

# Barnstable County

Actuarial Valuation and Review of Other  
Postemployment Benefits (OPEB) as of  
June 30, 2012 in accordance with GASB  
Statements No. 43 and No. 45





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*August 27, 2013*

*Mr. E. Mark Zielinski  
County Administrator and Director of Finance/Treasurer  
Barnstable County  
Superior Court House  
3195 Main Street  
P.O. Box 427  
Barnstable, MA 02630*

*Dear Mark:*

*We are pleased to submit this report on our actuarial valuation of postemployment welfare benefits as of June 30, 2012 under Governmental Accounting Standards Board (GASB) Statements Number 43 and 45. It establishes the liabilities of the postemployment welfare benefit plan in accordance with GASB Statements Number 43 and 45 for the fiscal years beginning July 1, 2012 and July 1, 2013 and summarizes the actuarial data. The actuarial calculations were completed under the supervision of Kathleen A. Riley, FSA, MAAA, EA, Senior Vice President and Actuary and Daniel J. Rhodes, ASA, FCA, MAAA, Vice President and Consulting Actuary.*

*This report is based on information received from the employers and their vendors. The actuarial projections were based on the assumptions and methods described in Exhibit II and on the plan of benefits as summarized in Exhibit III.*

*We look forward to discussing this with you at your convenience.*

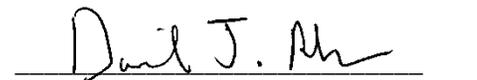
*Sincerely,*

*Segal Consulting, a Member of The Segal Group, Inc.*

*By:*

  
*Kathleen A. Riley, FSA, MAAA, EA  
Senior Vice President and Actuary*

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*Daniel J. Rhodes, ASA, FCA, MAAA  
Vice President and Consulting Actuary*

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**SECTION 1: Introduction for Barnstable County June 30, 2012 Measurement Under GASB**

**PURPOSE**

This report presents the results of our actuarial valuation of the postemployment welfare benefit program for certain towns, school districts and other member units in Barnstable County as of June 30, 2012. The results are in accordance with the Governmental Accounting Standards, which prescribe an accrual methodology for accumulating the value of other postemployment benefits (OPEB) over participants' active working lifetimes. The accounting standard supplements cash accounting, under which the expense for postemployment benefits is equal to benefit and administrative costs paid on behalf of retirees and their dependents (*i.e.*, a pay-as-you-go basis).

**HIGHLIGHTS OF THE VALUATION**

The GASB statements provide the method for selecting the investment return assumption (discount rate). If the benefits are fully funded, the discount rate should be based on the estimated long-term investment yield on the investments expected to be used to finance the payment of benefits. If financing continues to be pay-as-you-go, the discount rate should be based on the expected yield on the assets of the employer. If the benefits are partially funded, a blended discount rate can be used that reflects the proportionate amounts of plan and employer assets expected to be used. For the purpose of this valuation, we have used 7.75% and 4.50%, respectively, for fully funded and pay-as-you-go, compared to 8.25% and 5.00% in the prior valuation.

The Towns of Barnstable and Wellfleet have set up qualified trusts. Based on the long-term funding policies adopted by each Town, we are assuming a partially funded discount rate of 5.25% for the Town of Barnstable and 6.25% for the Town of Wellfleet. The projected contributions for the Town of Falmouth and Cape Cod Regional Technical School are not

large enough to increase the discount rate. While other Towns have also set up qualified trusts, and some have made contributions to the trust, they have not adopted a funding policy that would allow for a partially funded discount rate. See chart below for details.

<b>Unit</b>	<b>June 30, 2012 OPEB Balance</b>	<b>Funding Policy</b>	<b>Partially Funded Discount Rate</b>
Cape Cod Regional Tech School	\$176,000	\$10,000 in fiscal year 2013 and each year thereafter	N/A
Dennis-Yarmouth Regional School District	\$32,371	N/A	N/A
Town of Barnstable	\$782,352	\$200,000 in fiscal year 2013, increasing \$50,000 per year thereafter	5.25%
Town of Falmouth	\$20,000	\$100,000 in fiscal year 2013 and each year thereafter	N/A
Town of Mashpee	\$250,000	N/A	N/A
Town of Provincetown	\$56,528	N/A	N/A
Town of Truro	\$50,000	N/A	N/A
Town of Wellfleet	\$161,790	\$150,000 in fiscal year 2013 and each year thereafter	6.25%

## SECTION 1: Introduction for Barnstable County June 30, 2012 Measurement Under GASB

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The GASB statements allow the use of one of six funding methods to determine the actuarial liabilities. We have used the same cost method as used in the prior valuation.

To determine the amortization payment on the unfunded actuarial accrued liability (UAAL), an amortization period and amortization method must be selected. We have used a 30-year open amortization of the UAAL (the maximum permitted by the GASB statements), with payments increasing at 4.00% per year (previously, 4.50% per year). The GASB statements allow for either an open or closed amortization period. In open amortization, the period is reset to the initial value every year and the UAAL is reamortized, while under a closed amortization, the remaining period decreases and the UAAL is eventually “paid off.”

To be considered a fully funded plan, the “contribution in relation to the ARC” must equal the ARC. For example, if the ARC is \$345,000, and the employer pays benefits to retirees of \$95,000, then an additional contribution of the difference, or approximately \$250,000 will need to be added to an OPEB trust fund during the fiscal year ending June 30, 2013.

Assets set aside to fund OPEB liabilities must be held in a trust or equivalent arrangement, through which assets are accumulated and benefits are paid as they come due. Employer contributions to the plan are irrevocable, plan assets are dedicated to providing benefits to retirees and their spouses in accordance with the terms of the plan, and plan assets are legally protected from creditors of the employer.

Chapter 68 of the Acts of 2011 permits municipalities, authorities and certain other government entities of the Commonwealth to establish a liability trust fund for funding retiree benefits (other than pension), also known as Other Post-Employment Benefits (OPEB). The legislation also ensures that these entities have access to the state’s investment trust, the State Retiree Benefits Trust Fund (SRBTF) for purposes of investment OPEB funds.

GASB guidelines prohibit the offset of OPEB obligations by the future value of Medicare Part D subsidies. Therefore, these calculations do not include an estimate for retiree prescription drug plan federal subsidies that the Employer may be eligible to receive for plan years beginning in 2006.

Employer decisions regarding plan design, cost sharing between the Employer and its retirees, actuarial cost method, amortization techniques, and integration with Medicare are just some of the decisions that affect the magnitude of OPEB obligations. We are available to assist you with any investigation of such options you may wish to undertake.

This valuation does not include the potential impact of any future changes due to the Patient Protection and Affordable Care Act (PPACA) and the Health Care and Education Reconciliation Act (HCERA) of 2010 other than the excise tax on high cost health plans beginning in 2018 (reflected in this valuation) and those previously adopted as of the valuation date.

## **SECTION 1: Introduction for Barnstable County June 30, 2012 Measurement Under GASB**

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Pages 2 through 4 of each unit's individual results include the Required Supplemental Information for each unit's financial statements. Please note that the historical information shown is from each unit's financial statements, if available, or from a prior valuation report, if the financial statements were not provided.

Actual contributions as shown in Chart 1 and Chart 3 are equal to projected benefit payments including the implicit rate subsidy. Additional funding, if any, is added to the contribution. This is the amount that should be used for disclosure and is not the same as premiums paid.

We have included the additional funding amounts for fiscal years 2013 and 2014 for Cape Cod Regional Technical School, Towns of Barnstable, Falmouth and Wellfleet, based on the expected funding policies provided to us. If actual contributions are different from funding policies stated on page 1, amounts reported on Chart 1 and Chart 3 will change.

## SECTION 1: Introduction for Barnstable County June 30, 2012 Measurement Under GASB

### ACCOUNTING REQUIREMENTS

The Governmental Accounting Standards Board (GASB) issued Statement Number 43 -- *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, and Statement Number 45 – *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*. Under these statements, all state and local governmental entities that provide other post employment benefits (OPEB) are required to report the cost of these benefits on their financial statements.

