

# Barnstable County

Actuarial Valuation and Review of Other  
Postemployment Benefits (OPEB) as of  
June 30, 2014 in accordance with  
GASB Statements No. 43 and No. 45





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September 14, 2015

*Mr. Robert Lawton  
Interim Director of Finance/Treasurer  
Barnstable County  
Superior Court House  
3195 Main Street  
P.O. Box 427  
Barnstable, MA 02630*

*Dear Mr. Lawton:*

*We are pleased to submit this report on our actuarial valuation of postemployment welfare benefits as of June 30, 2014 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, 2014 and July 1, 2015 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, FSA, 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.*

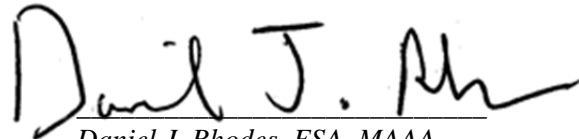
*We look forward to discussing this with you at your convenience.*

*Sincerely,*

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

By: 

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



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

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### DEPARTMENT RESULTS

**IMPORTANT INFORMATION ABOUT ACTUARIAL VALUATIONS**

An actuarial valuation is an estimate of future uncertain obligations of a postretirement health plan. As such, it will never forecast the precise future stream of benefit payments. It is an estimated forecast – the actual cost of the plan will be determined by the benefits and expenses paid, not by the actuarial valuation.

In order to prepare a valuation, Segal Consulting (“Segal”) relies on a number of input items. These include:

- **Plan of benefits** Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. For example, a plan may provide health benefits to post-65 retirees that coordinate with Medicare. If so, changes in the Medicare law or administration may change the plan’s costs without any change in the terms of the plan itself. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
- **Participant data** An actuarial valuation for a plan is based on data provided to the actuary by the plan. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is not necessary to have perfect data for an actuarial valuation: the valuation is an estimated forecast, not a prediction. The uncertainties in other factors are such that even perfect data does not produce a “perfect” result. Notwithstanding the above, it is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
- **Assets** Part of the cost of a plan will be paid from existing assets – the balance will need to come from future contributions and investment income. The valuation is based on the asset values as of the valuation date, typically reported by the auditor. Some plans include assets, such as private equity holdings, real estate, or hedge funds, that are not subject to valuation by reference to transactions in the marketplace. A snapshot as of a single date may not be an appropriate value for determining a single year’s contribution requirement, especially in volatile markets.
- **Actuarial assumptions** In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. To determine the future costs of benefits, Segal collects claims, premium, and enrollment data in order to establish a baseline cost for the valuation measurement, and then develops short- and long-term health care cost rates to project increases in costs in future years. This forecast also requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year, as well as forecasts of the plan’s benefits for each of those events. The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved the plan’s assets, or if there are no assets, a rate of return on the assets of the employer. All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions the actuary selects within that range. That is, there is no right answer (except with hindsight). It is important

## **SECTION 1: Executive Summary for the Barnstable County June 30, 2014 Measurement Under GASB 43 and 45**

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for any user of an actuarial valuation to understand and accept this constraint. The actuarial model may use approximations and estimates that will have an immaterial impact on our results and will have no impact on the actual cost of the plan. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.

Given the above, the user of Segal's actuarial valuation (or other actuarial calculations) needs to keep the following in mind:

- The actuarial valuation is prepared for use by certain towns, school districts and other member units in Barnstable County. It includes information for compliance with accounting standards. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- An actuarial valuation is a measurement at a specific date — it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of financial measurements, except where otherwise noted.
- Sections of this report include actuarial results that are not rounded, but that does not imply precision.
- Critical events for a plan include, but are not limited to, decisions about changes in benefits and contributions. The basis for such decisions needs to consider many factors such as the risk of changes in plan enrollment, emerging claims experience and health care cost trend, not just the current valuation results.
- Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. You should look to their other advisors for expertise in these areas.
- While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.
- Segal's report shall be deemed to be final and accepted upon delivery and review. Notify Segal immediately of any questions or concerns about the final content.

As Segal Consulting has no discretionary authority with respect to the management or assets of the Plan, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Plan.

## **SECTION 1: Executive Summary for the Barnstable County June 30, 2014 Measurement Under GASB 43 and 45**

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### **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, 2014. 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 7.50% and 4.50%, respectively, for fully funded and pay-as-you-go discount rates, compared to 7.75% and 4.50% in the prior valuation.

The chart on the following page shows the member units that have set up qualified trusts. We have also included the balance in the OPEB Trust as of June 30, 2014 and the funding policy for each unit as reported to us.

Based on the long-term funding policies adopted by each Unit, we are using a fully funded discount rate of 7.50% for the Bourne Water District and the Towns of Provincetown, Truro and Wellfleet, a partially funded discount rate of 5.00% for the Cape Cod Regional Transit Authority and Centerville, Osterville, Marston Mills Fire District, a partially funded discount rate of 5.25% for the Towns of Orleans and Yarmouth, a partially funded discount rate of 5.50% for the Towns of Barnstable and Brewster and a partially funded discount rate of 6.0% for the Town of Chatham. The projected contributions for the Towns of Bourne and Falmouth and Cape Cod Regional Technical School are not large enough to increase the discount rate. While other Units 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.

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<b>Unit</b>	<b>June 30, 2014 OPEB Balance</b>	<b>Funding Policy</b>	<b>Discount Rate</b>	<b>Unit</b>	<b>June 30, 2014 OPEB Balance</b>	<b>Funding Policy</b>	<b>Discount Rate</b>
Barnstable Fire District	\$20,030	N/A	N/A	Town of Chatham	\$102,543	\$150,000 in fiscal year 2015 and each year thereafter	6.0%
Bourne Water District	\$108,199	\$10,000 in fiscal year 2015 and each year thereafter	7.5%	Town of Falmouth	\$134,375	\$100,000 in fiscal year 2015 and each year thereafter	N/A
Cape Cod Regional Technical School	\$260,764	\$20,000 in fiscal year 2015 and each year thereafter	N/A	Town of Harwich	\$303,073	N/A	N/A
Cape Cod Regional Transit Authority	\$20,017	\$10,000 in fiscal year 2015 and each year thereafter	5.0%	Town of Mashpee	\$307,756	N/A	N/A
Centerville, Osterville, Marstens Mills Fire District	\$255,474	\$124,000 plus an undetermined supplemental amount in fiscal year 2015 and each year thereafter	5.0%	Town of Orleans	\$0	\$150,000 in fiscal year 2015 and each year thereafter	5.25%
Dennis-Yarmouth Regional School District	\$81,115	N/A	N/A	Town of Provincetown	\$538,955	\$500,000 in fiscal year 2015, \$512,500 in fiscal year 2016 increasing 2.5% per year thereafter	7.5%
Town of Barnstable	\$1,373,922	\$700,000 in fiscal year 2015, \$378,000 in fiscal year 2016, increasing \$50,000 per year thereafter	5.5%	Town of Truro	\$50,463	\$600,000 in fiscal year 2015, \$300,000 in fiscal year 2016 and each year thereafter	7.5%
Town of Bourne	\$350,417	\$200,000 in fiscal year 2015	N/A	Town of Wellfleet	\$441,005	\$200,000 in fiscal year 2015 and each year thereafter	7.5%
Town of Brewster	\$1,161,457	\$25,000 in fiscal year 2015, increasing \$25,000 per year thereafter	5.5%	Town of Yarmouth	\$200,000	\$200,000 in fiscal year 2015 and each year thereafter	5.25%

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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 and a 30-year closed amortization for the units that are fully funding. 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.”

