43 or paragraphs 33-35 of Statement No. 45. With the proper input of employee information, plan data and actuarial assumptions, the worksheet should calculate the needed information for required OPEB disclosures.

“A single-employer or agent multiple-employer plan that meets the criteria in paragraph 38 of Statement 43 or a sole or agent employer that meets any of the eligibility in paragraph 11 of Statement 45 is permitted to apply the *alternative measurement method* set forth in those Statements, which allows for certain simplifying modifications to the selection of assumptions for purposes of measuring the annual required contribution of the employer (ARC) and the plan’s actuarial accrued liabilities and funded status. The alternative measurement method includes the same three board measurement steps as an actuarial valuation:

1. *Project future cash outflows for benefits.* This step entails collection and organizing in spreadsheet format essential information about the *terms of the plan* and the *covered group*. It also involves making and applying assumptions about significant matters that will affect

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future cash flows. These include assumptions about future employment and retirement, life expectancy, and healthcare cost trends. The results of this step will be a spreadsheet of projected future cash outflows for benefits, by plan member (or groups of plan members) and in total, for each of the future years in which benefit payments are expected.

2. *Discount projected benefits to their present value.* This step involves discounting the projected future cash outflows to present value, using as the discount rate the expected long-term rate of return on the assets expected to be used to pay the benefits. For example, for a plan that is financed on a pay-as-you-go basis, for which no plan assets have been set aside in a trust, or equivalent arrangement, the discount rate would be the expected long-term rate of return on the employer government's **general** investments

3. Allocate the present value of projected benefits to periods using an actuarial cost method. This step involves the allocation of the present value of benefits to financial reporting periods using one of the six actuarial cost methods identified in paragraph 34d of Statement 43 or paragraph 13d of Statement 45. Through the allocation process, the following elements are calculated:

a. The *actuarial accrued liability*, representing the portions of the present value of benefits attributed by the actuarial cost method to prior periods.

b. The ARC, which is the basis for calculating the employer's *annual OPEB Cost* (or expense) for the year.”<sup>1</sup>

## Overview

This workbook contains three worksheets that you will use for completing the computations – the **Assumptions**, **Participants**, and **Warnings** worksheets. For your convenience, there is also a worksheet containing “click on” buttons to execute macros for printing the worksheets. To qualify to use the alternative measurement method, the number of members in a unit's other postemployment benefit (OPEB) plan must be less than 100, including active employees, terminated employees who have accumulated benefits but are not yet receiving them, and retirees and beneficiaries receiving benefits.<sup>2</sup> Units of government that allow retirees to purchase health insurance through their group health plan at the same rate as active employees (a blended rate) are subject to GASB 45 and potentially have an OPEB liability. This is referred to as the implicit rate subsidy by GASB 45. This workbook application can be used to calculate the liability for the units that pay full or partial cost of retiree health coverage under their OPEB plan and those units that allow retirees to purchase coverage under the active employee plan at a blended rate. Retired employees of a unit who continue health coverage up to the maximum period allowed under COBRA do not create an OPEB liability for units which neither provide coverage for employees nor allow retirees to participate in the plan beyond the period required by COBRA. COBRA coverage is not considered an OPEB plan under GASB 45.

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<sup>1</sup> *Comprehensive Implementation Guide*, June 2007, p. 8-135

<sup>2</sup> If the unit is approaching 100 members in the benefit plan, they should seriously consider having an actuarial valuation performed. See LGC memo 1064 issued in August 2006.

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If you have groups of participants (employees, terminated employees who have accumulated benefits but are not yet receiving them, and retirees and beneficiaries receiving benefits) who are covered under separate postemployment benefit plans with differing coverage provisions, you will need to run a separate workbook for each participant group. An example would be if employees hired on or after July 1, 2005 are in a different plan (receive different benefits) than those hired before July 1, 2005.

### Step 1: Gathering the Necessary Information

The unit may use their current health insurance plan's premium structure as the initial per participant health care rates for the purpose of projecting future health care benefit payments. You should use the annual health care rates as applied to retirees. If the same premium rates apply for active employees and retirees (community rated plan do not need to age adjust its rates as rates reflect the projected health claims experience of all participating employers rather than that of any single participating employer) (we are unaware of any community rated plans), the **employer should obtain age-adjusted premium rates for retirees from the insurer**. Age adjusted rates are the premium retirees would have paid for health insurance if they were not blended with active employees. These annual health care rates are required for the following categories:

- Pre-65 Participant Only (Single)
- Pre-65 Spouse Only
- Pre-65 Participant & Spouse
- 65 & Over Participant Only (Single)
- 65 & Over Participant with Pre-65 Spouse
- 65 & Over Spouse Only
- 65 & Over Spouse with Pre-65 Participant
- 65 & Over Participant & Spouse

The plan may not provide spouse coverage directly. However, indirect coverage may exist where the spousal rate is subsidized without age adjusted rates. In that case the amounts shown for spouse coverage should be the amounts of any subsidies. The costs entered should be the cost to the local government excluding the amount paid by the participant. If spouses of retirees pay \$5,580 per year for pre-65; however, the age adjusted cost is \$7,812 per year for pre-65, the unit should enter \$2,232 (\$7,812-\$5,580) as cost of spouse pre-65 retire health care. Where, the unit offers coverage at a variable percentage of the total cost based on years of service, the amounts entered should be the total cost. The workbook then applies the applicable variable percentage to the total cost from the **Percent Coverage Based on Service Table** in cells D23:E28 in the **Assumptions** worksheet to determine the unit's cost.