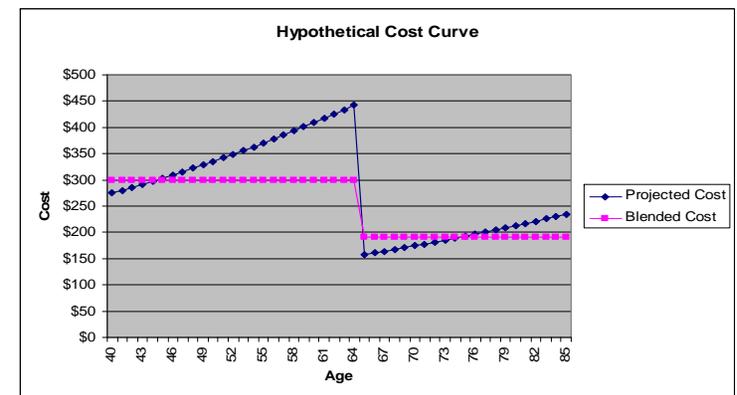
The statements cover postemployment benefits of health, prescription drug, dental, vision and life insurance coverage for retirees; long-term care coverage, life insurance and death benefits that are *not* offered as part of a pension plan; and long-term disability insurance for employees. These benefits, referred to as OPEB, are typically financed on a pay-as-you-go basis. The new standard introduces an accrual-basis accounting requirement; thereby recognizing the employer cost of postemployment benefits over an employee's career. The standards also introduce a consistent accounting requirement for both pension and non-pension benefits.

The total cost of providing postemployment benefits is projected, taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions. This amount is then discounted to determine the actuarial present value of the total projected benefits (APB). The actuarial accrued liability (AAL) is the portion of the present value of the total projected benefits allocated to years of employment prior to the measurement date. The unfunded actuarial accrued liability (UAAL) is the difference between the AAL and actuarial value of assets in the Plan.

Once the UAAL is determined, the Annual Required Contribution (ARC) is determined as the normal cost (the APB allocated to the current year of service) and the amortization of the UAAL. This ARC is compared to actual contributions made and any difference is reported as the net OPEB obligation (NOO). In addition, required supplementary information (RSI) must be reported, including historical information about the UAAL and the progress in funding the Plan.

The benefits valued in this report are limited to those described in Exhibit III of Section 4.

The following graph illustrates why a significant accounting obligation may exist even though the retiree contributes most or all of the blended premium cost of the plan. The average cost for retirees is likely to exceed the average cost for the whole group, leading to an implicit subsidy for these retirees. The accounting standard requires the employer to identify and account for this implicit subsidy as well as any explicit subsidies the employer may provide.



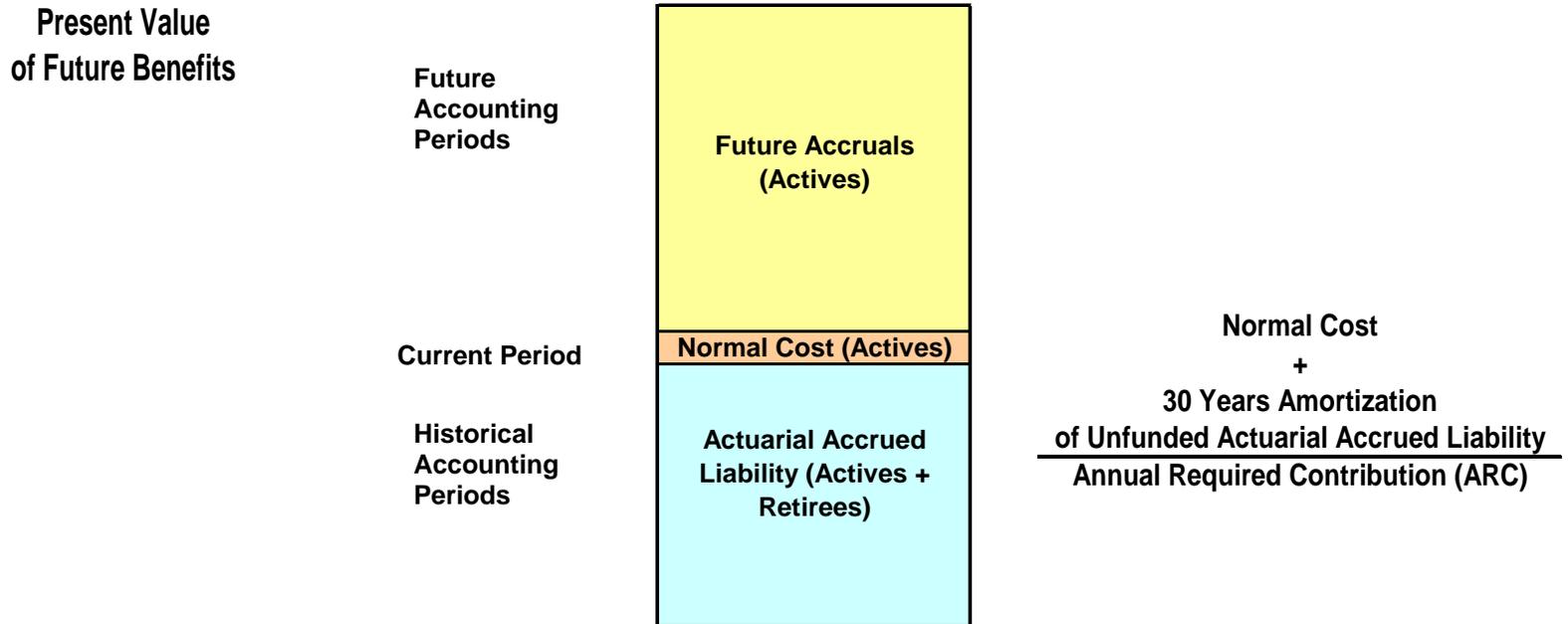
**SECTION 1: Introduction for Barnstable County June 30, 2012 Measurement Under GASB**

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This graph shows how the actuarial present value of the total projected benefits (APB) is broken down and allocated to various accounting periods.

The exact breakdown depends on the actuarial cost method and amortization methods selected by the employer.

**GASB 43/45 Measurement**



$$\text{Net OPEB Obligation} = \text{ARC}_1 + \text{ARC}_2 + \text{ARC}_3 + \dots - \text{Contribution}_1 - \text{Contribution}_2 - \text{Contribution}_3 - \dots$$

**SECTION 1: Introduction for Barnstable County June 30, 2012 Measurement Under GASB**

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Actuarial computations under GASB statements are for purposes of fulfilling certain welfare plan accounting requirements. The calculations shown in this report have been made on a basis consistent with our understanding of GASB. Determinations for purposes other than meeting the financial accounting requirements of GASB may differ significantly from the results reported here.

Calculations are based on the benefits provided under the terms of the substantive plan in effect at the time of the valuation and on the pattern of sharing costs between the employer and plan members. The projection of benefits does not incorporate the potential effect of legal or contractual funding limitations on the pattern of cost sharing between the employer and plan members in the future.

Actuarial calculations reflect a long-term perspective, and the methods and assumptions use techniques designed to reduce short term volatility in accrued liabilities and the actuarial value of assets, if any.

The calculation of an accounting obligation does not, in and of itself, imply that there is any legal liability to provide the benefits valued, nor is there any implication that the Employer is required to implement a funding policy to satisfy the projected expense.

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and the actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.

**SECTION 1: Introduction for Barnstable County June 30, 2012 Measurement Under GASB**

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**DEFINITIONS OF TERMS**

The following list defines certain technical terms for the convenience of the reader:

**Assumptions or Actuarial**

**Assumptions:**

The estimates on which the cost of the Plan is calculated including:

- (a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;
- (b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;
- (c) Retirement rates — the rate or probability of retirement at a given age;
- (d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

**Actuarial Present Value of Total  
Projected Benefits (APB):**

Present value of all future benefit payments for current retirees and active employees taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions.

**Normal Cost:**

The amount of contributions required to fund the benefit allocated to the current year of service.

**Actuarial Accrued Liability  
For Actives:**

The equivalent of the accumulated normal costs allocated to the years before the valuation date.

**Actuarial Accrued Liability  
For Retirees:**

The single sum value of lifetime benefits to existing retirees. This sum takes account of life expectancies appropriate to the ages of the retirees and of the interest which the sum is expected to earn before it is entirely paid out in benefits.

**Actuarial Value of Assets (AVA):**

The value of assets used by the actuary in the valuation. These may be at market value or some other method used to smooth variations in market value from one valuation to the next.

**Funded Ratio:**

The ratio AVA/AAL.

