HEARINGS, MEETINGS, LICENSES

8-25-14

Odyssey ADVISORS

100 Linwood Avenue, suite 201
Colchester, CT 06415
(860) 537-9080
www.odysseyadvisors.com

Town of Middleborough

GASB 45 – Costs, Benefits & Funding

August 25, 2014

What is GASB 45 & OPEB

- ✓ Governmental Accounting Standards Board ("GASB") issued Statement No. 45 which requires municipal entities to reflect the ongoing costs of other post-employment benefits ("OPEB") on an "accrual" basis rather than the historical "pay-as-you-go" basis
  - Why did GASB issue this statement?
  - What has Corporate America done? (i.e., FASB 106)

Plan Benefits

- ✓ Comprehensive Medical (20%-40% retiree paid) Insurance offered through Blue Cross Blue Shield of Massachusetts (At time of valuation, now with GIC) and $2,000 Group Term Life Insurance (25% retiree paid).

Costs

- ✓ Accrued Actuarial Liability decreased from $109.85 million to $79.45 million over the two year period
- ✓ Pay-as-you-go costs decreased from $4.74 million to $3.83 million per year
- ✓ Annual OPEB Costs decreased from $8.59 million to $7.13 million
- ✓ Post-65 costs are 76% of total
- ✓ Medical care cost increase have been flat for last few years. Medex III plan had a significant reduction in premiums
  - Explanations include recession, drugs coming off patent, etc.
  - Expect a reversion to the mean

Future Costs

- ✓ Covered retiree population expected to grow significantly over next 15 years – 585 to 695 before beginning to decline
- ✓ Employer share of retiree costs projected to grow from $2.93 million in 2013 to $9.71 million in 2052 ($2.1 million in 2013 dollars)

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Funding

- ✓ Why fund it?
- ✓ Approaches to funding
  - Fund additional $859K beyond pay-as-you-go costs – gets to full funding over 30 years assuming a 7.0% rate of return
  - Fund additional $191K beyond pay-as-you-go costs until 2034, when pension funding become available, then $4.74 million until fully funded– gets to full funding over 30 years assuming a 7.0% rate of return
  - Funding can be accessed to smooth annual pay-as-you-go costs or can be used after full-funding is achived
- ✓ Other bonding and/or capital needs of the Town
- ✓ $4.25 million in OPEB assets funded by G&E (93% funded at 7.0% discount rate)

OPEB Trust vs. Stabilization Fund

- ✓ OPEB Trust must be irrevocable – funds may only be used to provide for retiree welfare benefits. Given $2.93 million in annual benefit payments, can be done very easily
- ✓ OPEB Trust can be invested in long-term investments vs. short term cash of Stabilization Fund
- ✓ Trust expenses will likely be high unless assets are sizeable
- ✓ Stabilization Fund is not technically a GASB 45 asset although some auditors allow it
- ✓ Stabilization Fund is far more flexible – that may be good or bad

Questions?

Plymouth County

GASB 45 Statistics Comparative Information

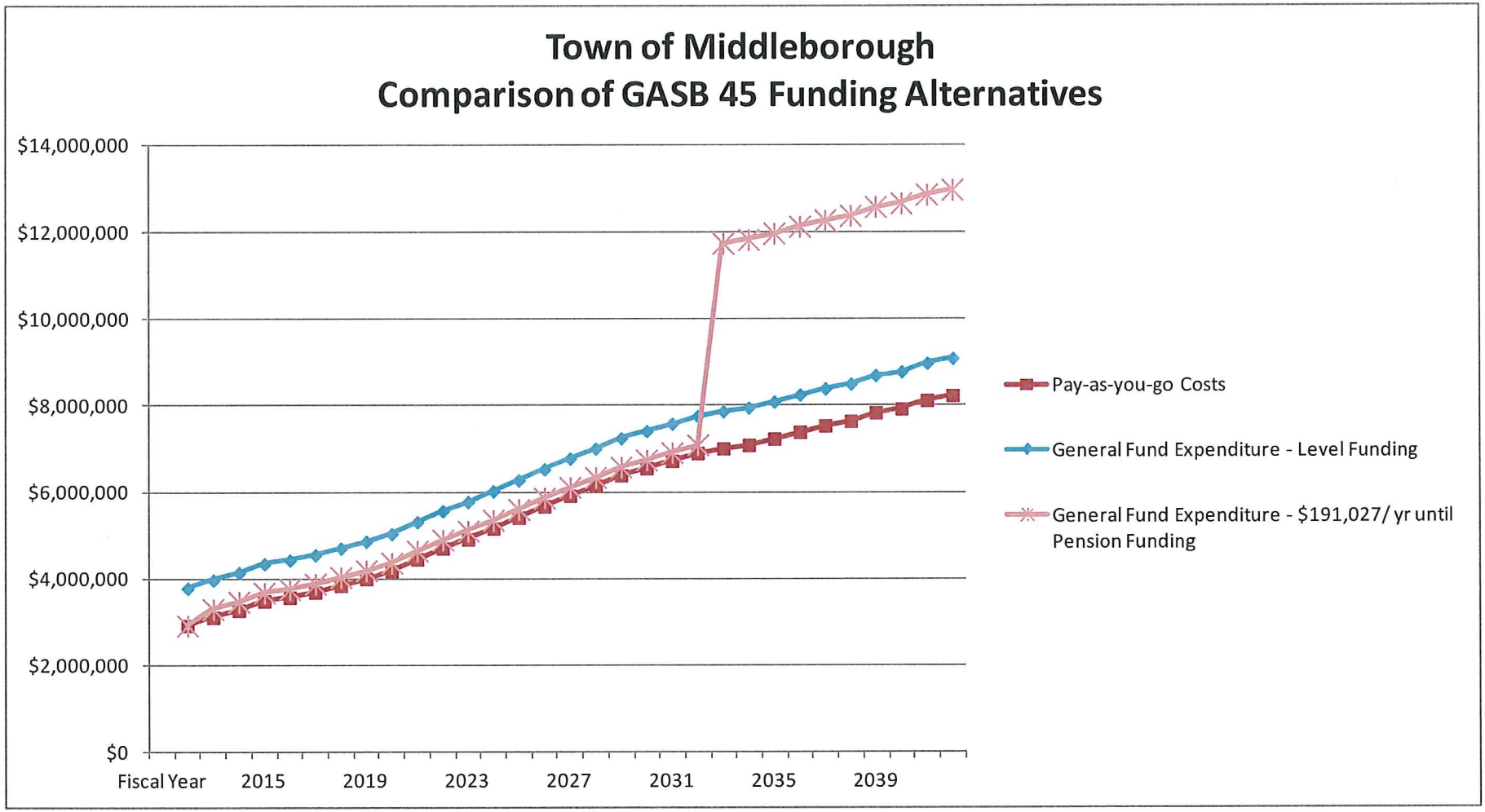
	Average Total Annual Normal Cost (annual benefit accrual)	Average Per Eligible Active Plan Participant	Average Unfunded Actuarial Liability	Average Unfunded Actuarial Liability as a % of Payroll	Average Benefit Payments	Average Per Covered Retiree	Average Funded Ratio
Town of Middleborough	2,873,028	5,462	75,204,016	N/A	2,925,616	7,425	5.35%
Town of Rockland	2,577,765	5,760	68,451,651	283%	2,401,841	8,798	0.00%
Town of Marion	489,075	3,481	9,380,253	133%	252,163	4,463	1.95%
Town of Mattapoisett	357,827	2,443	8,645,606	91%	359,950	3,870	3.41%
Town of Bridgewater	986,605	7,446	35,701,966	N/A	1,259,128	9,914	0.00%
North River Collaborative	114,832	574	643,126	8%	50,916	5,092	59.68%
Old Colony Planning Council	62,597	4,039	1,091,511	117%	16,737	16,737	0.00%
South Shore Regional Vocational Technical Sc	191,744	1,977	4,580,647	69%	178,645	6,160	7.27%
Brockton Area Transit Authority	18,375	2,827	415,178	97%	0	0	0.00%
Plymouth County Average	599,852	4,046	16,113,742	115%	564,922	7,666	9.04%