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.

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.

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.



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Based on the expected funding policies provided to us, we have included the additional funding amounts for fiscal years 2015 and 2016 for:

- Bourne Water District
- Cape Cod Regional Technical School
- Cape Cod Regional Transit Authority
- Centerville, Osterville, Marstons Mills Fire District
- Town of Barnstable
- Town of Bourne (2015 only)
- Town of Brewster
- Town of Chatham
- Town of Falmouth
- Town of Orleans
- Town of Provincetown
- Town of Truro
- Town of Wellfleet
- Town of Yarmouth.

If actual contributions are different from the funding policies stated on page 4, Charts 1 and 3 will need to be revised.

**SECTION 1: Introduction for the Barnstable County June 30, 2014 Measurement Under GASB 43 and 45**

**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.

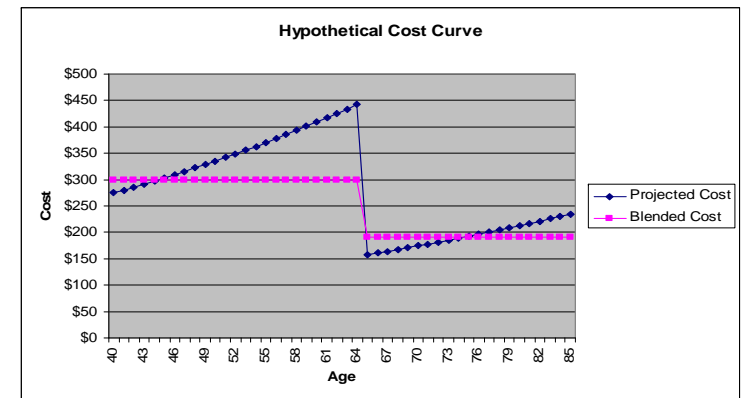
The statements cover postemployment benefits of health, prescription drug, dental, vision and life insurance coverage for retirees; long-term care coverage, life insurance and death benefits that are *not* offered as part of a pension plan; and long-term disability insurance for employees. These benefits, 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 II of Section 3.

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.



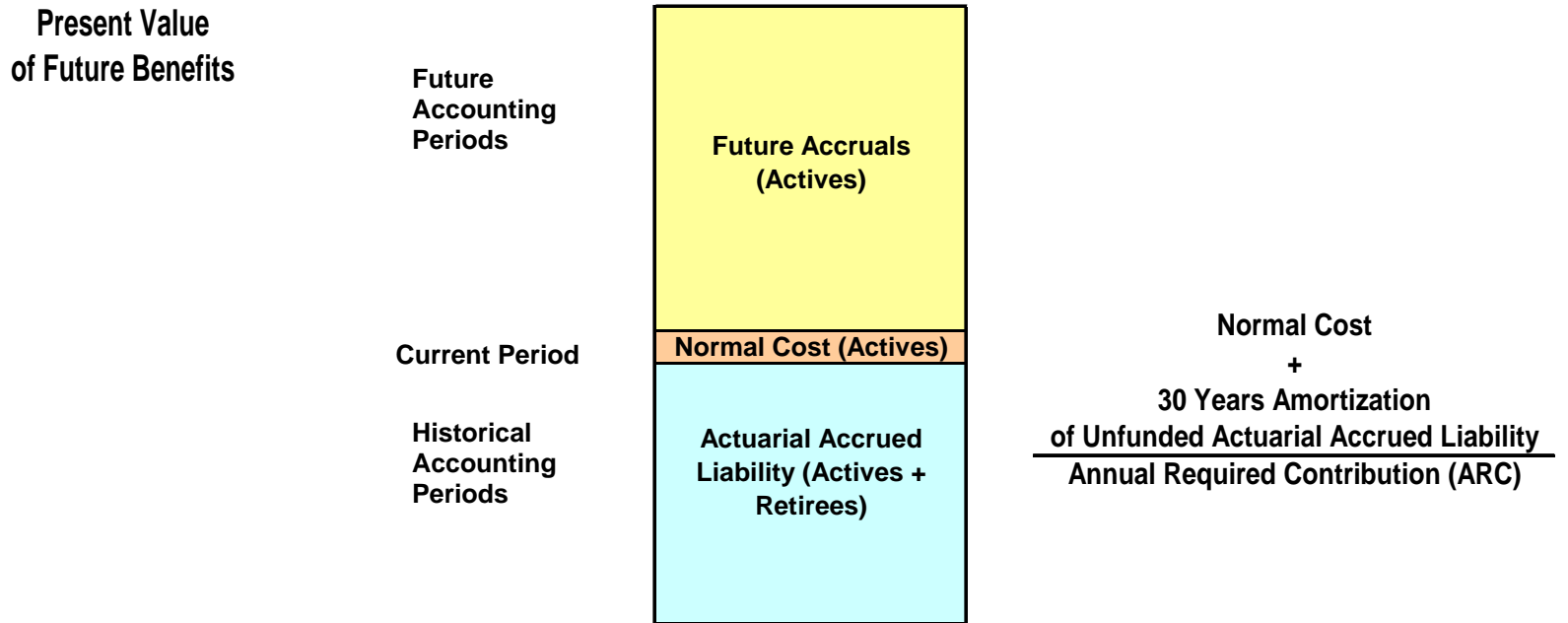
**SECTION 1: Introduction for the Barnstable County June 30, 2014 Measurement Under GASB 43 and 45**

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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 the Barnstable County June 30, 2014 Measurement Under GASB 43 and 45**

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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 the Barnstable County June 30, 2014 Measurement Under GASB 43 and 45**

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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 the Barnstable County June 30, 2014 Measurement Under GASB 43 and 45**

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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.