**SECTION 1: Introduction for Barnstable County June 30, 2012 Measurement Under GASB**

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<b>Unfunded Actuarial Accrued Liability (UAAL):</b>	The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.
<b>Amortization of the Unfunded Actuarial Accrued Liability:</b>	Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.
<b>Investment Return (discount rate):</b>	The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next. If the plan is funded on a pay-as-you-go basis, the discount rate is tied to the expected rate of return on day-to-day employer funds.
<b>Covered Payroll:</b>	Annual reported salaries for all active participants on the valuation date.
<b>ARC as a Percentage of Covered Payroll:</b>	The ratio of the annual required contribution to covered payroll.
<b>Health Care Cost Trend Rates:</b>	The annual rate of increase in net claims costs per individual benefiting from the Plan.
<b>Annual Required Contribution (ARC):</b>	The ARC is equal to the sum of the normal cost and the amortization of the unfunded actuarial accrued liability.
<b>Net OPEB Obligation (NOO):</b>	The NOO is the cumulative difference between the ARC and actual contributions made. If the plan is not funded, the actual contribution would be equal to the annual benefit payments less retiree contributions. There are additional adjustments in the NOO calculations to adjust for timing differences between cash and accrual accounting, and to prevent double counting of OPEB plan costs.

**SECTION 2: Valuation Results for Barnstable County June 30, 2012 Measurement Under GASB**

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August 27, 2013

**ACTUARIAL CERTIFICATION**

This is to certify that Segal Consulting, a Member of The Segal Group, Inc. has conducted an actuarial valuation of certain benefit obligations of the other postemployment benefit programs for certain towns, school districts and other member units in Barnstable County as of June 30, 2012, in accordance with generally accepted actuarial principles and practices. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of GASB Statements Number 43 and 45 for the determination of the liability for postemployment benefits other than pensions.

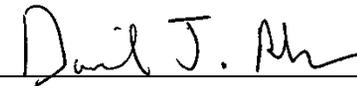
The actuarial valuation is based on the plan of benefits verified by the employers and on participant, premium data and claims experience provided by the employers or from vendors employed by the employers. Segal Consulting does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. Segal, however, does review the data for reasonableness and consistency.

The actuarial computations made are for purposes of fulfilling plan accounting requirements. Determinations for purposes other than meeting financial accounting requirements may be significantly different from the results reported here. Accordingly, additional determinations may be needed for other purposes, such as judging benefit security at termination or adequacy of funding an ongoing plan.

To the best of our knowledge, this report is complete and accurate and in our opinion presents the information necessary to comply with GASB Statements Number 43 and 45 with respect to the benefit obligations addressed. The signing actuaries are members of the Society of Actuaries, the American Academy of Actuaries, and other professional actuarial organizations and collectively meet their "General Qualification Standards for Statements of Actuarial Opinion" to render the actuarial opinion contained herein. Further, in our opinion, the assumptions as approved by the employers are reasonably related to the experience and expectations of the postemployment benefit programs.



Kathleen A. Riley, FSA, MAAA, EA  
Senior Vice President and Actuary



Daniel J. Rhodes, ASA, FCA, MAAA  
Vice President and Consulting Actuary

**SECTION 2: Valuation Results for the June 30, 2012 Measurement under GASB**

**SUMMARY OF VALUATION RESULTS  
TOWN OF NANTUCKET**

*The key results and significant assumptions for the current year are shown on a funded basis and a pay-as-you-go basis.*

	<b>Funded (7.75% interest rate)</b>	<b>Pay-as-you-go (4.50% interest rate)</b>
<b>Actuarial Accrued Liability by Participant Category</b>		
1. Current retirees, beneficiaries and dependents	\$32,206,746	\$45,767,274
2. Current active members	<u>23,649,551</u>	<u>42,791,842</u>
3. Total as of July 1, 2012: (1) + (2)	\$55,856,297	\$88,559,116
4. Actuarial value of assets as of July 1, 2012	<u>0</u>	<u>0</u>
5. Unfunded actuarial accrued liability (UAAL) as of July 1, 2012: (3) - (4)	\$55,856,297	\$88,559,116
<b>Annual Required Contribution for Fiscal Year Ending June 30, 2013</b>		
6. Normal cost as of July 1, 2012	\$1,883,184	\$3,681,009
7. Adjustment for timing	<u>71,612</u>	<u>81,911</u>
8. Normal cost adjusted for timing: (6) + (7)	\$1,954,796	\$3,762,920
9. 30-year amortization of the unfunded actuarial accrued liability (UAAL) increasing at 4.0% per year	\$2,970,259	\$3,161,846
10. Adjustment for timing	<u>112,950</u>	<u>70,359</u>
11. Amortization payment adjusted for timing: (9) + (10)	\$3,083,209	\$3,232,205
12. Total Annual Required Contribution (ARC): (8) + (11)	5,038,005	6,995,125
13. Projected benefit payments for fiscal year ending June 30, 2013	\$2,622,032	\$2,622,032

*Note: Adjustment for timing assumes payment in the middle of the year.*

**SECTION 2: Valuation Results for the June 30, 2012 Measurement under GASB**

**TOWN OF NANTUCKET  
Required Supplementary Information, Pay-As-You-Go Assumptions (4.50%)**

**CHART 1  
Schedule of Employer Contributions**

<b>Fiscal Year Ended June 30,</b>	<b>Annual OPEB Cost</b>	<b>Actual Contributions</b>	<b>Percentage Contributed</b>
2009	\$10,745,000	\$2,534,000	23.6%
2010	11,184,000	2,587,000	23.1
2011	5,905,000	2,200,000	37.3
2012	6,257,000	2,534,000	40.5
2013	7,201,187	2,622,032	36.4
2014	7,616,281	2,880,448	37.8

**CHART 2  
Schedule of Funding Progress**

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) (b)</b>	<b>Unfunded AAL (UAAL) (b) – (a)</b>	<b>Funded Ratio (a) / (b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll [(b) – (a) / (c)]</b>
6/30/2006	\$0	\$104,980,000	\$104,980,000	0.0%	N/A	N/A
6/30/2008	0	127,923,000	127,923,000	0.0	N/A	N/A
6/30/2010	0	82,253,000	82,253,000	0.0	N/A	N/A
6/30/2012	0	88,559,116	88,559,116	0.0	N/A	N/A

*Note: Employer should provide covered payroll amount.*

**SECTION 2: Valuation Results for the June 30, 2012 Measurement under GASB**

**CHART 3**

**Net OPEB Obligation (NOO)**

<b>Fiscal Year Ended June 30,</b>	<b>Annual Required Contribution (a)</b>	<b>Interest on Existing NOO (b)</b>	<b>ARC Adjustment (c)</b>	<b>Annual OPEB Cost (a) + (b) + (c) (d)</b>	<b>Actual Contribution Amount (e)</b>	<b>Net Increase in NOO (d) - (e) (f)</b>	<b>NOO as of Following Date (g)</b>
2009	\$10,745,000	\$0	\$ 0	\$10,745,000	\$2,534,000	\$8,211,000	\$8,211,000
2010	10,647,000	537,000	0	11,184,000	2,587,000	8,597,000	16,808,000
2011	5,680,000	840,000	(615,000)	5,905,000	2,200,000	3,705,000	20,513,000
2012	5,982,000	1,025,000	(750,000)	6,257,000	2,534,000	3,723,000	24,236,000
2013	6,995,125	1,090,620	(884,558)	7,201,187	2,622,032	4,579,155	28,815,155
2014	7,371,286	1,296,682	(1,051,687)	7,616,281	2,880,448	4,735,833	33,550,989

**SECTION 2: Valuation Results for the June 30, 2012 Measurement under GASB**

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**TOWN OF NANTUCKET**

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**CHART 4**

**Required Supplementary Information**

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<b>Valuation date</b>	June 30, 2012
<b>Actuarial cost method</b>	Projected Unit Credit
<b>Amortization method</b>	Amortization payments increasing at 4.0%
<b>Amortization period</b>	30 years open
<b>Asset valuation method</b>	Market value
<b>Actuarial assumptions:</b>	
Investment rate of return	4.5%, pay-as-you-go scenario
Medical/drug cost trend rate	8.0% decreasing by 0.50% for 6 years to an ultimate level of 5.0% per year.
Dental	None
Part B reimbursement and/or penalties	6%
Inflation rate	4.0%
<b>Plan membership:*</b>	
Current retirees, beneficiaries, and dependents	307
Current active members	<u>463</u>
Total	770

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*\* Does not include retirees, if any, eligible for life insurance benefits only.*

**SECTION 2: Valuation Results for the June 30, 2012 Measurement under GASB**

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**TOWN OF NANTUCKET**

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**Summary of Participant Data**

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*This exhibit summarizes the participant data used for the current valuation.*

**Active employees covered for medical benefits as of June 30, 2012**

Number of employees	
Male	176
Female	<u>287</u>
Total	463
Average age	46.7
Average service	11.1

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**Retired employees, spouses and beneficiaries covered for medical benefits as of June 30, 2012\***

Number of individuals	307
Average age	66.8

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*\* Does not include retirees, if any, eligible for life insurance benefits only.*

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**EXHIBIT I**  
**Actuarial Assumptions and Actuarial Cost Method**

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**Data:** Detailed census data, claims experience, premium rates, and summary plan descriptions for postemployment welfare benefits were provided by the employers.