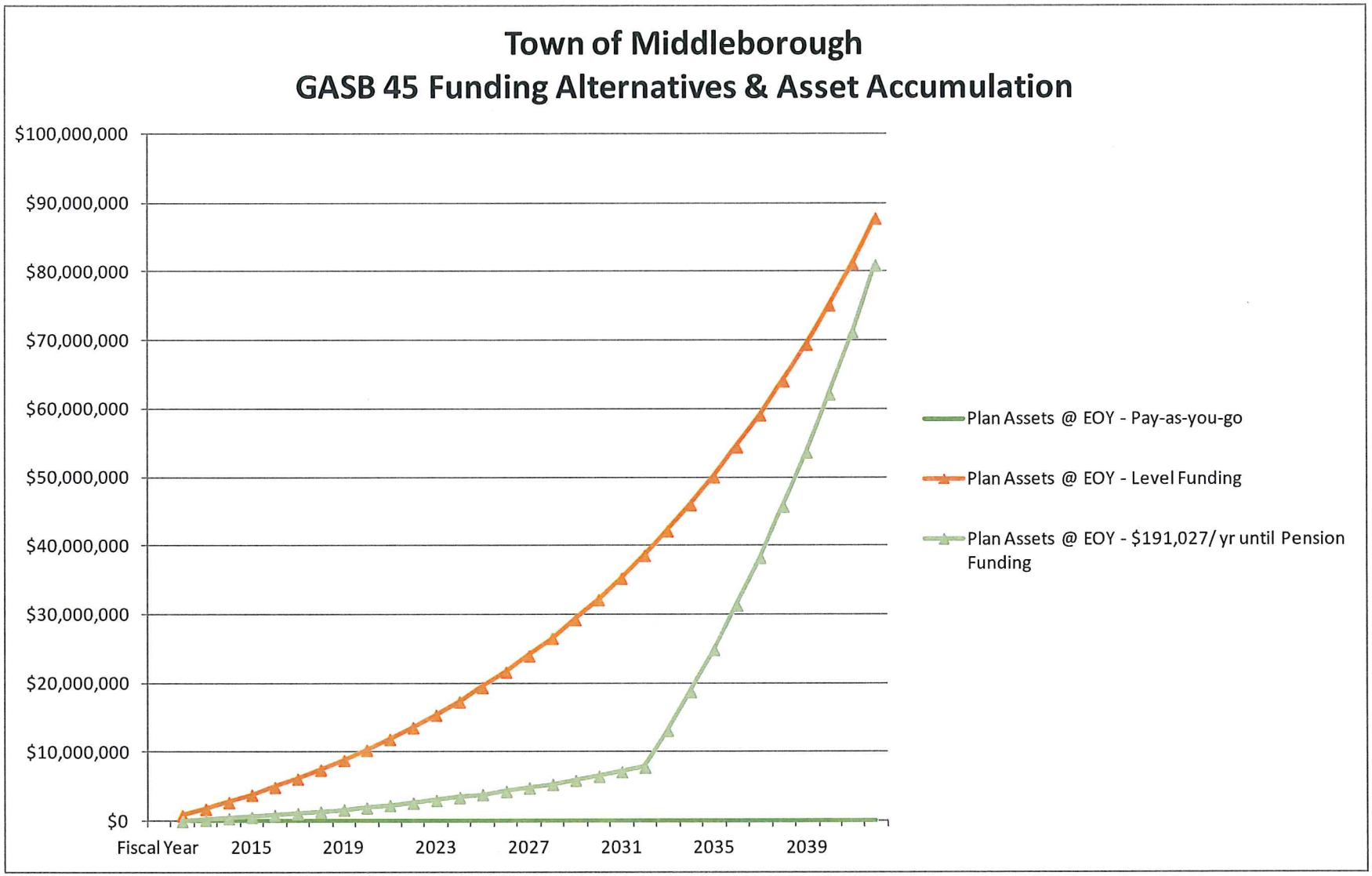
Town of Middleborough
Comparison of GASB 45 Funding Alternatives