September 14, 2015

**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, 2014, 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.

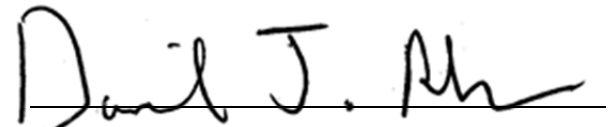
The actuarial valuation is based on the plan of benefits verified by the employers and on participant, premium data and claims and expense experience provided by the employers or from vendors employed by the employers. Segal Consulting does not audit the data provided. The accuracy and comprehensiveness 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, FSA, MAAA  
Vice President and Consulting Actuary

**SECTION 2: Valuation Results for the June 30, 2014 Measurement under GASB**

**SUMMARY OF VALUATION RESULTS  
TOWN OF YARMOUTH**

*The key results and significant assumptions for the current year are shown on a funded basis and a partially funded basis.*

	<b>Funded (7.50% interest rate)</b>	<b>Partially Funded (5.25% interest rate)</b>
<b>Actuarial Accrued Liability by Participant Category</b>		
1. Current retirees, beneficiaries and dependents	\$8,959,571	\$11,350,308
2. Current active members	<u>11,378,592</u>	<u>16,837,144</u>
3. Total as of July 1, 2014: (1) + (2)	\$20,338,163	\$28,187,452
4. Actuarial value of assets as of July 1, 2014	<u>200,000</u>	<u>200,000</u>
5. Unfunded actuarial accrued liability (UAAL) as of July 1, 2014: (3) - (4)	\$20,138,163	\$27,987,452
<b>Annual Required Contribution for Fiscal Year Ending June 30, 2015</b>		
6. Normal cost as of July 1, 2014	\$540,752	\$961,341
7. Adjustment for timing	<u>19,912</u>	<u>24,912</u>
8. Normal cost adjusted for timing: (6) + (7)	\$560,664	\$986,253
9. 30-year amortization of the unfunded actuarial accrued liability (UAAL) increasing at 4.0% per year	\$1,041,499	\$1,103,467
10. Adjustment for timing	<u>38,350</u>	<u>28,595</u>
11. Amortization payment adjusted for timing: (9) + (10)	\$1,079,849	\$1,132,062
12. Total Annual Required Contribution (ARC): (8) + (11)	1,640,513	2,118,315
13. Projected benefit payments for fiscal year ending June 30, 2015	\$722,664	\$722,664

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



**SECTION 2: Valuation Results for the June 30, 2014 Measurement under GASB**

**TOWN OF YARMOUTH**

**Required Supplementary Information, Partially Funded Assumptions (5.25%)**

**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	\$2,199,783	\$478,120	21.7%
2010	2,199,783	559,455	25.4
2011	1,806,901	797,145	44.1
2012	1,906,129	913,274	47.9
2013	1,921,472	645,702	33.6
2014	2,034,553	689,301	33.9
2015	2,214,550	922,664	41.7
2016	2,349,621	1,010,220	43.0

*Note: Fiscal years 2015 and 2016 include OPEB trust contributions of \$200,000. If different amounts are contributed, the figures will need to be revised.*

**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	\$44,539,914	\$44,539,914	0.0%	N/A	N/A
6/30/2008	0	28,429,568	28,429,568	0.0%	N/A	N/A
6/30/2010	0	28,138,933	28,138,933	0.0%	N/A	N/A
6/30/2012	0	24,258,510	24,258,510	0.0%	N/A	N/A
6/30/2014	200,000	28,187,452	27,987,452	0.7%	N/A	N/A

*Note: Employer should provide covered payroll amount.*

**SECTION 2: Valuation Results for the June 30, 2014 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	\$2,199,783	\$0	\$ 0	\$2,199,783	\$478,120	\$1,721,663	\$1,721,663
2010	2,199,783	0	0	2,199,783	559,455	1,640,328	3,361,991
2011	1,761,759	168,100	(122,958)	1,806,901	797,145	1,009,756	4,371,747
2012	1,847,430	218,587	(159,888)	1,906,129	913,274	992,855	5,364,602
2013	1,875,864	241,407	(195,799)	1,921,472	645,702	1,275,770	6,640,372
2014	1,978,094	298,817	(242,358)	2,034,553	689,301	1,345,252	7,985,624
2015	2,118,315	419,245	(323,010)	2,214,550	922,664	1,291,886	9,277,510
2016	2,237,818	487,069	(375,266)	2,349,621	1,010,220	1,339,401	10,616,911

*Note: Fiscal years 2015 and 2016 include OPEB trust contributions of \$200,000. If different amounts are contributed, the figures will need to be revised.*

**SECTION 2: Valuation Results for the June 30, 2014 Measurement under GASB**

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**TOWN OF YARMOUTH**

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**CHART 4**

**Required Supplementary Information**

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<b>Valuation date</b>	June 30, 2014
<b>Actuarial cost method</b>	Entry Age Normal
<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	5.25%, partially funded scenario
Medical/Prescription drug cost trend rate	Under 65: 10% decreasing by 2.0% for 1 year and 0.5% for 6 years to an ultimate rate of 5.0% per year. Over 65: 10% decreasing by 0.5% for 10 years to an ultimate level of 5.0% per year
Dental	None
Part B reimbursement and/or penalties	5.0%
Inflation rate	4.0%
<b>Plan membership:</b>	
Current retirees, beneficiaries, and dependents	180
Current active members	<u>196</u>
Total	376

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*Note: Plan membership counts do not include retirees, if any, eligible for life insurance benefits only.*

**SECTION 2: Valuation Results for the June 30, 2014 Measurement under GASB**

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**TOWN OF YARMOUTH**

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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, 2014**

Number of employees	
Male	145
Female	<u>51</u>
Total	196
Average age	47.7
Average service	13.7

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**Retired employees, spouses and beneficiaries covered for medical benefits as of June 30, 2014**

Number of individuals	180
Average age	68.7

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*Note: Retired employees, spouses and beneficiaries covered for medical benefits as of June 30, 2014 does not include retirees, if any, eligible for life insurance benefits only.*

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

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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. Under Projected Unit Credit, active employees' benefits are allocated from date of hire to assumed retirement age.

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**Per Capita Cost Development:**

**CCMHG Retirees**

*Medical and Prescription 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, 2014 through June 30, 2015. (The Medicare plans renew on January 1, so the costs for these plans were based on an average of the calendar year 2014 and 2015 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, 2014 through June 30, 2015.

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

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**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 January 1, 2013 through December 31, 2014. 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 premium rate for the plan as of January 1, 2015, 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 January 1, 2013 through December 31, 2014. Claims were separated by plan year and adjusted as described above to yield a weighted average per capita claims cost.

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

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**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 March 1, 2013 through February 28, 2015. 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 II with Blue Medicare Rx Prescription Drug Plan for Medicare-eligible retirees were based on the premium rate for the plan as of January 1, 2015. 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, 2014. 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, 2014 Measurement Under GASB

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<b>Measurement Date:</b>	June 30, 2014
<b>Discount Rate:</b>	7.50% (previously 7.75%) funding and 4.50% pay-as-you-go; partially funded rate determined for certain units based on reported funding policy.