**Actuarial Cost Method:** Projected Unit Credit or Entry Age Normal

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**Per Capita Cost Development:**

**CCMHG Retirees**

*Medical and Drug Costs*

Per capita claims costs were based on the approved funding rates (for self-funded plans) or insured premium rates (for fully insured plans) charged by the Cape Cod Municipal Health Group to the member units for the period July 1, 2012 through June 30, 2013. (The Blue Cross Blue Shield Medicare HMO Blue, Tufts Medicare Prime Supplement and Tufts Medicare Preferred renew on January 1, so the costs for these plans were based on an average of the calendar year 2012 and 2013 premium rates).

Premiums were combined by taking a weighted average based on the number of participants in each plan, and were then trended to the midpoint of the valuation year at assumed trend rates.

For experience-rated plans (*i.e.*, all plans except for Medicare Advantage plans), actuarial factors were then applied to the premium to estimate individual retiree and spouse costs by age and by gender. The Medicare Advantage plans (Blue Cross Blue Shield Medicare HMO Blue and Tufts Medicare Preferred HMO plans) are community rated and thus were not adjusted to reflect the age and gender of the enrolled population.

*Dental*

Per capita claims costs were based on the Delta Dental funding rates charged by the CCMHG to the member units for the period July 1, 2012 through June 30, 2013.

**Town of Bourne (Non-Teachers)**

*Medical and Prescription Drug*

Per capita claims costs were based on actual paid claim experience furnished by the Town and its carrier, Blue Cross Blue Shield of Massachusetts, for the period July 1, 2010 through June 30, 2012. Claims were separated by plan year and plan design, then adjusted as follows:

- actual large claims were replaced by the *expected* amount of large claims using the stop loss premiums to smooth out random fluctuations in experience.
- total claims were divided by the number of adult members to yield a per capita claim,
- the per capita claim was trended to the midpoint of the valuation year at assumed trend rates, and
- the per capita claim was adjusted for the effect of any plan changes.

Per capita claims for each plan year and a manual rate based on national data were then combined by taking a weighted average. The weights used in this average account for a number of factors including each plan year's volatility of claims experience and distance to the valuation year. Actuarial factors were then applied to the weighted average cost to estimate individual retiree and spouse costs by age and by gender.

Per capita claims costs for the Town's Blue MedicareRx Prescription Drug Plan for Medicare-eligible retirees were based on the average premium rates for the plan as of January 1, 2013, trended to the midpoint of the valuation year at assumed trend rates.

*Dental*

Per capita costs were based on actual paid claim experience furnished by the Town and its carrier, Blue Cross Blue Shield of Massachusetts, for the period June 1, 2011 through May 31, 2013. Claims were separated by plan year and adjusted as described above to yield a weighted average per capita claims cost.

**Town of Nantucket and Nantucket Regional Transit Authority**

*Medical and Prescription Drug*

Per capita claims costs were based on actual paid claim experience furnished by the Town and its carrier, Blue Cross Blue Shield of Massachusetts, for the period November 1, 2010 through October 31, 2012. Claims were separated by plan year and plan design, then adjusted as follows:

- actual large claims were replaced by the *expected* amount of large claims using the stop loss premiums to smooth out random fluctuations in experience.
- total claims were divided by the number of adult members to yield a per capita claim,
- the per capita claim was trended to the midpoint of the valuation year at assumed trend rates, and
- the per capita claim was adjusted for the effect of any plan changes.

Per capita claims for each plan year and a manual rate based on national data were then combined by taking a weighted average. The weights used in this average account for a number of factors including each plan year's volatility of claims experience and distance to the valuation year. Actuarial factors were then applied to the weighted average cost to estimate individual retiree and spouse costs by age and by gender.

Per capita claims costs for the Town's Medex III for Medicare-eligible retirees were based on the premium rate for the plan as of June 1, 2013. Premiums were trended to the midpoint of the valuation year at assumed trend rates. Actuarial factors were then applied to the premium to estimate individual retiree and spouse costs by age and by gender.

**Retired GIC Teachers from the Towns of Barnstable, Bourne, Eastham and Upper Cape Cod RTS**

*Medical and Prescription Drug*

Per capita claims costs for retired teachers participating in the Group Insurance Commission's (GIC) Retired Municipal Teachers plans were taken from the Commonwealth of Massachusetts Postemployment Benefits Other than Pensions Actuarial Valuation as of January 1, 2012. The costs shown in the valuation report were trended to the midpoint of the valuation year at assumed trend rates.

**SECTION 3: Supporting Information for Barnstable County June 30, 2012 Measurement Under GASB**

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**Measurement Date:** June 30, 2012

**Discount Rate:** 7.75% funding and 4.50% pay-as-you-go

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**Preretirement Mortality Rates:**

*Healthy Non-Teachers* RP-2000 Employee Mortality Table projected 12 years with Scale AA

*Healthy Teachers* RP-2000 Employee Mortality Table projected 15 years with Scale AA

**Postretirement Mortality Rates:**

*Healthy Non-Teachers* RP-2000 Healthy Annuitant Mortality Table projected 12 years with Scale AA

*Healthy Teachers* RP-2000 Healthy Annuitant Mortality Table projected 15 years with Scale AA

*Disabled (Non-Teachers)* RP-2000 Healthy Annuitant Mortality Table projected 12 years with Scale AA set forward 2 years

*Disabled (Teachers)* RP-2000 Healthy Annuitant Mortality Table set forward 3 years for males

*Disabled (Falmouth)* RP-2000 Healthy Annuitant Mortality Table set forward 2 years

The mortality tables were determined to contain provisions appropriate to reflect future monthly improvement.

**SECTION 3: Supporting Information for Barnstable County June 30, 2012 Measurement Under GASB**

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**Termination Rates before Retirement:**

**Groups 1 and 2 (excluding Teachers) - Rate per year (%)**

Age	Mortality		Disability
	Male	Female	
20	0.03	0.02	0.01
25	0.03	0.02	0.02
30	0.04	0.02	0.03
35	0.07	0.04	0.06
40	0.10	0.06	0.10
45	0.13	0.09	0.15
50	0.17	0.14	0.19
55	0.24	0.23	0.24
60	0.40	0.37	0.28

*Note: 55% of the rates shown represent accidental disability and death.*

**Group 4 – Rate per year (%)**

Age	Mortality		Disability
	Male	Female	
20	0.03	0.02	0.10
25	0.03	0.02	0.20
30	0.04	0.02	0.30
35	0.07	0.04	0.30
40	0.10	0.06	0.30
45	0.13	0.09	1.00
50	0.17	0.14	1.25
55	0.24	0.23	1.20
60	0.40	0.37	0.85

*Note: 90% of the rates shown represent accidental disability and death.*

**SECTION 3: Supporting Information for Barnstable County June 30, 2012 Measurement Under GASB**

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**Termination Rates before Retirement (continued):**

Age	Teachers - Rate (%)		Disability
	Mortality		
	Male	Female	
20	0.03	0.02	0.00
25	0.03	0.02	0.01
30	0.04	0.02	0.01
35	0.07	0.04	0.01
40	0.10	0.06	0.01
45	0.13	0.08	0.03
50	0.16	0.13	0.05
55	0.23	0.22	0.08
60	0.38	0.36	0.10

*Notes: 35% of the disability rates shown represent accidental disability.  
55% of the death rates shown represent accidental death.*