			Level Dollar Funding Approach			Level Dollar with Pension Funding Approach		
Fiscal Year	Pay-as-you-go Costs	Plan Assets @ EOY - Pay-as-you-go	Additional Level Dollar Funding over 30 years	General Fund Expenditure - Level Funding	Plan Assets @ EOY - Level Funding	Level Payments of $191,027 per Year Until Pension Funding Available	General Fund Expenditure - $191,027/ yr until Pension Funding	Plan Assets @ EOY - $191,027/ yr until Pension Funding
2013	2,925,616	0	859,773	3,785,389	859,773	0	2,925,616	0
2014	3,114,592	0	859,773	3,974,365	1,779,730	191,027	3,305,619	191,027
2015	3,280,341	0	859,773	4,140,114	2,764,084	191,027	3,471,368	395,426
2016	3,489,049	0	859,773	4,348,822	3,817,343	191,027	3,680,076	614,132
2017	3,572,831	0	859,773	4,432,604	4,944,330	191,027	3,763,858	848,148
2018	3,692,203	0	859,773	4,551,976	6,150,206	191,027	3,883,230	1,098,545
2019	3,845,675	0	859,773	4,705,448	7,440,493	191,027	4,036,702	1,366,470
2020	4,002,063	0	859,773	4,861,836	8,821,101	191,027	4,193,090	1,653,150
2021	4,177,964	0	859,773	5,037,737	10,298,351	191,027	4,368,991	1,959,897
2022	4,454,095	0	859,773	5,313,868	11,879,009	191,027	4,645,122	2,288,116
2023	4,706,017	0	859,773	5,565,790	13,570,313	191,027	4,897,044	2,639,311
2024	4,914,061	0	859,773	5,773,834	15,380,008	191,027	5,105,088	3,015,089
2025	5,162,363	0	859,773	6,022,136	17,316,382	191,027	5,353,390	3,417,172
2026	5,415,020	0	859,773	6,274,793	19,388,302	191,027	5,606,047	3,847,401
2027	5,671,222	0	859,773	6,530,995	21,605,256	191,027	5,862,249	4,307,746
2028	5,918,334	0	859,773	6,778,107	23,977,397	191,027	6,109,361	4,800,315
2029	6,149,005	0	859,773	7,008,778	26,515,588	191,027	6,340,032	5,327,364
2030	6,388,718	0	859,773	7,248,491	29,231,452	191,027	6,579,745	5,891,306
2031	6,552,622	0	859,773	7,412,395	32,137,427	191,027	6,743,649	6,494,724
2032	6,722,893	0	859,773	7,582,666	35,246,820	191,027	6,913,920	7,140,381
2033	6,902,970	0	859,773	7,762,743	38,573,870	191,027	7,093,997	7,831,234
2034	7,010,001	0	859,773	7,869,774	42,133,814	4,742,337	11,752,338	13,121,757
2035	7,091,255	0	859,773	7,951,028	45,942,954	4,742,337	11,833,592	18,782,617
2036	7,234,764	0	859,773	8,094,537	50,018,734	4,742,337	11,977,101	24,839,737
2037	7,392,621	0	859,773	8,252,394	54,379,818	4,742,337	12,134,958	31,320,856
2038	7,535,124	0	859,773	8,394,897	59,046,178	4,742,337	12,277,461	38,255,653
2039	7,641,891	0	859,773	8,501,664	64,039,183	4,742,337	12,384,228	45,675,886
2040	7,840,236	0	859,773	8,700,009	69,381,699	4,742,337	12,582,573	53,615,535
2041	7,926,321	0	859,773	8,786,094	75,098,191	4,742,337	12,668,658	62,110,959
2042	8,121,088	0	859,773	8,980,861	81,214,837	4,742,337	12,863,425	71,201,063
2043	8,234,199	0	859,773	9,093,972	87,759,649	4,742,337	12,976,536	80,927,474

Town of Middleborough
Funding Amounts by Location

Contribution to Trust Fund by Location	
General Govt Employees and Retirees	43,954.00
Schools Employees and Retirees	115,974.00
Public Safety Employees and Retirees	19,925.00
DPW Employees and Retirees	3,466.00
Water Employees and Retirees	4,961.00
Waste Water Employees and Retirees	1,380.00
Gas & Electric Employees and Retirees	0.00
Trash Employees and Retirees	1,367.00
Total	191,027.00


Town of Middleborough
Comparison of GASB 45 Funding Alternatives
$14,000,000
$12,000,000
$10,000,000
$8,000,000
$6,000,000
$4,000,000
$2,000,000
$0
Fiscal Year
2015
2019
2023
2027
2031
2035
2039
Pay-as-you-go Costs
General Fund Expenditure - Level Funding
General Fund Expenditure - $191,027/ yr until Pension Funding


Town of Middleborough
GASB 45 Funding Alternatives & Asset Accumulation
$100,000,000
$90,000,000
$80,000,000
$70,000,000
$60,000,000
$50,000,000
$40,000,000
$30,000,000
$20,000,000
$10,000,000
$0
Fiscal Year
2015
2019
2023
2027
2031
2035
2039
Plan Assets @ EOY - Pay-as-you-go
Plan Assets @ EOY - Level Funding
Plan Assets @ EOY - $191,027/ yr until Pension Funding

Incorporated 1669
344 Years of Progress

CRANBERRY CAPITAL
OF THE WORLD

Town of Middleborough
Massachusetts

CHARLES J. CRISTELLO
Town Manager

508-947-0928
FAX 508-946-2320

MEMORANDUM

To: Board of Selectmen

cc: Finance Committee, All Department Heads, Superintendent of Schools

From: Charles J. Cristello, Town Manager

Date: August 21, 2014

Re: ***Recommendation to Adopt an OPEB Funding Schedule***

Parker Elmore of Odyssey Advisors will be presenting the most recent Other Postemployment Benefits (OPEB) GASB 45 valuation report at your meeting on Monday night. As you know other postemployment benefits are those benefits provided after retirement other than pension benefits, such as medical, dental, and life insurance. Several years ago the Government Accounting Standards Board (GASB) required that those benefits must be recognized in a municipalities' financial statements while employees are providing services to the town rather than after they have retired.