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#### **Preretirement Mortality Rates:**

<i>Healthy Non-Teachers</i>	RP-2000 Employee Mortality Table projected generationally with Scale AA from 2010 (previously, RP-2000 Employee Mortality Table projected 12 years with Scale AA)
<i>Healthy Non-Teachers (Falmouth)</i>	RP-2000 Employee Mortality Table projected 22 years with Scale AA (previously, RP-2000 Employee Mortality Table projected 12 years with Scale AA)
<i>Healthy Teachers</i>	RP-2000 Combined Healthy White Collar Mortality Table projected 22 years with Scale AA (previously RP-2000 Employee Mortality Table projected 15 years with Scale AA)

#### **Postretirement Mortality Rates:**

<i>Healthy Non-Teachers</i>	RP-2000 Healthy Annuitant Mortality Table projected generationally with Scale AA from 2010 (previously, RP-2000 Healthy Annuitant Mortality Table projected 12 years with Scale AA)
<i>Healthy Non-Teachers (Falmouth)</i>	RP-2000 Annuitant Mortality Table projected 17 years with Scale AA (previously, RP-2000 Annuitant Mortality Table projected 12 years with Scale AA)
<i>Healthy Teachers</i>	RP-2000 Healthy Annuitant Large Benefit Amount Mortality Table projected 17 years with Scale AA (previously, RP-2000 Healthy Annuitant Mortality Table projected 15 years with Scale AA)
<i>Disabled Non-Teachers</i>	RP-2000 Healthy Annuitant Mortality Table projected generationally with Scale AA from 2010 set forward 3 years for males (previously, RP-2000 Healthy Annuitant Mortality Table projected 12 years with Scale AA set forward 2 years)
<i>Disabled Non-Teachers(Falmouth)</i>	RP-2000 Healthy Annuitant Mortality Table set forward 3 years for males projected 17 years with Scale AA (previously, RP-2000 Healthy Annuitant Mortality Table set forward 2 years)
<i>Disabled (Teachers)</i>	RP-2000 Healthy Annuitant Large Benefit Amount Mortality Table projected 7 years with Scale AA set forward 3 years for males (previously, RP-2000 Healthy Annuitant Mortality Table set forward 3 years for males)



**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

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The mortality tables were determined to contain provisions appropriate to reasonably reflect future monthly improvement, based on a review of the mortality experience of the Non-Teachers.

**Termination Rates before Retirement:**

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

Age	Mortality				Disability
	Current		Previously		
	Male	Female	Male	Female	
20	0.03	0.02	0.03	0.02	0.01
25	0.04	0.02	0.03	0.02	0.02
30	0.04	0.03	0.04	0.02	0.03
35	0.08	0.05	0.07	0.04	0.06
40	0.11	0.07	0.10	0.06	0.10
45	0.15	0.11	0.13	0.09	0.15
50	0.21	0.17	0.17	0.14	0.19
55	0.30	0.25	0.24	0.23	0.24
60	0.49	0.39	0.40	0.37	0.28

*Note: 55% of the rates shown represent accidental disability and death.  
Current mortality rates do not reflect generational projection.*

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

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

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<b>Falmouth Groups 1 and 2</b>					
<b>Rate per year (%)</b>					
<b>Mortality</b>					
<b>Age</b>	<b>Current</b>		<b>Previously</b>		<b>Disability</b>
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>	
20	0.02	0.01	0.03	0.02	0.01
25	0.03	0.02	0.03	0.02	0.02
30	0.04	0.02	0.04	0.02	0.03
35	0.07	0.04	0.07	0.04	0.06
40	0.09	0.05	0.10	0.06	0.10
45	0.11	0.08	0.13	0.09	0.15
50	0.14	0.11	0.17	0.14	0.19
55	0.20	0.21	0.24	0.23	0.24
60	0.34	0.35	0.40	0.37	0.28

*Note: 55% of the rates shown represent accidental disability and death.  
Current mortality rates do not reflect generational projection.*

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

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

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**Group 4 (excluding Falmouth) – Rate per year (%)**

Age	Mortality				Disability
	Current		Previously		
	Male	Female	Male	Female	
20	0.03	0.02	0.03	0.02	0.10
25	0.04	0.02	0.03	0.02	0.20
30	0.04	0.03	0.04	0.02	0.30
35	0.08	0.05	0.07	0.04	0.30
40	0.11	0.07	0.10	0.06	0.30
45	0.15	0.11	0.13	0.09	1.00
50	0.21	0.17	0.17	0.14	1.25
55	0.30	0.25	0.24	0.23	1.20
60	0.49	0.39	0.40	0.37	0.85

*Note: 90% of the rates shown represent accidental disability and death.  
Current mortality rates do not reflect generational projection.*

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

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

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<b>Falmouth Group 4 – Rate per year (%)</b>					
<b>Mortality</b>					
<b>Age</b>	<b>Current</b>		<b>Previously</b>		<b>Disability</b>
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>	
20	0.02	0.01	0.03	0.02	0.10
25	0.03	0.02	0.03	0.02	0.20
30	0.04	0.02	0.04	0.02	0.30
35	0.07	0.04	0.07	0.04	0.30
40	0.09	0.05	0.10	0.06	0.30
45	0.11	0.08	0.13	0.09	1.00
50	0.14	0.11	0.17	0.14	1.25
55	0.20	0.21	0.24	0.23	1.20
60	0.34	0.35	0.40	0.37	0.85

*Note: 90% of the rates shown represent accidental disability and death.  
Current mortality rates do not reflect generational projection.*

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

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

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<b>Teachers - Rate per year (%)</b>						
<b>Mortality</b>						
<b>Age</b>	<b>Current</b>		<b>Previously</b>		<b>Disability</b>	
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>	<b>Current</b>	<b>Previously</b>
20	0.02	0.01	0.03	0.02	0.00	0.00
25	0.03	0.02	0.03	0.02	0.01	0.01
30	0.03	0.02	0.04	0.02	0.01	0.01
35	0.05	0.04	0.07	0.04	0.01	0.01
40	0.07	0.05	0.10	0.06	0.01	0.01
45	0.10	0.07	0.13	0.08	0.03	0.03
50	0.13	0.10	0.16	0.13	0.05	0.05
55	0.22	0.22	0.23	0.22	0.07	0.08
60	0.39	0.42	0.38	0.36	0.07	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, 2014 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, 2014 Measurement Under GASB**

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**Teachers – Withdrawal Rate (%)**

Age	0 – 4 Years of Service		5 – 9 Years of Service		10+ Years of Service	
	Male	Female	Male	Female	Male	Female
20	13.0	10.0	5.5	7.0	1.5	5.0
30	15.0	15.0	5.4	8.8	1.5	4.5
40	13.3	10.5	5.2	5.0	1.7	2.2
50	16.2	9.8	7.0	5.0	2.3	2.0

**Previously:**

**Teachers – Withdrawal Rate (%)**

Age	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, 2014 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, 2014 Measurement Under GASB**