**SECTION 3: Supporting Information for Barnstable County June 30, 2012 Measurement Under GASB**

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**Withdrawal Rates:**

Years of Service	Rate per year (%)		Group 4
	Groups 1 and 2 (excluding Teachers)	Years of Service	
0	15.0	0 – 10	1.5
1	12.0	11+	0.0
2	10.0		
3	9.0		
4	8.0		
5	7.6		
6	7.5		
7	6.7		
8	6.3		
9	5.9		
10	5.4		
11	5.0		
12	4.6		
13	4.1		
14	3.7		
15	3.3		
16 – 20	2.0		
21 – 29	1.0		
30+	0.0		

**SECTION 3: Supporting Information for Barnstable County June 30, 2012 Measurement Under GASB**

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Age	Teachers – Withdrawal Rate (%)					
	0 – 4 Years of Service		5 – 9 Years of Service		10+ Years of Service	
	Male	Female	Male	Female	Male	Female
20	12.0	10.0	4.5	9.0	1.0	5.0
30	11.4	12.0	4.5	9.0	1.0	5.0
40	9.7	11.0	5.4	6.5	1.7	2.9
50	10.0	8.2	4.8	4.2	2.2	2.1

**SECTION 3: Supporting Information for Barnstable County June 30, 2012 Measurement Under GASB**

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Retirement Rates:	All Groups (excluding Teachers) – Rate per year (%)			
	Age	Groups 1 and 2		Group 4
		Male	Female	
	45 - 49	--	--	1.0
	50 – 51	1.0	1.5	2.0
	52	1.0	2.0	2.0
	53	1.0	2.5	5.0
	54	2.0	2.5	7.5
	55	2.0	5.5	15.0
	56 – 57	2.5	6.5	10.0
	58	5.0	6.5	10.0
	59	6.5	6.5	15.0
	60	12.0	5.0	20.0
	61	20.0	13.0	20.0
	62	30.0	15.0	25.0
	63	25.0	12.5	25.0
	64	22.0	18.0	30.0
	65	40.0	15.0	100.0
	66 - 67	25.0	20.0	--
	68	30.0	25.0	--
	69	30.0	20.0	--
	70	100.0	100.0	--

**SECTION 3: Supporting Information for Barnstable County June 30, 2012 Measurement Under GASB**

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<b>Teachers - Rate per year (%)</b>						
<b>Years of Service</b>						
<b>Age</b>	<b>Less than 20</b>		<b>20 – 29</b>		<b>30 or more</b>	
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>
50 – 53	0.0	0.0	1.0	1.5	2.0	2.0
54	0.0	0.0	1.0	1.5	2.0	2.0
55	3.0	2.0	3.0	3.0	6.0	6.0
56	8.0	2.0	5.0	3.0	20.0	15.0
57	15.0	8.0	8.0	7.0	35.0	30.0
58	15.0	10.0	10.0	7.0	50.0	35.0
59	20.0	15.0	20.0	11.0	50.0	35.0
60	15.0	20.0	20.0	16.0	50.0	35.0
61	30.0	20.0	25.0	20.0	50.0	35.0
62	20.0	25.0	30.0	30.0	40.0	35.0
63	30.0	24.0	30.0	30.0	40.0	40.0
64	40.0	20.0	30.0	30.0	50.0	30.0
65	40.0	30.0	40.0	30.0	50.0	35.0
66	40.0	30.0	30.0	30.0	50.0	35.0
67	40.0	30.0	30.0	30.0	50.0	35.0
68	40.0	30.0	30.0	30.0	50.0	30.0
69	40.0	30.0	30.0	30.0	50.0	30.0
70	100.0	100.0	100.0	100.0	100.0	100.0

**Dependents:**

Demographic data was available for spouses of current retirees. For future retirees, husbands were assumed to be three years older than their wives. For future retirees who elect to continue their health coverage at retirement, 65% were assumed to have an eligible spouse who also opts for health coverage at that time.

**SECTION 3: Supporting Information for Barnstable County June 30, 2012 Measurement Under GASB**

**Per Capita Health Costs:**

2012 – 2013 medical and prescription drug claims costs are shown in the table below for retirees and for spouses at selected ages. These costs are net of deductibles and other benefit plan cost sharing provisions.

**CCMHG**

Age	Non-Medicare Plans				Medicare Supplement			
	Retiree		Spouse		Retiree		Spouse	
	Male	Female	Male	Female	Male	Female	Male	Female
45	\$7,081	\$8,883	\$4,392	\$6,631	N/A	N/A	N/A	N/A
50	8,405	9,573	5,871	7,687	N/A	N/A	N/A	N/A
55	9,981	10,305	7,856	8,897	N/A	N/A	N/A	N/A
60	11,854	11,108	10,516	10,319	N/A	N/A	N/A	N/A
65	14,078	11,966	14,078	11,966	\$4,459	\$3,790	\$4,459	\$3,790
70	16,316	12,895	16,316	12,895	5,168	4,084	5,168	4,084
75	17,583	13,881	17,583	13,881	5,569	4,397	5,569	4,397
80	18,935	14,965	18,935	14,965	5,997	4,740	5,997	4,740

**Bourne (Non-Teachers)**

Age	Non-Medicare Plans				Medicare Supplement			
	Retiree		Spouse		Retiree		Spouse	
	Male	Female	Male	Female	Male	Female	Male	Female
45	\$8,507	\$10,672	\$5,277	\$7,966	N/A	N/A	N/A	N/A
50	10,097	11,501	7,053	9,234	N/A	N/A	N/A	N/A
55	11,991	12,380	9,437	10,689	N/A	N/A	N/A	N/A
60	14,241	13,344	12,634	12,397	N/A	N/A	N/A	N/A
65	16,913	14,376	16,913	14,376	\$2,040	\$1,734	\$2,040	\$1,734
70	19,602	15,492	19,602	15,492	2,364	1,869	2,364	1,869
75	21,124	16,676	21,124	16,676	2,548	2,011	2,548	2,011
80	22,748	17,979	22,748	17,979	2,744	2,169	2,744	2,169

**SECTION 3: Supporting Information for Barnstable County June 30, 2012 Measurement Under GASB**

**Nantucket (including Nantucket Regional Transit Authority)**

Age	Non-Medicare Plans				Medicare Supplement			
	Retiree		Spouse		Retiree		Spouse	
	Male	Female	Male	Female	Male	Female	Male	Female
45	\$7,836	\$9,830	\$4,861	\$7,338	N/A	N/A	N/A	N/A
50	9,301	10,594	6,496	8,506	N/A	N/A	N/A	N/A
55	11,046	11,404	8,693	9,846	N/A	N/A	N/A	N/A
60	13,118	12,292	11,638	11,419	N/A	N/A	N/A	N/A
65	15,579	13,242	15,579	13,242	\$3,780	\$3,213	\$3,780	\$3,213
70	18,056	14,270	18,056	14,270	4,381	3,462	4,381	3,462
75	19,458	15,361	19,458	15,361	4,721	3,727	4,721	3,727
80	20,954	16,560	20,954	16,560	5,084	4,018	5,084	4,018

**GIC Plans**

Age	Retired on or before June 1, 1990				Retired after June 1, 1990			
	Non-Medicare Eligible		Medicare Eligible		Non-Medicare Eligible		Medicare Eligible	
	Retiree	Spouse	Retiree	Spouse	Retiree	Spouse	Retiree	Spouse
45	\$7,148	\$6,838	N/A	N/A	\$6,830	\$6,413	N/A	N/A
50	8,409	8,044	N/A	N/A	8,034	7,543	N/A	N/A
55	9,890	9,461	N/A	N/A	9,450	8,872	N/A	N/A
60	11,804	11,292	N/A	N/A	11,279	10,589	N/A	N/A
65	14,525	13,902	\$2,928	\$2,928	13,887	13,049	\$2,765	\$2,765
70	16,765	16,051	3,377	3,377	16,034	15,072	3,188	3,188
75	18,892	18,092	3,804	3,804	18,074	16,997	3,592	3,592
80	20,677	19,810	4,160	4,160	19,792	18,623	3,927	3,927

**Medicare Advantage:** \$3,043

**Medicare Rx (Bourne):** \$1,668

**SECTION 3: Supporting Information for Barnstable County June 30, 2012 Measurement Under GASB**

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**Annual Dental Cost:**

<i>CCMHG</i>	\$555
<i>Bourne</i>	\$409

**Health Care Cost Trend Rates:**

Health care trend measures the anticipated overall rate at which health plan costs are expected to increase in future years. The rates shown below are “net” and are applied to the net per capita costs shown above. The trend shown for a particular plan year is the rate that must be applied to that year’s cost to yield the next year’s projected cost.