Most municipalities are still trying to figure out how to respond to these changes in accounting standards. Most have done nothing, some have made modest attempts to appropriate excess funds toward their OPEB liabilities, and relatively few have adopted a funding schedule to pay off this liability over a 30 year period. Over the past several months Treasurer/Collector Judy MacDonald and I have been working with Mr. Elmore to come up with a funding schedule that the Town of Middleborough can afford given our current financial situation.

Mr. Elmore will go into more detail about his report on Monday. In brief, the town's actuarial accrued liability stood at $79 million at the beginning of FY 13. In that fiscal year the town underfunded its annual OPEB liability by $3.3 million, assuming a pay-as-you–go funding strategy. Had the town adopted a 30 year funding schedule at a 7% discount rate the additional cost would have been $860,000 annually (see attached schedule). Adoption of a funding schedule allows the town to assume a higher rate of return on investments thereby lowering the unfunded liability. However, even the lower expense of $860,000 is currently beyond our ability to afford.

In further discussions with Mr. Elmore he suggested we construct a funding schedule with the paying-off of our unfunded pension liability in 2034 in mind. Mr. Elmore gave us eight scenarios, attached, which rely on varying contributions over the first 20 years until funding from the existing pension appropriation becomes available. Ms. MacDonald and I recommend the first option, a flat $191,000 for the first 20 years starting in FY 15 since that amount resembles what we have been able to appropriate over the last two years. It is also the amount that we have projected in our current Five Year Forecast. The contribution would increase to $4.7 million in 2034 for the final 10 years when our unfunded pension liability is finally paid off.

Please keep in mind that adoption of a funding schedule is a 'soft' obligation. Should another financial crisis occur OPEB contributions could be suspended, if necessary.

I look forward to discussing this recommendation with you on Monday. Please feel free to call me if you have any questions.

TYPICAL FUNDING SCHEDULE

EXHIBIT D

Projected Cash Flows (Open Group) – Funded Approach

Total Medical, Dental & Life Insurance - Funding over 30 years at 7.00% discount rate