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Age	Teachers - Rate per year (%)					
	Years of Service					
	Less than 20		20 – 29		30 or more	
	Male	Female	Male	Female	Male	Female
50 - 52	--	--	1.0	1.0	2.0	1.5
53	--	--	1.5	1.0	2.0	1.5
54	--	--	2.5	1.0	2.0	2.0
55	5.0	3.0	3.0	3.0	6.0	5.0
56	5.0	3.0	6.0	5.0	20.0	15.0
57	5.0	4.0	10.0	8.0	40.0	35.0
58	5.0	8.0	15.0	10.0	50.0	35.0
59	10.0	8.0	20.0	15.0	50.0	35.0
60	10.0	10.0	25.0	20.0	40.0	35.0
61	20.0	12.0	30.0	25.0	40.0	35.0
62	20.0	12.0	35.0	30.0	35.0	35.0
63	25.0	15.0	40.0	30.0	35.0	35.0
64	25.0	20.0	40.0	30.0	35.0	35.0
65	25.0	25.0	40.0	40.0	35.0	35.0
66	30.0	25.0	30.0	30.0	40.0	35.0
67	30.0	30.0	30.0	30.0	40.0	30.0
68	30.0	30.0	30.0	30.0	40.0	30.0
69	30.0	30.0	30.0	30.0	40.0	30.0
70	100.0	100.0	100.0	100.0	100.0	100.0

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

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Previously,

Age	Teachers - Rate per year (%)					
	Years of Service					
	Less than 20		20 – 29		30 or more	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
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, 2014 Measurement Under GASB**

**Per Capita Health Costs:**

2014 – 2015 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	\$7,426	\$9,315	\$4,606	\$6,953	N/A	N/A	N/A	N/A
50	8,814	10,039	6,156	8,061	N/A	N/A	N/A	N/A
55	10,467	10,807	8,238	9,330	N/A	N/A	N/A	N/A
60	12,430	11,648	11,028	10,821	N/A	N/A	N/A	N/A
65	14,763	12,549	14,763	12,549	\$3,843	\$3,267	\$3,843	\$3,267
70	17,110	13,523	17,110	13,523	4,454	3,520	4,454	3,520
75	18,439	14,556	18,439	14,556	4,800	3,789	4,800	3,789
80	19,856	15,693	19,856	15,693	5,169	4,085	5,169	4,085

**Bourne (Non-Teachers)**

Age	Non-Medicare Plans				Medicare Supplement			
	Retiree		Spouse		Retiree		Spouse	
	Male	Female	Male	Female	Male	Female	Male	Female
45	\$9,271	\$11,631	\$5,751	\$8,681	N/A	N/A	N/A	N/A
50	11,004	12,534	7,686	10,064	N/A	N/A	N/A	N/A
55	13,068	13,492	10,285	11,649	N/A	N/A	N/A	N/A
60	15,520	14,543	13,769	13,511	N/A	N/A	N/A	N/A
65	18,432	15,667	18,432	15,667	\$1,926	\$1,637	\$1,926	\$1,637
70	21,363	16,884	21,363	16,884	2,232	1,764	2,232	1,764
75	23,022	18,174	23,022	18,174	2,406	1,899	2,406	1,899
80	24,791	19,593	24,791	19,593	2,590	2,047	2,590	2,047

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 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	\$8,618	\$10,811	\$5,345	\$8,070	N/A	N/A	N/A	N/A
50	10,228	11,650	7,144	9,355	N/A	N/A	N/A	N/A
55	12,147	12,541	9,560	10,828	N/A	N/A	N/A	N/A
60	14,426	13,518	12,798	12,558	N/A	N/A	N/A	N/A
65	17,133	14,563	17,133	14,563	\$2,863	\$2,434	\$2,863	\$2,434
70	19,857	15,694	19,857	15,694	3,318	2,623	3,318	2,623
75	21,399	16,893	21,399	16,893	3,576	2,823	3,576	2,823
80	23,044	18,212	23,044	18,212	3,851	3,043	3,851	3,043

**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	\$6,314	\$4,838	N/A	N/A	\$5,976	\$5,537	N/A	N/A
50	7,428	5,690	N/A	N/A	7,031	6,513	N/A	N/A
55	8,736	6,693	N/A	N/A	8,269	7,660	N/A	N/A
60	10,426	7,988	N/A	N/A	9,869	9,142	N/A	N/A
65	12,834	9,827	\$2,856	\$2,856	12,157	11,274	\$2,686	\$2,686
70	14,816	11,343	3,294	3,294	14,039	13,025	3,098	3,098
75	16,697	12,780	3,709	3,709	15,827	14,691	3,489	3,489
80	18,278	13,986	4,055	4,055	17,334	16,105	3,814	3,814

*Note: Costs are net of contributions.*

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

**Medicare Advantage (CCMHG):** \$3,091

**Medicare Rx (Bourne):** \$1,364

**Annual Dental Cost:**

*CCMHG* \$581

*Bourne* \$448

**Weighted Average Annual Retiree Contribution Amount:**

	<b>CCMHG</b>	<b>Bourne</b>	<b>Nantucket</b>
<i>Non-Medicare Plans</i>	\$10,301	\$11,960	\$11,734
<i>Medicare Supplement Plans</i>	4,067	3,607	3,030

**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.

Year Ending June 30	<b>Medical/Prescription Drug</b>									
	<b>CCMHG</b>		<b>GIC</b>		<b>Bourne</b>		<b>Nantucket</b>		<b>Dental</b>	<b>Part B</b>
	<b>Under 65</b>	<b>Over 65</b>	<b>Under 65</b>	<b>Over 65</b>	<b>Under 65</b>	<b>Over 65</b>	<b>Under 65</b>	<b>Over 65</b>		
2015	10.00%	10.00%	6.50%	6.50%	4.00%	4.00%	10.00%	13.50%	2.00%	5.00%
2016	8.00%	9.50%	6.00%	6.00%	8.00%	8.00%	9.50%	8.00%	5.00%	5.00%
2017	7.50%	9.00%	6.00%	6.00%	7.50%	7.50%	9.00%	7.50%	5.00%	5.00%
2018	7.00%	8.50%	6.00%	6.00%	7.00%	7.00%	8.50%	7.00%	5.00%	5.00%
2019	6.50%	8.00%	6.00%	6.00%	6.50%	6.50%	8.00%	6.50%	5.00%	5.00%
2020	6.00%	7.50%	6.00%	6.00%	6.00%	6.00%	7.50%	6.00%	5.00%	5.00%
2021	5.50%	7.00%	6.00%	6.00%	5.50%	5.50%	7.00%	6.00%	5.00%	5.00%
2022	5.00%	6.50%	6.00%	6.00%	5.00%	5.00%	6.50%	5.50%	5.00%	5.00%
2023	5.00%	6.00%	6.00%	6.00%	5.00%	5.00%	6.00%	5.00%	5.00%	5.00%
2024	5.00%	5.50%	5.50%	5.50%	5.00%	5.00%	5.50%	5.00%	5.00%	5.00%
2025 & later	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

**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.

The following is the assumed plan enrollment for current retirees under age 65 and future retirees upon reaching age 65:

	Projected Percent Enrollment for Retirees Currently under Age 65 and Future Retirees Hired Prior to 1986		Projected Percent Enrollment for Future Retirees Hired in 1986 or Later	
	Percent Enrolled in Medicare Supplement Plan (%)	Percent Enrolled in Non-Medicare Plan (%)	Percent Enrolled in Medicare Supplement Plan (%)	Percent Enrolled in Medicare Advantage Plan (%)
Barnstable County*	100	--	100	--
Barnstable Fire District	100	--	100	--
Bourne Recreation Authority	100	--	100	--
Bourne Water District	100	--	100	--
Buzzards Bay Water District	100	--	100	--
Cape Cod Regional Technical School	100	--	100	--
Cape Cod Regional Transit Authority	100	--	100	--
Centerville, Osterville, Marstons Mills Fire District	100	--	100	--

\* Assumption has been revised to reflect current experience.