<b>Year Ending June 30</b>	<b>Medical/Drug</b>	<b>Dental</b>	<b>Part B</b>
2013	8.00%	5.00%	6.00%
2014	7.50%	5.00%	6.00%
2015	7.00%	5.00%	6.00%
2016	6.50%	5.00%	6.00%
2017	6.00%	5.00%	6.00%
2018	5.50%	5.00%	6.00%
2019 & later	5.00%	5.00%	6.00%

**Retiree Contribution Increase Rate:**

Retiree contributions for medical and prescription drug coverage are expected to increase with medical trend. Retiree contributions for dental are assumed to increase with dental trend.

**Participation and Coverage Election:**

100% of active employees with coverage are assumed to elect retiree coverage.

100% of retirees over age 65 are assumed to remain in their current medical plan for life and continue dental and life insurance coverage, if elected.

50% of future retirees with medical coverage are assumed to have life insurance coverage, and 90% are assumed to have dental benefits if the retirees are eligible for those benefits according to unit.

**SECTION 3: Supporting Information for Barnstable County June 30, 2012 Measurement Under GASB**

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*Barnstable Fire District, Bourne Recreation Authority, Bourne Water District, Buzzard's Bay Water District, Cape Cod Regional Technical High School, Cape Cod Regional Transit Authority, COMM Fire District, Dennis Water District, Hyannis Fire District, Mashpee Water District, Monomoy Regional School District, Sandwich Water District, Town of Truro and Upper Cape Cod Regional School District:*

For future retirees and current retirees under age 65, 100% are assumed to enroll in a Medicare Supplement plan upon reaching age 65.

*Dennis-Yarmouth Regional School District, Towns of Barnstable, Bourne, Eastham, Harwich, Mashpee, Orleans, Provincetown and Sandwich:*

For future retirees hired prior to 1986 and current retirees under age 65, 95% are assumed to be eligible for Medicare and are assumed to enroll in the Medicare Supplement Plan upon reaching age 65, 5% are assumed to be ineligible and to remain enrolled in a non-Medicare plan. For future retirees hired in 1986 or later, 100% are assumed to enroll in a Medicare Supplement plan upon reaching age 65. For Dennis-Yarmouth Regional School District and Town of Barnstable, for future retirees hired in 1986 or later, 95% are assumed to enroll in a Medicare Supplement plan and 5% are assumed to enroll in a Medicare Advantage plan upon reaching age 65.

**SECTION 3: Supporting Information for Barnstable County June 30, 2012 Measurement Under GASB**

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*Barnstable County, Towns of  
Chatham, Dennis, Falmouth,  
Nantucket and Wellfleet:*

For future retirees hired prior to 1986 and current retirees under age 65, 90% are assumed to be eligible for Medicare and are assumed to enroll in a Medicare Supplement plan upon reaching age 65, and 10% are assumed to be ineligible for, or elect out of, Medicare and remain enrolled in a non-Medicare plan. For future retirees hired in 1986 or later, 100% are assumed to enroll in a Medicare Supplement plan upon reaching age 65. For Town of Chatham, for future retirees hired in 1986 or later, 95% are assumed to enroll in a Medicare Supplement plan and 5% are assumed to enroll in a Medicare Advantage plan upon reaching age 65.

*Nauset Regional School District,  
Towns of Brewster and Yarmouth:*

For future retirees and current retirees under age 65, 95% are assumed to enroll in a Medicare Supplement plan upon reaching age 65 and 5% are assumed to enroll in a Medicare Advantage plan. For Town of Brewster, for future retirees hired in 1986 or later, 100% are assumed to enroll in a Medicare Supplement Plan upon reaching age 65.

*Towns of Barnstable, Bourne, and,  
Eastham and Upper Cape Cod RTS  
(retired teachers):*

All future and current retired teachers under 65 are assumed to elect a GIC indemnity plan upon retirement. For future retirees hired prior to 1986 and current retirees under the age of 65 (excluding Upper Cape Cod RTS), 90% are assumed to be eligible for Medicare and 10% are assumed to be ineligible and remain in a non-Medicare GIC indemnity plan upon reaching age 65. For future retirees hired in 1986 or later(excluding Upper Care Cod RTS), 100% are assumed to be eligible for Medicare and enroll in a GIC indemnity plan on reaching age 65. For all future and current retirees for Upper Cape Cod RTS, 100% are assumed to be eligible for Medicare and enroll in a GIC indemnity plan on reaching age 65.

**SECTION 3: Supporting Information for Barnstable County June 30, 2012 Measurement Under GASB**

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<b>Plan Design:</b>	Development of plan liabilities was based on the substantive plan of benefits in effect as described in Exhibit II.
<b>Administrative Expenses:</b>	Administrative expenses for self-insured plans were assumed to increase at 3.5%. Administrative expenses for insured plans were assumed to be included in the fully insured premium rates.
<b>Annual Maximum Benefits:</b>	No increase in the annual maximum benefit levels was assumed.
<b>Lifetime Maximum Benefits:</b>	No information was available regarding accumulations toward lifetime maximum benefits and no such accumulations were assumed.
<b>Missing Participant Data:</b>	A missing census item for a given participant was assumed to equal the average value of that item over all other participants of the same status for whom the item is known.
<b>Health Care Reform Assumption:</b>	This valuation does not include the potential impact of any future changes due to the Patient Protection and Affordable Care Act (PPACA) and the Health Care and Education Reconciliation Act (HCERA) of 2010 other than the excise tax on high cost health plans beginning in 2018 (reflected with this valuation) and those previously adopted as of the valuation date. The addition of the excise tax in this valuation increased the actuarial accrued liability and normal cost as shown below for employers participating in the following groups:

	<u>Actuarial Accrued Liability</u>	<u>Normal Cost</u>
GIC*	3.64%	5.00%
CCMHG	0.78%	1.57%
Bourne	0.50%	1.14%
Nantucket	3.41%	2.72%

\* The GIC assumption comes from the January 1, 2012 OPEB Actuarial Valuation for the Commonwealth of Massachusetts, prepared by Aon Hewitt and dated October 18, 2012.

**Assumption Changes  
Since Prior Valuation:**

Per capita health care costs and administrative expenses for CCMHG and Towns of Bourne and Nantucket were recalculated based on more recent data.

Per capita health costs for GIC retirees were updated based on the Commonwealth of Massachusetts Postemployment Benefits Other than Pensions Actuarial Valuation as of January 1, 2012.

Medical/drug trend assumption was changed from 8.50% in 2013 decreasing by 0.75% per year to 5.50% in 2017 and by 0.50% to 5.00% by 2018 to 8.00% in 2013 decreasing by 0.50% per year to 5.00% by 2019.

The plan election assumption upon reaching age 65 was revised for Barnstable County, Bourne Recreation Authority, Cape Cod Regional Technical High School, Dennis Water District, Dennis-Yarmouth RSD, Hyannis Fire Department, Mashpee Water District, Nantucket Regional Transit Authority, Nauset RSD, Sandwich Water District, Towns of Barnstable, Bourne, Chatham, Eastham, Harwich, Provincetown, Sandwich, Truro and Yarmouth and Upper Cape Cod RTS, as noted in the coverage descriptions.

The excise tax on high cost health plans beginning in 2018 was included in this valuation.

The pay-as-you-go discount rate was changed from 5.00% to 4.50%. The funding discount rate was changed from 8.25% to 7.75%.

**SECTION 3: Supporting Information for Barnstable County June 30, 2012 Measurement Under GASB**

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The mortality assumption was updated as follows:

	<b>Previous</b>	<b>Current</b>
<b>Preretirement:</b>		
<i>Falmouth</i>	RP 2000 Employee Mortality Table	RP 2000 Employee Mortality Table projected 12 years with Scale AA
<i>Non-Teachers</i>	RP 2000 Employee Mortality Table projected 10 years with Scale AA	RP 2000 Employee Mortality Table projected 12 years with Scale AA
<i>Teachers</i>	RP 2000 Employee Mortality Table projected 10 years with Scale AA	RP 2000 Employee Mortality Table projected 15 years with Scale AA
<b>Postretirement:</b>		
<i>Falmouth</i>	RP 2000 Healthy Annuitant Mortality Table	RP 2000 Healthy Annuitant Mortality Table projected 12 years with Scale AA
<i>Non-Teachers</i>	RP 2000 Healthy Annuitant Mortality Table projected 10 years with Scale AA	RP 2000 Healthy Annuitant Mortality Table projected 12 years with Scale AA
<i>Teachers</i>	RP 2000 Healthy Annuitant Mortality Table projected 10 years with Scale AA	RP 2000 Healthy Annuitant Mortality Table projected 15 years with Scale AA
<b>Disabled:</b>		
<i>Non-Teachers</i>	RP 2000 Healthy Annuitant Mortality Table projected 10 years with Scale AA set forward 2 years	RP 2000 Healthy Annuitant Mortality Table projected 12 years with Scale AA set forward 2 years

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**EXHIBIT II**  
**Summary of Plan**

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This exhibit summarizes the major benefit provisions as included in the valuation. To the best of our knowledge, the summary represents the substantive plans as of the measurement date. It is not intended to be, nor should it be interpreted as, a complete statement of all benefit provisions.