Fiscal Year	Total APBO	Normal Cost	Expected Amortization	Interest on Net OPEB Obligation	Adjustment to ARC	Amortization of Actuarial (Gain) / Loss	Expected Annual OPEB Cost	OPEB Obligation as of June 30	Employer Share of Premiums / Claims	Excess Employer Payments (beyond claims)	Plan Assets at Beginning of year	Unfunded Accrued Actuarial Liability ("UAAL")
								23,839,865				
2013	53,882,081	1,553,761	7,768,086	1,668,791	(1,795,485)	(3,664,852)	5,530,301	25,584,777	2,925,616	859,773	4,248,664	49,633,417
2014	56,194,001	1,581,552	7,768,086	1,790,935	(1,926,902)	(3,533,435)	5,680,236	27,290,648	3,114,592	859,773	5,405,843	50,788,158
2015	58,487,229	1,607,667	7,768,086	1,910,346	(2,055,379)	(3,404,958)	5,825,762	28,976,296	3,280,341	859,773	6,644,025	51,843,204
2016	60,791,752	1,634,107	7,768,086	2,028,341	(2,182,332)	(3,278,005)	5,970,197	30,597,671	3,489,049	859,773	7,968,880	52,822,872
2017	63,062,388	1,654,997	7,768,086	2,141,837	(2,304,445)	(3,155,892)	6,104,583	32,269,650	3,572,831	859,773	9,386,475	53,675,913
2018	65,424,673	1,688,615	7,768,086	2,258,876	(2,430,369)	(3,029,968)	6,255,240	33,972,914	3,692,203	859,773	10,903,301	54,521,372
2019	67,860,618	1,716,792	7,768,086	2,378,104	(2,558,650)	(2,901,687)	6,402,645	35,670,111	3,845,675	859,773	12,526,305	55,334,313
2020	70,333,083	1,741,273	7,768,086	2,496,908	(2,686,473)	(2,773,864)	6,545,930	37,354,205	4,002,063	859,773	14,262,919	56,070,164
2021	72,837,353	1,761,478	7,768,086	2,614,795	(2,813,310)	(2,647,027)	6,684,022	39,000,490	4,177,964	859,773	16,121,096	56,716,257
2022	75,350,464	1,764,312	7,768,086	2,730,035	(2,937,299)	(2,523,038)	6,802,096	40,488,718	4,454,095	859,773	18,109,346	57,241,118
2023	77,748,999	1,758,286	7,768,086	2,834,211	(3,049,384)	(2,410,953)	6,900,246	41,823,174	4,706,017	859,773	20,236,773	57,512,226
2024	80,037,357	1,771,981	7,768,086	2,927,623	(3,149,887)	(2,310,450)	7,007,353	43,056,693	4,914,061	859,773	22,513,120	57,524,237
2025	82,277,945	1,772,906	7,768,086	3,013,969	(3,242,789)	(2,217,548)	7,094,624	44,129,181	5,162,363	859,773	24,948,811	57,329,134
2026	84,410,725	1,782,511	7,768,086	3,089,043	(3,323,563)	(2,136,774)	7,179,303	45,033,691	5,415,020	859,773	27,555,001	56,855,724
2027	86,432,708	1,791,414	7,768,086	3,152,359	(3,391,685)	(2,068,652)	7,251,522	45,754,218	5,671,222	859,773	30,343,624	56,089,084
2028	88,331,601	1,812,534	7,768,086	3,202,796	(3,445,951)	(2,014,386)	7,323,079	46,299,190	5,918,334	859,773	33,327,451	55,004,150
2029	90,121,799	1,848,678	7,768,086	3,240,944	(3,486,996)	(1,973,341)	7,397,371	46,687,783	6,149,005	859,773	36,520,146	53,601,653
2030	91,829,035	1,886,411	7,768,086	3,268,145	(3,516,262)	(1,944,075)	7,462,305	46,901,597	6,388,718	859,773	39,936,329	51,892,706
2031	93,439,719	1,943,263	7,768,086	3,283,112	(3,532,366)	(1,927,971)	7,534,124	47,023,326	6,552,622	859,773	43,591,645	49,848,074
2032	95,048,505	1,998,891	7,768,086	3,291,633	(3,541,534)	(1,918,803)	7,598,273	47,038,933	6,722,893	859,773	47,502,833	47,545,672
2033	96,647,217	2,062,215	7,768,086	3,292,726	(3,542,709)	(1,917,628)	7,662,690	46,938,880	6,902,970	859,773	51,687,804	44,959,413
2034	98,233,099	2,126,882	7,768,086	3,285,722	(3,535,174)	(1,925,163)	7,720,353	46,789,459	7,010,001	859,773	56,165,723	42,067,376
2035	99,884,516	2,200,391	7,768,086	3,275,262	(3,523,920)	(1,936,417)	7,783,402	46,621,833	7,091,255	859,773	60,957,097	38,927,419
2036	101,643,297	2,272,290	7,768,086	3,263,529	(3,511,295)	(1,949,042)	7,843,568	46,370,864	7,234,764	859,773	66,083,867	35,559,430
2037	103,448,498	2,341,963	7,768,086	3,245,961	(3,492,394)	(1,967,943)	7,895,673	46,014,143	7,392,621	859,773	71,569,511	31,878,987
2038	105,285,718	2,423,282	7,768,086	3,220,990	(3,465,528)	(1,994,809)	7,952,021	45,571,267	7,535,124	859,773	77,439,150	27,846,568
2039	107,186,047	2,538,062	0	3,189,989	(3,432,173)	(2,028,164)	267,714	37,337,317	7,641,891	859,773	83,719,664	23,466,383
2040	109,227,973	2,633,647	0	2,613,613	(2,812,038)	(2,648,299)	(213,077)	28,424,231	7,840,236	859,773	90,439,813	18,788,160
2041	111,302,892	2,751,191	0	1,989,697	(2,140,754)	(3,319,583)	(719,449)	18,918,688	7,926,321	859,773	97,630,373	13,672,519
2042	113,556,719	2,859,439	0	1,324,309	(1,424,850)	(4,035,487)	(1,276,589)	8,661,238	8,121,088	859,773	105,324,272	8,232,447
2043	115,875,726	2,988,495	0	606,287	(652,316)	652,316	3,594,782	3,162,048	8,234,199	859,773	113,556,744	2,318,982
2044	118,374,124	3,110,053	0	221,344	(238,148)	238,148	3,331,397	(1,945,839)	8,439,284	0	122,365,489	(3,991,365)

Odyssey ADVISORS
100 Linwood Avenue, Suite 201
Colchester, CT 06415
(860) 537-9080
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Presented by Primoris Benefit Advisors, Inc.

Charles Cristello

From: Judy MacDonald
Sent: Monday, January 27, 2014 11:29 AM
To: Charles Cristello
Subject: FW: GASB 45 - Funding options utlizing pension funding
Attachments: Various GASB 45 Funding Scenarios.pdf

Just received this a few minutes ago.

From: Parker Elmore [mailto:pelmore@odysseyadvisors.com]
Sent: Monday, January 27, 2014 11:15 AM
To: Judy MacDonald
Cc: Kurtis Thompson
Subject: GASB 45 - Funding options utlizing pension funding

Judy,

As we had discussed, we have prepared various GASB 45 funding scenarios that utilize the expiration of your pension funding requirements in 2034. Based on the projected GASB 45 liabilities and the assumption of investment within a blended portfolio which would yield 7.0% net of expenses, you would be able to fully fund the GASB 45 liability by 2045 in a variety of manners which range from modest funding over the next 20 years until the pension funding is available through no funding until such funding is available.

I know we probably have shown more options than you need, but we wanted to provide you options that detail the impact of how much of the pension funding you may wish to utilize. Once you've had a chance to review these figures, feel free to contact us and we'll happily explain all the options.

Have a great day & talk to you soon.

Parker

Parker E. Elmore, A.S.A., M.A.A.A., F.C.A., E.A.
President & CEO
Odyssey Advisors
100 Linwood Avenue, Suite 201
Colchester, CT 06415-1134

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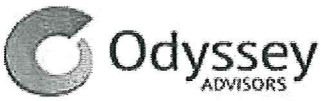
Tollfree: (855) 401-GAIN
Fax: (860) 371-2419



Visit us on:

From: Judy MacDonald [mailto:jmcdnld@middleborough.com]
Sent: Monday, January 13, 2014 11:08 AM

RECOMMENDED FUNDING SCHEDULE

Town of Middleborough, MA
GASB 45 Funding Scenarios

Total Medical, Dental & Life Insurance - Funding over 30 years at 7.00% discount rate - level funding of $191,027 per year until pension funding available