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

	Projected Percent Enrollment for Retirees Currently under Age 65 and Future Retirees Hired Prior to 1986		Projected Percent Enrollment for Future Retirees Hired in 1986 or Later	
	Percent Enrolled in Medicare Supplement Plan (%)	Percent Enrolled in Non-Medicare Plan (%)	Percent Enrolled in Medicare Supplement Plan (%)	Percent Enrolled in Medicare Advantage Plan (%)
Dennis Water District	100	--	100	--
Dennis-Yarmouth Regional School District	95	5	95	5
Hyannis Fire District	100	--	100	--
Mashpee Water District	100	--	100	--
Monomoy Regional School District	50	50	100	--
Nantucket Regional Transit Authority	95	5	100	--
Nauset Regional School District	100	--	95	5
North Sagamore Water District	100	--	100	--
Sandwich Water District	100	--	100	--
Town of Barnstable*	100	--	100	--
Town of Bourne	100	--	100	--
Town of Brewster*	100	--	100	--
Town of Chatham	90	10	95	5
Town of Dennis*	95	5	100	--
Town of Eastham	95	5	100	--
Town of Falmouth	90	10	100	--
Town of Harwich	95	5	100	--
Town of Mashpee	95	5	100	--
Town of Nantucket	95	5	100	--

\* Assumption has been revised to reflect current experience.

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

	Projected Percent Enrollment for Retirees Currently under Age 65 and Future Retirees Hired Prior to 1986		Projected Percent Enrollment for Future Retirees Hired in 1986 or Later	
	Percent Enrolled in Medicare Supplement Plan (%)	Percent Enrolled in Non-Medicare Plan (%)	Percent Enrolled in Medicare Supplement Plan (%)	Percent Enrolled in Medicare Advantage Plan (%)
Town of Orleans	95	5	100	--
Town of Provincetown	95	5	100	--
Town of Sandwich	95	5	100	--
Town of Truro	100	--	100	--
Town of Wellfleet	90	10	100	--
Town of Yarmouth	100	--	95	5
Upper Cape Cod Regional Technical School	100	--	100	--

*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 Cape 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, 2014 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 3.0%. Administrative expenses for insured plans were assumed to be included in the fully insured premium rates.
<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>Demographic Assumptions:</b>	The demographic assumptions for non-teachers used in this valuation are the same as used in the Barnstable County Retirement System Actuarial Valuation as of January 1, 2014, dated May 27, 2014. The demographic assumptions for teachers used in this valuation are the same as used in the Massachusetts Teachers' Retirement System Actuarial Valuation Report as of January 1, 2014, dated September 12, 2014. The demographic assumptions for the Town of Falmouth are the same as used in the Falmouth Contributory Retirement System Actuarial Valuation Report as of January 1, 2014 dated January 8, 2015. A review of the demographic assumptions is beyond the scope of this assignment, however, we have no reason to doubt the reasonableness of the assumptions.
<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 and those previously adopted as of the valuation date. The excise tax in this valuation changed 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*	1.40%	3.70%
CCMHG	0.51%	1.19%
Bourne	1.86%	4.57%
Nantucket	2.02%	3.51%

\* The GIC assumption comes from the January 1, 2014 OPEB Actuarial Valuation for the Commonwealth of Massachusetts, prepared by Aon Hewitt and dated November 3, 2014.

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

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**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, 2014.

The funding discount rate was changed from 7.75% to 7.50%.

Medical/prescription drug trend assumption was changed to 10.00% in 2015 decreasing by 2% in 2016 and by 0.50% to 5.00% by 2022 for participants under age 65 and to 10% in 2015 decreasing by 0.50% to 5.00% by 2025 for participants over age 65 (previously, 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 and the Towns of Barnstable, Brewster and Dennis.

The mortality assumption was updated as follows:

	<b>Previous</b>	<b>Current</b>
<b>Preretirement:</b>		
<i>Falmouth</i>	RP 2000 Employee Mortality Table projected 12 years with Scale AA	RP-2000 Employee Mortality Table projected 22 years with Scale AA
<i>Non-Teachers</i>	RP 2000 Employee Mortality Table projected 12 years with Scale AA	RP-2000 Employee Mortality Table projected generationally with Scale AA from 2010
<i>Teachers</i>	RP 2000 Employee Mortality Table projected 15 years with Scale AA	RP-2000 Combined Healthy White Collar Mortality Table projected 22 years with Scale AA
<b>Postretirement:</b>		
<i>Falmouth</i>	RP 2000 Healthy Annuitant Mortality Table projected 12 years with Scale AA	RP-2000 Healthy Annuitant Mortality Table projected 17 years with Scale AA
<i>Non-Teachers</i>	RP 2000 Healthy Annuitant Mortality Table projected 12 years with Scale AA	RP-2000 Healthy Annuitant Mortality Table projected generationally with Scale AA from 2010

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

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	<b>Previous</b>	<b>Current</b>
<i>Teachers</i>	RP 2000 Healthy Annuitant Mortality Table projected 15 years with Scale AA	RP-2000 Healthy Annuitant Large Benefit Amount Mortality Table projected 17 years with Scale AA
<b>Disabled:</b>		
<i>Falmouth</i>	RP-2000 Healthy Annuitant Mortality Table set forward 2 years	RP-2000 Healthy Annuitant Mortality Table set forward 3 years for males projected 17 years with Scale AA
<i>Non-Teachers</i>	RP 2000 Healthy Annuitant Mortality Table projected 12 years with Scale AA set forward 2 years	RP-2000 Healthy Annuitant Mortality Table projected generationally with Scale AA from 2010 set forward 3 years for males
<i>Teachers</i>	RP-2000 Healthy Annuitant Mortality Table set forward 3 years for males	RP-2000 Healthy Annuitant Mortality Large Benefit Amount Mortality Table projected 7 years with Scale AA set forward 3 years for males

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

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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.

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

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**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.