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**Eligibility:**

The following groups of retirees receiving a pension from the Barnstable County Retirement System, the Falmouth Retirement System, or the Massachusetts Teachers Retirement System are eligible for postretirement medical benefits:

*Members hired before  
April 2, 2012*

**Group 1 and Group 2 (including Teachers):**

- > Retirees with at least 10 years of creditable service are eligible at age 55;
- > Retirees with at least 20 years of creditable service are eligible at any age.

**Group 4**

- > Retirees are eligible at age 55;
- > Retirees with at least 20 years of creditable service are eligible at any age.

*Members hired on or  
after April 2, 2012*

**Group 1 (including Teachers):**

- > Retirees with at least 10 years of creditable service are eligible at age 60.

**Group 2**

- > Retirees with at least 10 years of creditable service are eligible at age 55.

**Group 4**

- > Retirees are eligible at age 55;
- > Retirees with at least 10 years of creditable service are eligible at age 50.

**Disability:** Accidental (job-related) Disability has no age or service requirement. Ordinary (non-job related) Disability has no age requirement but requires 10 years of creditable service.

**Pre-Retirement Death:** Surviving spouses of members who die in active service on Accidental (job-related) Death are eligible at any age. Surviving spouses of members who die in active service on Ordinary (non-job related) Death are eligible after two years of service.

**Post-Retirement Death:** Surviving spouse is eligible.

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**Cape Code Municipal Health Group**

**Benefit Types:**

Medical and prescription drug benefits are provided to all eligible retirees through a variety of plans offered through the Cape Cod Municipal Health Group (CCMHG) provided by Blue Cross Blue Shield of Massachusetts, Harvard Pilgrim Health Plan and Tufts Health Plan. The CCMHG also provides contributory and voluntary dental coverage through Delta Dental.

**Duration of Coverage:**

Lifetime.

**Dependent Benefits:**

Medical, prescription drug, and dental.

**Dependent Coverage:**

Benefits are payable to a spouse for their lifetime, regardless of when the retiree dies.

**SECTION 3: Supporting Information for Barnstable County June 30, 2012 Measurement Under GASB**

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(CCMHG continued)

**Contribution rates:**

CCMHG current premium rates and employer contribution percentages are summarized below:

	Subscribers			Retirees Age 65 and	Monthly Cost (eff. 7/1/2012)
	Active	Retired	Total		
<b><u>Non-Medicare Plans</u></b>					
BCBS Master Health Plus					
Individual	32	34	66	9	\$1,024.00
2-person	0	0	0	0	\$2,052.00
Family	26	18	44	0	\$2,560.00
BCBS Blue Care Elect Preferred					
Individual	521	292	813	44	\$717.00
2-person	41	5	46	0	\$1,439.00
Family	939	213	1152	14	\$1,795.00
BCBS Network Blue HMO					
Individual	609	59	668	10	\$564.00
2-person	55	4	59	0	\$1,131.00
Family	1067	62	1129	2	\$1,510.00
Harvard Pilgrim HMO					
Individual	399	57	456	10	\$573.00
Family	792	61	853	2	\$1,532.00
Harvard Pilgrim PPO					
Individual	266	52	318	11	\$628.00
Family	454	47	501	3	\$1,662.00
Totals	5,201	904	6,105	105	

**SECTION 3: Supporting Information for Barnstable County June 30, 2012 Measurement Under GASB**

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(CCMHG continued)

<u>Medicare Plans</u>					<b>(eff. 7/1/2012)</b>
Tufts Medicare Preferred Supplement**	N/A	16	16		\$333.00
BCBS Medex 3 Enhanced	N/A	1619	1619		\$409.00
Harvard Pilgrim Medicare Enhanced	N/A	311	311		\$323.00
BCBS Managed Blue for Seniors	N/A	11	11		\$402.79
Totals	0	1,957	1,957	0	
<u>Medicare Advantage Plans</u>					<b>(eff. 1/1/2013)</b>
BCBS Medicare HMO Blue	0	5	5	6	\$303.82
Tufts Medicare Preferred HMO	0	22	22	21	\$240.00
Totals	0	27	27	27	
Dental Blue Premier					<b>(eff. 7/1/2012)</b>
Individual					\$34.00
Family					\$96.00

\* 105 of 2,089 over-65 retirees are in a non-Medicare plan

\*\* Premium rate is as of January 1, 2013

**SECTION 3: Supporting Information for Barnstable County June 30, 2012 Measurement Under GASB**

(CCMHG continued)

Unit	Employer Contribution Percentage						Retiree Life Insurance Benefit
	Medical				Dental	Life Insurance	
	Retirees and Spouses		Surviving Spouses				
	Under Age 65	Age 65 and Over	Under Age 65	Age 65 and Over			
Barnstable County	75%	75%	75%	75%	75%	75%	\$10,000
Barnstable Fire District	80%	80%	80%	80%	80%	80%	\$10,000
Bourne Recreation Authority	75%	75%	0%	0%	75%	75%	\$5,000
Bourne Water District	75%	75%	50%	50%	75%	75%	\$5,000
Buzzards Bay Water District	75%	75%	75%	75%	75%	75%	\$5,000
Cape Cod Regional Technical School	65%	65%	65%	65%	65%	99%	\$10,000
Cape Cod Regional Transit Authority	0%	0%	0%	0%	0%	None	None
C.O.M.M. Fire District	70%-90%	80%	70%-90%	80%	80%	80%	\$1,000
Cotuit Fire District	75%	75%	0%	0%	75%	75%	\$2,000
Dennis Water District	75%	75%	50%	50%	75%	75%	\$5,000
Dennis-Yarmouth Regional School District	60%	60%	0%	0%	60%	60%	\$1,000
Hyannis Fire District	95%	95%	95%	95%	95%	95%	\$5,000
Mashpee Water District	75%	75%	75%	75%	75%	50%	\$5,000
Monomoy Regional School District	70%	70%	70%	70%	70%	70%	\$5,000
Nauset Regional School District	50%	50%	50%	50%	0%	50%	\$2,000
Sandwich Water District	90%	90%	90%	90%	90%	90%	\$2,000
Upper Cape Cod Regional Technical School	70%	70%	70%	70%	None	50%	\$10,000
Town of Barnstable	50%	50%	0%	0%	None	50%	\$2,000
Town of Bourne	75%	75%	0%	0%	75%	50%	\$5,000
Town of Brewster	50%	50%	50%	50%	0%	50%	\$1,000
Town of Chatham	50%	50%	50%	50%	50%	50%	\$5,000
Town of Dennis	60%	60%	50%	50%	60%	60%	\$2,000
Town of Eastham	65%	65%	65%	65%	65%	50%	\$5,000
Town of Falmouth	65%	50%	65%	50%	0%	50%	\$1,000
Town of Harwich	75%	75%	50%	50%	0%	75%	\$2,000
Town of Mashpee	75%	75%	75%	75%	0%	75%	\$4,000
Town of Nantucket	80%-90%	90%	80%-90%	90%	0%	None	None
Town of Orleans	75%	75%	0%	0%	0%	75%	\$2,000
Town of Provincetown	80%	80%	0%	0%	None	50%	\$1,000
Town of Sandwich	75%	75%	50%	50%	75%	75%	\$2,000
Town of Truro	65%	65%	0%	0%	0%	65%	\$1,000
Town of Wellfleet	50%	50%	50%	50%	0%	50%	\$5,000
Town of Yarmouth	50%	50%	50%	50%	0%	50%	\$5,000

**SECTION 3: Supporting Information for Barnstable County June 30, 2012 Measurement Under GASB**

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**Town of Bourne**

**Benefit Types:** Medical, prescription drug and dental benefits are provided to all eligible retirees through a variety of plans provided by Blue Cross Blue Shield of Massachusetts.