Fiscal Year	Total APBO	Normal Cost	Expected Amortization	Interest on Net OPEB Obligation	Adjustment to ARC	Amortization of Actuarial (Gain) / Loss	Expected Annual OPEB Cost	OPEB Obligation as of June 30	Employer Share of Premiums / Claims	Excess Employer Payments (beyond claims)	Plan Assets at Beginning of year	Unfunded Accrued Actuarial Liability ("UAAL")
								23,839,865				
2013	53,882,081	1,553,761	7,768,086	1,668,791	(1,795,485)	(3,664,852)	5,530,301	25,584,777	2,925,616	0	4,248,664	49,633,417
2014	56,194,001	1,581,552	7,768,086	1,790,935	(1,926,902)	(3,533,435)	5,680,236	27,290,648	3,114,592	191,027	4,546,070	51,647,931
2015	58,487,229	1,607,667	7,768,086	1,910,346	(2,055,379)	(3,404,958)	5,825,762	28,976,296	3,280,341	191,027	5,055,322	53,431,907
2016	60,791,752	1,634,107	7,768,086	2,028,341	(2,182,332)	(3,278,005)	5,970,197	30,597,671	3,489,049	191,027	5,600,221	55,191,531
2017	63,062,388	1,654,997	7,768,086	2,141,837	(2,304,445)	(3,155,892)	6,104,583	32,269,650	3,572,831	191,027	6,183,263	56,879,125
2018	65,424,673	1,688,615	7,768,086	2,258,876	(2,430,369)	(3,029,968)	6,255,240	33,972,914	3,692,203	191,027	6,807,118	58,617,555
2019	67,860,618	1,716,792	7,768,086	2,378,104	(2,558,650)	(2,901,687)	6,402,645	35,670,111	3,845,675	191,027	7,474,643	60,385,975
2020	70,333,083	1,741,273	7,768,086	2,496,908	(2,686,473)	(2,773,864)	6,545,930	37,354,205	4,002,063	191,027	8,188,895	62,144,188
2021	72,837,353	1,761,478	7,768,086	2,614,795	(2,813,310)	(2,647,027)	6,684,022	39,000,490	4,177,964	191,027	8,953,144	63,884,209
2022	75,350,464	1,764,312	7,768,086	2,730,035	(2,937,299)	(2,523,038)	6,802,096	40,488,718	4,454,095	191,027	9,770,891	65,579,573
2023	77,748,999	1,758,286	7,768,086	2,834,211	(3,049,384)	(2,410,953)	6,900,246	41,823,174	4,706,017	191,027	10,645,880	67,103,119
2024	80,037,357	1,771,981	7,768,086	2,927,623	(3,149,887)	(2,310,450)	7,007,353	43,056,693	4,914,061	191,027	11,582,118	68,455,239
2025	82,277,945	1,772,906	7,768,086	3,013,969	(3,242,789)	(2,217,548)	7,094,624	44,129,181	5,162,363	191,027	12,583,893	69,694,052
2026	84,410,725	1,782,511	7,768,086	3,089,043	(3,323,563)	(2,136,774)	7,179,303	45,033,691	5,415,020	191,027	13,655,792	70,754,933
2027	86,432,708	1,791,414	7,768,086	3,152,359	(3,391,685)	(2,068,652)	7,251,522	45,754,218	5,671,222	191,027	14,802,724	71,629,984
2028	88,331,601	1,812,534	7,768,086	3,202,796	(3,445,951)	(2,014,386)	7,323,079	46,299,190	5,918,334	191,027	16,029,941	72,301,660
2029	90,121,799	1,848,678	7,768,086	3,240,944	(3,486,996)	(1,973,341)	7,397,371	46,687,783	6,149,005	191,027	17,343,063	72,778,736
2030	91,829,035	1,886,411	7,768,086	3,268,145	(3,516,262)	(1,944,075)	7,462,305	46,901,597	6,388,718	191,027	18,748,104	73,080,931
2031	93,439,719	1,943,263	7,768,086	3,283,112	(3,532,366)	(1,927,971)	7,534,124	47,023,326	6,552,622	191,027	20,251,498	73,188,221
2032	95,048,505	1,998,891	7,768,086	3,291,633	(3,541,534)	(1,918,803)	7,598,273	47,038,933	6,722,893	191,027	21,860,129	73,188,376
2033	96,647,217	2,062,215	7,768,086	3,292,726	(3,542,709)	(1,917,628)	7,662,690	46,938,880	6,902,970	191,027	23,581,365	73,065,852
2034	98,233,099	2,126,882	7,768,086	3,285,722	(3,535,174)	(1,925,163)	7,720,353	46,789,459	7,010,001	4,742,337	25,423,087	72,810,012
2035	99,884,516	2,200,391	7,768,086	3,275,262	(3,523,920)	(1,936,417)	7,783,402	46,621,833	7,091,255	4,742,337	31,945,040	67,939,476
2036	101,643,297	2,272,290	7,768,086	3,263,529	(3,511,295)	(1,949,042)	7,843,568	46,370,864	7,234,764	4,742,337	38,923,530	62,719,767
2037	103,448,498	2,341,963	7,768,086	3,245,961	(3,492,394)	(1,967,943)	7,895,673	46,014,143	7,392,621	4,742,337	46,390,514	57,057,984
2038	105,285,718	2,423,282	7,768,086	3,220,990	(3,465,528)	(1,994,809)	7,952,021	45,571,267	7,535,124	4,742,337	54,380,187	50,905,531
2039	107,186,047	2,538,062	0	3,189,989	(3,432,173)	(2,028,164)	267,714	37,337,317	7,641,891	4,742,337	62,929,137	44,256,910
2040	109,227,973	2,633,647	0	2,613,613	(2,812,038)	(2,648,299)	(213,077)	28,424,231	7,840,236	4,742,337	72,076,514	37,151,459
2041	111,302,892	2,751,191	0	1,989,697	(2,140,754)	(3,319,583)	(719,449)	18,918,688	7,926,321	4,742,337	81,864,207	29,438,685
2042	113,556,719	2,859,439	0	1,324,309	(1,424,850)	(4,035,487)	(1,276,589)	8,661,238	8,121,088	4,742,337	92,337,038	21,219,681
2043	115,875,726	2,988,495	0	606,287	(652,316)	652,316	3,594,782	3,162,048	8,234,199	4,742,337	103,542,968	12,332,758
2044	118,374,124	3,110,053	0	221,344	(238,148)	238,148	3,331,397	(1,945,839)	8,439,284	4,742,337	115,533,313	2,840,811
2045	120,958,036	3,245,618	0	(136,208)	146,549	5,260	3,261,219	(7,312,897)	8,628,277	0	128,362,982	(7,404,946)
2046	123,665,721	3,388,476	0	(511,902)	550,766	5,260	3,432,600	(12,664,504)	8,784,207	0	128,564,184	(4,898,463)