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

**Employer Percentage Contribution**

Unit	Employer Contribution Percentage						Life Insurance	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	
CC Regional Technical High	65%	65%	65%	65%	65%	99%	\$10,000	
CC 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	
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	
Nantucket Regional Transit Authority	80%-90%	90%	80%-90%	90%	0%	None	None	
Nauset Regional School District	50%	50%	50%	50%	0%	50%	\$2,000	
North Sagamore Water District	75%	75%	50%	50%	75%	75%	\$5,000	
Sandwich Water District	90%	90%	90%	90%	90%	90%	\$2,000	
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	
Upper Cape Cod Regional Technical School	70%	70%	70%	70%	None	50%	\$10,000	

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

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**Cape Code Municipal Health Group**

<b>Benefit Types:</b>	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.
<b>Duration of Coverage:</b>	Lifetime.
<b>Dependent Benefits:</b>	Medical, prescription drug, and dental.
<b>Dependent Coverage:</b>	Benefits are payable to a spouse for their lifetime, regardless of when the retiree dies.

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

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(CCMHG continued)

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

	<b>Subscribers</b>			<i>Retirees Age 65 and</i>	<b>Monthly Cost (eff. 7/1/2014)</b>
	<b>Active</b>	<b>Retired</b>	<b>Total</b>		
<b><u>Non-Medicare Plans</u></b>					
BCBS Master Health Plus					
Individual	27	27	54	9	\$1,168.00
2-person	0	0	0	0	\$2,339.00
Family	23	15	38	1	\$2,919.00
BCBS Blue Care Elect Preferred PPO					
Individual	522	255	777	64	\$774.00
2-person	35	2	37	0	\$1,552.00
Family	893	192	1085	25	\$1,937.00
BCBS Network Blue HMO					
Individual	702	63	765	14	\$609.00
2-person	59	4	63	1	\$1,221.00
Family	1116	70	1186	7	\$1,630.00
Harvard Pilgrim HMO					
Individual	371	16	387	1	\$618.00
Family	788	19	807	1	\$1,653.00
Harvard Pilgrim PPO					
Individual	157	20	177	3	\$678.00
Family	255	31	286	4	\$1,794.00
Harvard Pilgrim EPO					
Individual	92	65	157	17	\$607.00
Family	164	65	229	5	\$1,624.00
Totals	5,204	844	6,048	152	



**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

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(CCMHG continued)

	Subscribers			<i>Retirees</i>	Monthly Cost (eff. 1/1/2015)
	Active	Retired	Total		
<b><u>Medicare Plans</u></b>					
Tufts Medicare Preferred Supplement with PDP+	N/A	21	21		\$332.00
BCBS Medex 2 + Blue Medicare RX	N/A	1708	1708		\$303.04
Harvard Pilgrim Med Enhanced + Cov 1st Hlth Rx	N/A	344	344		\$289.28
BCBS Managed Blue for Seniors with Rx	N/A	15	15		\$294.78
Totals	0	2,088	2,088	0	
<b><u>Medicare Advantage Plans</u></b>					
(eff. 1/1/2015)					
BCBS Medicare HMO Blue	0	1	1	1	\$275.24
Tufts Medicare Preferred HMO	0	24	24	24	\$262.00
Totals	0	25	25	25	
<b>Dental Blue Premier</b>					
(eff. 7/1/2014)					
Individual					\$38.00
Double					\$76.00
Family					\$99.00

\* 152 of 2,265 over-65 retirees are in a non-Medicare plan

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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.

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

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**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:

	<b>Subscribers</b>			<i>Retirees Age 65 and over*</i>	<b>Monthly Cost (eff. 7/1/2014)</b>
	<b>Active</b>	<b>Retired</b>	<b>Total</b>		
<b><u>Non-Medicare Plans</u></b>					
BCBS Blue Care Elect Preferred PPO					
Individual	60	19	79	3	\$887.57
Family	133	30	163	2	\$2,131.28
BCBS Network Blue HMO					
Individual	73	3	76	0	\$757.24
Family	121	4	125	0	\$1,814.45
Totals	387	56	443	5	
<b><u>Medicare Plans</u></b>					
<b>(eff. 1/1/2015)</b>					
BCBS Medex 2 + Blue Medicare RX	0	92	92		\$304.94
Dental Blue					
<b>(eff. 7/1/2014)</b>					
Individual					\$33.80
Family					\$90.60

\* 5 of 97 over-65 retirees are in a non-Medicare plan

**SECTION 3: Supporting Information for Barnstable County June 30, 2014 Measurement Under GASB**

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**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 and over*	Monthly Cost (eff. 7/1/2014)
	Active	Retired	Total		
<b><u>Non-Medicare Plans</u></b>					
BCBS Blue Care Elect Preferred PPO					
Individual	115	19	134	3	\$830.00
Family	263	27	290	3	\$1,188.00
BCBS Master Medical					
Individual	40	15	59	1	\$1,770.00
Family	72	25	95	5	\$2,580.00
Totals	490	86	578	12	
<b><u>Medicare Plans</u></b>					
(eff. 1/1/2015)					
BCBS Medex 2 + Blue Medicare RX	N/A	164	164		\$264.31

\* 12 of 176 over-65 retirees are in a non-Medicare plan

**SECTION 3: Supporting Information for the Barnstable County June 30, 2014 Measurement Under GASB 43 and 45**

**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. 7/1/2015)	
	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	1	0	0	\$46.88	\$70.32
Family	1	2	0	\$124.24	\$186.36
Unicare/Comm Indemnity/CIC					
Individual	126	126	65	\$122.79	\$165.20
Family	62	62	13	\$297.09	\$399.06
Totals	190	190	78		
<b><u>Medicare Plans</u></b>					
HP Medicare Enhance	2	2		\$39.07	\$58.60
Unicare/Comm Indemnity OME/CIC	329	329	300	\$43.34	\$61.78
Totals	331	331	300		

\* 78 of 409 over-65 retirees are in a non-Medicare plan

**SECTION 3: Supporting Information for the Barnstable County June 30, 2014 Measurement Under GASB 43 and 45**

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**Plan Changes**

**Since the Prior Valuation:**

The CCMHG and the Town of Nantucket have introduced Medicare Prescription Drug Plans (PDPs) to provide prescription drug benefits to retirees enrolled in Medicare Supplement plans. These changes have resulted in lower premiums compared to prior plans. Previously, the Medicare Supplement plans included drug benefits, and the groups applied for subsidies under the Medicare Retiree Drug Subsidy (RDS) program. GASB guidelines prohibit the offset of OPEB obligations by the future value of RDS subsidies, but do allow obligations to reflect the lower rates associated with PDPs.