Data is entered only in the light yellow cells found on the **Assumptions** and **Participants** worksheets. All other cells are password protected.

### Step 2: Entering Data on the Assumptions Worksheets

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Enter the **Valuation Date** in cell B1. This is equivalent to the actuarial valuation date and does not have to coincide with the employer's balance sheet date, however it should be consistently applied each year or other applicable interval between valuations. Units who use a December valuation date will have time to make any budget changes for the current fiscal year and next budget year.

In the **Qualification Requirements for Health Care Benefits** table (cells B5:C10) enter the combinations of age and service that will qualify the employee for retiree health care benefits. Local government health care benefit plans may "piggy-back" qualification requirements to the benefit requirements of the Local Government Employees' Retirement System (LGERS), so take LGERS benefit requirements into consideration while entering the data in this table. This worksheet does not take into account a plan participant status for meeting the LGERS retirement criteria; however, minimum retirement requirement of age 50 and the unit's service requirement for retiree health care benefit should be entered under these assumptions.

Enter any total requirement of **Age plus Service** in cell B12 (i.e. Age + Years of Service = 70).

Indicate to **Amortize Liability at a Level Percentage of Payroll** by entering a "Y" for Yes or "N" for No in cell B17. We suggest you set this parameter to "N".

Indicate to **Amortize Liability over What Period** by entering a "Y" for life expectancy or "N" for working years in cell C22. We suggest that you set this parameter to "Y".

In the range **Percent Coverage Based on Service** in cells E23:F28 enter any variable cost contribution percentages of the unit based on years of service. Column E (Service) contains the years of service. Column F (Percentage) contains the coverage percentage. You must have column E in order of low to high and the last entry must be 100 (years).

Enter retiree health care costs in the range **Annual Health Care Costs for Retirees** in cells E39:E46. This amount is the per employee premium rate on an annual basis that the local government pays. If your unit rates for retiree's are subsidized by active employees you must enter age adjusted rates for retirees. You will probably need to work with your insurance company to obtain the age-adjusted rates for retirees, especially if you do not have any current retirees. Remember, if retirees and their spouses pay for health care coverage and they pay less than the age adjusted rate the difference must be entered in cells E39:E46 to determine if the unit has a material OPEB Liability.

Enter **Expected Retirement Age** in cell, assuming the participant has met all of the other requirements for receiving health insurance benefits at retirement. We suggest that you set this parameter to 57-62 if you do not have this information for your unit. The earlier an employee is assumed to retire the higher your liability will be.

Enter the **Retirement Age Adjustment for Current Active Employees Eligible for Retiree Health Benefits** in cell E5. This is the number of additional years active employees

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who are already qualified for retiree health insurance are expected to work. If you do not have access to this information we suggest you use 1 in North Carolina.

Enter the **Present Value Discount Rate** in cell E9. This is the discount rate to be applied to projected future costs in determining the liability for health care costs. If your retiree health plan is not funded then the expected return on the unit's financial assets should be used.

Enter the **Estimated Payroll Growth Rate** in cell E15. This is the estimated annual rate of increase in employee salaries and wages.

Enter the estimated **Annual Health Care Inflation Rates** in cells L8 to L33. **CAUTION** – For the entry in cell L8, if you are using the actual costs for the year following the evaluation year when determining **Annual Health Care Costs for Retirees**, you will want to enter 0 in cell L8 because the inflation rate if any has already been reflected in your rate quote. If your rates are for FY 2009 then place 0 for inflation rate for FY 2009.

### Step 3: Entering Data on the Participants Worksheet

On the **Participants** worksheet is where you will enter all the necessary demographic data for all the participants in the post employment health plan (current employees, former employees who are vested and current retirees who receive health care benefits) of the unit. Remember, only input data in the cells highlighted in yellow. All other cells are password protected.

All the items should be self explanatory. Enter information for every participant. It is strongly recommended that full Social Security Numbers **NOT BE USED** as employee ID's due to privacy issues. Participants and covered spouses must be entered on the same line. Certain edits are performed against your entries. Any problems are displayed on the **Warnings** worksheet.

Column H is used to indicate the Participant's status. Only use the "D" status where the participant is deceased and the covered spouse is still alive. If both participant and spouse are deceased make no line entry. If the participant is no longer active but his retirement qualification has been postponed to a future date, count the participant as active and use the **Service Adjustment Column** to minus out service credit for years employee was not active yet unable to collect benefits and use the **Service Adjustment Column** to minus out service credit that would appear to be earned.

### The Results

The results of the computations are shown on the Assumptions Worksheet starting at Cell A62. You will notice a number of hidden columns and rows in the worksheets. Actually, the workbook contains computation for all of the actuarial methods permitted under GASB 45. The actuaries handling North Carolina valuations have chosen to use the Unit Credit Cost Method and therefore all of the other permitted methods have been hidden.

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#### **Print**

To print the Assumptions used in the calculations go to the “Macros” worksheet and click “Print All Assumptions.” To print the list of Participants in the benefit plan, go to the “Macros” worksheet and click on “Print Participants.”

#### **Help**

For help with using this workbook or any other questions related to this process contact Ken Wease at (919) 807-2391 or email him at [ken.wease@nctreasurer.com](mailto:ken.wease@nctreasurer.com) or Melinda Canady at (919) 807-2384 or email her at [melinda.canady@nctreasurer.com](mailto:melinda.canady@nctreasurer.com).