Town of Middleborough, MA
GASB 45 Funding Scenarios

Total Medical, Dental & Life Insurance - Funding over 30 years at 7.00% discount rate - increasing funding starting at $150,000 and increasing at 4.00%per year until pension funding available

Fiscal Year	Total APBO	Normal Cost	Expected Amortization	Interest on Net OPEB Obligation	Adjustment to ARC	Amortization of Actuarial (Gain) / Loss	Expected Annual OPEB Cost	OPEB Obligation as of June 30	Employer Share of Premiums / Claims	Excess Employer Payments (beyond claims)	Plan Assets at Beginning of year	Unfunded Accrued Actuarial Liability ("UAAL")
								23,839,865				
2013	53,882,081	1,553,761	7,768,086	1,668,791	(1,795,485)	(3,664,852)	5,530,301	25,584,777	2,925,616	0	4,248,664	49,633,417
2014	56,194,001	1,581,552	7,768,086	1,790,935	(1,926,902)	(3,533,435)	5,680,236	27,290,648	3,114,592	150,000	4,546,070	51,647,931
2015	58,487,229	1,607,667	7,768,086	1,910,346	(2,055,379)	(3,404,958)	5,825,762	28,976,296	3,280,341	156,000	5,014,295	53,472,934
2016	60,791,752	1,634,107	7,768,086	2,028,341	(2,182,332)	(3,278,005)	5,970,197	30,597,671	3,489,049	162,240	5,521,296	55,270,456
2017	63,062,388	1,654,997	7,768,086	2,141,837	(2,304,445)	(3,155,892)	6,104,583	32,269,650	3,572,831	168,730	6,070,027	56,992,361
2018	65,424,673	1,688,615	7,768,086	2,258,876	(2,430,369)	(3,029,968)	6,255,240	33,972,914	3,692,203	175,479	6,663,658	58,761,015
2019	67,860,618	1,716,792	7,768,086	2,378,104	(2,558,650)	(2,901,687)	6,402,645	35,670,111	3,845,675	182,498	7,305,593	60,555,025
2020	70,333,083	1,741,273	7,768,086	2,496,908	(2,686,473)	(2,773,864)	6,545,930	37,354,205	4,002,063	189,798	7,999,482	62,333,601
2021	72,837,353	1,761,478	7,768,086	2,614,795	(2,813,310)	(2,647,027)	6,684,022	39,000,490	4,177,964	197,390	8,749,244	64,088,109
2022	75,350,464	1,764,312	7,768,086	2,730,035	(2,937,299)	(2,523,038)	6,802,096	40,488,718	4,454,095	205,285	9,559,081	65,791,383
2023	77,748,999	1,758,286	7,768,086	2,834,211	(3,049,384)	(2,410,953)	6,900,246	41,823,174	4,706,017	213,497	10,433,502	67,315,497
2024	80,037,357	1,771,981	7,768,086	2,927,623	(3,149,887)	(2,310,450)	7,007,353	43,056,693	4,914,061	222,037	11,377,344	68,660,013
2025	82,277,945	1,772,906	7,768,086	3,013,969	(3,242,789)	(2,217,548)	7,094,624	44,129,181	5,162,363	230,918	12,395,795	69,882,150
2026	84,410,725	1,782,511	7,768,086	3,089,043	(3,323,563)	(2,136,774)	7,179,303	45,033,691	5,415,020	240,155	13,494,419	70,916,306
2027	86,432,708	1,791,414	7,768,086	3,152,359	(3,391,685)	(2,068,652)	7,251,522	45,754,218	5,671,222	249,761	14,679,183	71,753,525
2028	88,331,601	1,812,534	7,768,086	3,202,796	(3,445,951)	(2,014,386)	7,323,079	46,299,190	5,918,334	259,751	15,956,487	72,375,114
2029	90,121,799	1,848,678	7,768,086	3,240,944	(3,486,996)	(1,973,341)	7,397,371	46,687,783	6,149,005	270,142	17,333,193	72,788,606
2030	91,829,035	1,886,411	7,768,086	3,268,145	(3,516,262)	(1,944,075)	7,462,305	46,901,597	6,388,718	280,947	18,816,658	73,012,377
2031	93,439,719	1,943,263	7,768,086	3,283,112	(3,532,366)	(1,927,971)	7,534,124	47,023,326	6,552,622	292,185	20,414,771	73,024,948
2032	95,048,505	1,998,891	7,768,086	3,291,633	(3,541,534)	(1,918,803)	7,598,273	47,038,933	6,722,893	303,872	22,135,990	72,912,515
2033	96,647,217	2,062,215	7,768,086	3,292,726	(3,542,709)	(1,917,628)	7,662,690	46,938,880	6,902,970	316,027	23,989,382	72,657,835
2034	98,233,099	2,126,882	7,768,086	3,285,722	(3,535,174)	(1,925,163)	7,720,353	46,789,459	7,010,001	4,034,583	25,984,666	72,248,433
2035	99,884,516	2,200,391	7,768,086	3,275,262	(3,523,920)	(1,936,417)	7,783,402	46,621,833	7,091,255	4,034,583	31,838,176	68,046,340
2036	101,643,297	2,272,290	7,768,086	3,263,529	(3,511,295)	(1,949,042)	7,843,568	46,370,864	7,234,764	4,034,583	38,101,432	63,541,865
2037	103,448,498	2,341,963	7,768,086	3,245,961	(3,492,394)	(1,967,943)	7,895,673	46,014,143	7,392,621	4,034,583	44,803,116	58,645,382
2038	105,285,718	2,423,282	7,768,086	3,220,990	(3,465,528)	(1,994,809)	7,952,021	45,571,267	7,535,124	4,034,583	51,973,918	53,311,800
2039	107,186,047	2,538,062	0	3,189,989	(3,432,173)	(2,028,164)	267,714	37,337,317	7,641,891	4,034,583	59,646,676	47,539,371
2040	109,227,973	2,633,647	0	2,613,613	(2,812,038)	(2,648,299)	(213,077)	28,424,231	7,840,236	4,034,583	67,856,527	41,371,446
2041	111,302,892	2,751,191	0	1,989,697	(2,140,754)	(3,319,583)	(719,449)	18,918,688	7,926,321	4,034,583	76,641,067	34,661,825
2042	113,556,719	2,859,439	0	1,324,309	(1,424,850)	(4,035,487)	(1,276,589)	8,661,238	8,121,088	4,034,583	86,040,525	27,516,194
2043	115,875,726	2,988,495	0	606,287	(652,316)	652,316	3,594,782	3,162,048	8,234,199	4,034,583	96,097,945	19,777,781
2044	118,374,124	3,110,053	0	221,344	(238,148)	238,148	3,331,397	(1,945,839)	8,439,284	4,034,583	106,859,385	11,514,739
2045	120,958,036	3,245,618	0	(136,208)	146,549	5,260	3,261,219	(7,312,897)	8,628,277	2,583,911	118,374,125	2,583,911
2046	123,665,721	3,388,476	0	(511,902)	550,766	5,260	3,432,600	(12,664,504)	8,784,207	0	129,244,225	(5,578,504)