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**SECTION 4: Supplemental Information by Department for the June 30, 2014 Measurement under GASB**

**DEPARTMENT RESULTS – TOWN OF YARMOUTH  
PROJECTED UNIT CREDIT, PAY-AS-YOU-GO 5.25%**

	<b>Admin</b>	<b>Building</b>	<b>Cemetery</b>	<b>Commercial Development</b>	<b>DPW</b>	<b>Finance</b>
<b>Actuarial Accrued Liability by Participant Category</b>						
1. Current retirees, beneficiaries and dependents	\$393,246	\$35,481	\$103,078	\$83,747	\$0	\$1,025,799
2. Current active members	<u>450,697</u>	<u>269,421</u>	<u>67,450</u>	<u>200,747</u>	<u>604,270</u>	<u>1,374,497</u>
3. Total as of July 1, 2014: (1) + (2)	\$843,943	\$304,902	\$170,528	\$284,494	\$604,270	\$2,400,296
4. Actuarial value of assets as of July 1, 2014	<u>5,988</u>	<u>2,163</u>	<u>1,210</u>	<u>2,019</u>	<u>4,288</u>	<u>17,031</u>
5. Unfunded actuarial accrued liability (UAAL) as of July 1, 2014: (3) - (4)	\$837,955	\$302,739	\$169,318	\$282,475	\$599,982	\$2,383,265
<b>Annual Required Contribution for Fiscal Year Ending June 30, 2015</b>						
6. Normal cost as of July 1, 2014	\$35,342	\$25,609	\$4,405	\$16,033	\$16,850	\$46,927
7. Adjustment for timing	<u>916</u>	<u>664</u>	<u>114</u>	<u>415</u>	<u>437</u>	<u>1,216</u>
8. Normal cost adjusted for timing: (6) + (7)	\$36,258	\$26,273	\$4,519	\$16,448	\$17,287	\$48,143
9. 30-year amortization of the unfunded actuarial accrued liability (UAAL) increasing at 4.0% per year	\$33,037	\$11,936	\$6,676	\$11,137	\$23,656	\$93,966
10. Adjustment for timing	<u>856</u>	<u>309</u>	<u>173</u>	<u>289</u>	<u>613</u>	<u>2,435</u>
11. Amortization payment adjusted for timing: (9) + (10)	\$33,893	\$12,245	\$6,849	\$11,426	\$24,269	\$96,401
12. Total Annual Required Contribution (ARC): (8) + (11)	70,151	38,518	11,368	27,874	41,556	144,544
13. Projected benefit payments for fiscal year ending June 30, 2015	\$20,998	\$8,568	\$9,009	\$4,764	\$223	\$70,460

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

**SECTION 4: Supplemental Information by Department for the June 30, 2014 Measurement under GASB**

	<b>Fire</b>	<b>Golf</b>	<b>Health</b>	<b>Library</b>	<b>Parks</b>	<b>Police</b>
<b>Actuarial Accrued Liability by Participant Category</b>						
1. Current retirees, beneficiaries and dependents	\$3,880,859	\$885,075	\$0	\$304,821	\$150,397	\$2,823,226
2. Current active members	<u>3,745,406</u>	<u>463,296</u>	<u>635,149</u>	<u>368,089</u>	<u>547,023</u>	<u>5,351,993</u>
3. Total as of July 1, 2014: (1) + (2)	\$7,626,265	\$1,348,371	\$635,149	\$672,910	\$697,420	\$8,175,219
4. Actuarial value of assets as of July 1, 2014	<u>54,111</u>	<u>9,567</u>	<u>4,507</u>	<u>4,775</u>	<u>4,948</u>	<u>58,006</u>
5. Unfunded actuarial accrued liability (UAAL) as of July 1, 2014: (3) - (4)	\$7,572,154	\$1,338,804	\$630,642	\$668,135	\$692,472	\$8,117,213
<b>Annual Required Contribution for Fiscal Year Ending June 30, 2015</b>						
6. Normal cost as of July 1, 2014	\$301,830	\$13,540	\$13,736	\$24,577	\$24,293	\$331,182
7. Adjustment for timing	<u>7,822</u>	<u>351</u>	<u>356</u>	<u>637</u>	<u>630</u>	<u>8,580</u>
8. Normal cost adjusted for timing: (6) + (7)	\$309,652	\$13,891	\$14,092	\$25,214	\$24,923	\$339,762
9. 30-year amortization of the unfunded actuarial accrued liability (UAAL) increasing at 4.0% per year	\$298,549	\$52,785	\$24,864	\$26,343	\$27,302	\$320,040
10. Adjustment for timing	<u>7,737</u>	<u>1,368</u>	<u>644</u>	<u>683</u>	<u>708</u>	<u>8,293</u>
11. Amortization payment adjusted for timing: (9) + (10)	\$306,286	\$54,153	\$25,508	\$27,026	\$28,010	\$328,333
12. Total Annual Required Contribution (ARC): (8) + (11)	615,938	68,044	39,600	52,240	52,933	668,095
13. Projected benefit payments for fiscal year ending June 30, 2015	\$201,347	\$60,241	\$6,881	\$28,543	\$14,183	\$188,986

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

**SECTION 4: Supplemental Information by Department for the June 30, 2014 Measurement under GASB**

	Recreation	Sanitation	Senior Services	Water	Total
<b>Actuarial Accrued Liability by Participant Category</b>					
1. Current retirees, beneficiaries and dependents	\$0	\$351,178	\$385,645	\$772,807	\$11,350,308
2. Current active members	<u>260,706</u>	<u>459,217</u>	<u>296,195</u>	<u>908,965</u>	<u>16,837,144</u>
3. Total as of July 1, 2014: (1) + (2)	\$260,706	\$810,395	\$681,840	\$1,681,772	\$28,187,452
4. Actuarial value of assets as of July 1, 2014	<u>1,850</u>	<u>5,750</u>	<u>4,838</u>	<u>11,933</u>	<u>200,000</u>
5. Unfunded actuarial accrued liability (UAAL) as of July 1, 2014: (3) - (4)	\$258,856	\$804,645	\$677,002	\$1,669,839	\$27,987,452
<b>Annual Required Contribution for Fiscal Year Ending June 30, 2015</b>					
6. Normal cost as of July 1, 2014	\$5,051	\$5,193	\$17,586	\$53,165	\$961,341
7. Adjustment for timing	<u>131</u>	<u>135</u>	<u>456</u>	<u>1,378</u>	<u>24,912</u>
8. Normal cost adjusted for timing: (6) + (7)	\$5,182	\$5,328	\$18,042	\$54,543	\$986,253
9. 30-year amortization of the unfunded actuarial accrued liability (UAAL) increasing at 4.0% per year	\$10,206	\$31,725	\$26,692	\$65,837	\$1,103,467
10. Adjustment for timing	<u>264</u>	<u>822</u>	<u>692</u>	<u>1,706</u>	<u>28,595</u>
11. Amortization payment adjusted for timing: (9) + (10)	\$10,470	\$32,547	\$27,384	\$67,543	\$1,132,062
12. Total Annual Required Contribution (ARC): (8) + (11)	15,652	37,875	45,426	122,086	2,118,315
13. Projected benefit payments for fiscal year ending June 30, 2015	\$3,476	\$17,051	\$15,737	\$54,708	\$722,664

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