**Duration of Coverage:** Lifetime.

**Dependent Benefits:** Medical, prescription drug, and dental.

**Dependent Coverage:** Benefits are payable to a spouse for their lifetime, regardless of when the retiree dies.

**Contribution rates:** Current premium rates are summarized below:

	Subscribers			Retirees Age 65 and over*	Monthly Cost (eff. 7/1/2013)
	Active	Retired	Total		
<u>Non-Medicare Plans</u>					
BCBS Blue Care Elect Preferred PPO					
Individual	56	21	77	1	\$829.50
Family	156	22	178	1	\$1,991.85
BCBS Network Blue HMO					
Individual	64	1	65	0	\$707.70
Family	117	3	120	0	\$1,695.75
Totals	393	47	440	2	
<u>Medicare Plans</u>					
BCBS Medex II/Blue Medicare Rx	1	88	88		\$349.60
Dental Blue					
Individual					\$33.80
Family					\$90.60

\* 2 of 90 over-65 retirees are in a non-Medicare plan

**SECTION 3: Supporting Information for Barnstable County June 30, 2012 Measurement Under GASB**

**Town of Nantucket (including Nantucket Regional Transit Authority)**

**Benefit Types:** Medical and prescription drug benefits are provided to all eligible retirees through a variety of plans provided by Blue Cross Blue Shield of Massachusetts.

**Duration of Coverage:** Lifetime.

**Dependent Benefits:** Medical and prescription drug.

**Dependent Coverage:** Benefits are payable to a spouse for their lifetime, regardless of when the retiree dies.

**Contribution rates:** Current premium rates are summarized below:

	Subscribers			Retirees Age 65	Monthly Cost (eff. 6/1/2013)
	Active	Retired	Total		
<b><u>Non-Medicare Plans</u></b>					
BCBS Blue Care Elect Preferred PPO					
Individual	67	1	68	0	\$741.00
Family	190	1	191	0	\$1,579.00
BCBS Master Medical					
Individual	78	39	117	14	\$1,060.00
Family	130	61	191	9	\$2,300.00
Totals	465	102	567	23	
<b><u>Medicare Plans</u></b>					
(eff. 6/1/2013)					
BCBS Medex 3	N/A	76	70		\$358.64
Totals	0	76	70		

\* 23 of 99 over-65 retirees are in a non-Medicare plan

**SECTION 3: Supporting Information for the Barnstable County June 30, 2012 Measurement under GASB**

**Employers Participating in the Group Insurance Commission (GIC) for Retired Teachers**

**Benefit Types:** Medical and prescription drug benefits are provided to all eligible retirees through a variety of plans provided through the Commonwealth of Massachusetts GIC.

**Duration of Coverage:** Lifetime.

**Dependent Benefits:** Medical and prescription drug.

**Dependent Coverage:** Benefits are payable to a spouse for their lifetime, regardless of when the retiree dies.

**Contribution rates:** Current premium rates are summarized below:

	Subscribers			Monthly Cost (eff. 7/1/2013)	
	Retired	Total	Retirees Age 65 and over*	Retired on or before July 1, 1990	Retired after July 1, 1990
	<b><u>Non-Medicare Plans</u></b>				
Neighborhood Health Plan					
Individual	0	0	0	\$45.56	\$68.34
Family	1	1	0	\$120.74	\$181.11
Unicare/Comm Indemnity/CIC					
Individual	105	105	25	\$114.66	\$154.78
Family	55	55	5	\$277.53	\$373.85
Totals	161	161	30		
<b><u>Medicare Plans</u></b>					
HP Medicare Enhance	4	4		\$39.32	\$58.98
Unicare/Comm Indemnity OME/CIC	338	338	265	\$42.88	\$60.31
Totals	342	342	265		

\* 30 of 372 over-65 retirees are in a non-Medicare plan

\*\* Enrollment in plan is frozen

**SECTION 4: Supplemental Information by Department for the June 30, 2012 Measurement under GASB**

**DEPARTMENT RESULTS – TOWN OF NANTUCKET**

**PROJECTED UNIT CREDIT, PAY-AS-YOU-GO ASSUMPTIONS (4.50%)**

	Airport	County	Our Island Home	School	Sewer
<b>Actuarial Accrued Liability by Participant Category</b>					
1. Current retirees, beneficiaries and dependents	\$2,673,291	\$203,159	\$3,472,389	\$17,622,983	\$0
2. Current active members	<u>2,442,221</u>	<u>69,443</u>	<u>4,328,030</u>	<u>15,113,947</u>	<u>391,763</u>
3. Total as of July 1, 2012: (1) + (2)	\$5,115,512	\$272,602	\$7,800,419	\$32,736,930	\$391,763
4. Actuarial value of assets as of July 1, 2012	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
5. Unfunded actuarial accrued liability (UAAL) as of July 1, 2012: (3) - (4)	\$5,115,512	\$272,602	\$7,800,419	\$32,736,930	\$391,763
<b>Annual Required Contribution for Fiscal Year Ending June 30, 2013</b>					
6. Normal cost as of July 1, 2012	\$185,711	\$13,814	\$346,641	\$1,159,817	\$57,132
7. Adjustment for timing	<u>4,133</u>	<u>307</u>	<u>7,714</u>	<u>25,809</u>	<u>1,271</u>
8. Normal cost adjusted for timing: (6) + (7)	\$189,844	\$14,121	\$354,355	\$1,185,626	\$58,403
9. 30-year amortization of the unfunded actuarial accrued liability (UAAL) increasing at 4.00% per year	182,640	9,733	278,500	1,168,814	13,987
10. Adjustment for timing	<u>4,064</u>	<u>217</u>	<u>6,197</u>	<u>26,009</u>	<u>311</u>
11. Amortization payment adjusted for timing: (9) + (10)	\$186,704	\$9,950	\$284,697	\$1,194,823	\$14,298
12. Total Annual Required Contribution (ARC): (8) + (11)	376,548	24,071	639,052	2,380,449	72,701
13. Projected benefit payments for fiscal year ending June 30, 2013	\$132,849	\$9,789	\$204,106	\$1,060,008	\$64

*Note: Adjustment for timing assumes payment in the middle of the fiscal year.*

**SECTION 4: Supplemental Information by Department for the June 30, 2012 Measurement under GASB**

	Siasconset Water	Town	Wannacomet Water	Total
<b>Actuarial Accrued Liability by Participant Category</b>				
1. Current retirees, beneficiaries and dependents	\$965,198	\$20,616,294	\$213,960	\$45,767,274
2. Current active members	<u>0</u>	<u>19,426,317</u>	<u>1,020,121</u>	<u>42,791,842</u>
3. Total as of July 1, 2012: (1) + (2)	\$965,198	\$40,042,611	\$1,234,081	\$88,559,116
4. Actuarial value of assets as of July 1, 2012	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
5. Unfunded actuarial accrued liability (UAAL) as of July 1, 2012: (3) - (4)	\$965,198	\$40,042,611	\$1,234,081	\$88,559,116
<b>Annual Required Contribution for Fiscal Year Ending June 30, 2013</b>				
6. Normal cost as of July 1, 2012	\$0	\$1,872,551	\$45,343	\$3,681,009
7. Adjustment for timing	<u>0</u>	<u>41,668</u>	<u>1,009</u>	<u>81,911</u>
8. Normal cost adjusted for timing: (6) + (7)	\$0	\$1,914,219	\$46,352	\$3,762,920
9. 30-year amortization of the unfunded actuarial accrued liability (UAAL) increasing at 4.00% per year	34,461	1,429,650	44,061	3,161,846
10. Adjustment for timing	<u>767</u>	<u>31,814</u>	<u>980</u>	<u>70,359</u>
11. Amortization payment adjusted for timing: (9) + (10)	\$35,228	\$1,461,464	\$45,041	\$3,232,205
12. Total Annual Required Contribution (ARC): (8) + (11)	35,228	3,375,683	91,393	6,995,125
13. Projected benefit payments for fiscal year ending June 30, 2013	\$41,001	\$1,151,353	\$22,862	\$2,622,032

*Note: Adjustment for timing assumes payment in the middle of the fiscal year.*