Town of Middleborough, MA
GASB 45 Funding Scenarios

Total Medical, Dental & Life Insurance - Funding over 30 years at 7.00% discount rate - increasing at $50,000 per year until pension funding available

Fiscal Year	Total APBO	Normal Cost	Expected Amortization	Interest on Net OPEB Obligation	Adjustment to ARC	Amortization of Actuarial (Gain) / Loss	Expected Annual OPEB Cost	OPEB Obligation as of June 30	Employer Share of Premiums / Claims	Excess Employer Payments (beyond claims)	Plan Assets at Beginning of year	Unfunded Accrued Actuarial Liability ("UAAL")
								23,839,865				
2013	53,882,081	1,553,761	7,768,086	1,668,791	(1,795,485)	(3,664,852)	5,530,301	25,584,777	2,925,616	0	4,248,664	49,633,417
2014	56,194,001	1,581,552	7,768,086	1,790,935	(1,926,902)	(3,533,435)	5,680,236	27,290,648	3,114,592	50,000	4,546,070	51,647,931
2015	58,487,229	1,607,667	7,768,086	1,910,346	(2,055,379)	(3,404,958)	5,825,762	28,976,296	3,280,341	100,000	4,914,295	53,572,934
2016	60,791,752	1,634,107	7,768,086	2,028,341	(2,182,332)	(3,278,005)	5,970,197	30,597,671	3,489,049	150,000	5,358,296	55,433,456
2017	63,062,388	1,654,997	7,768,086	2,141,837	(2,304,445)	(3,155,892)	6,104,583	32,269,650	3,572,831	200,000	5,883,377	57,179,011
2018	65,424,673	1,688,615	7,768,086	2,258,876	(2,430,369)	(3,029,968)	6,255,240	33,972,914	3,692,203	250,000	6,495,213	58,929,460
2019	67,860,618	1,716,792	7,768,086	2,378,104	(2,558,650)	(2,901,687)	6,402,645	35,670,111	3,845,675	300,000	7,199,878	60,660,740
2020	70,333,083	1,741,273	7,768,086	2,496,908	(2,686,473)	(2,773,864)	6,545,930	37,354,205	4,002,063	350,000	8,003,869	62,329,214
2021	72,837,353	1,761,478	7,768,086	2,614,795	(2,813,310)	(2,647,027)	6,684,022	39,000,490	4,177,964	400,000	8,914,140	63,923,213
2022	75,350,464	1,764,312	7,768,086	2,730,035	(2,937,299)	(2,523,038)	6,802,096	40,488,718	4,454,095	450,000	9,938,130	65,412,334
2023	77,748,999	1,758,286	7,768,086	2,834,211	(3,049,384)	(2,410,953)	6,900,246	41,823,174	4,706,017	500,000	11,083,799	66,665,200
2024	80,037,357	1,771,981	7,768,086	2,927,623	(3,149,887)	(2,310,450)	7,007,353	43,056,693	4,914,061	550,000	12,359,665	67,677,692
2025	82,277,945	1,772,906	7,768,086	3,013,969	(3,242,789)	(2,217,548)	7,094,624	44,129,181	5,162,363	600,000	13,774,842	68,503,103
2026	84,410,725	1,782,511	7,768,086	3,089,043	(3,323,563)	(2,136,774)	7,179,303	45,033,691	5,415,020	650,000	15,339,081	69,071,644
2027	86,432,708	1,791,414	7,768,086	3,152,359	(3,391,685)	(2,068,652)	7,251,522	45,754,218	5,671,222	700,000	17,062,817	69,369,891
2028	88,331,601	1,812,534	7,768,086	3,202,796	(3,445,951)	(2,014,386)	7,323,079	46,299,190	5,918,334	750,000	18,957,214	69,374,387
2029	90,121,799	1,848,678	7,768,086	3,240,944	(3,486,996)	(1,973,341)	7,397,371	46,687,783	6,149,005	800,000	21,034,219	69,087,580
2030	91,829,035	1,886,411	7,768,086	3,268,145	(3,516,262)	(1,944,075)	7,462,305	46,901,597	6,388,718	850,000	23,306,614	68,522,421
2031	93,439,719	1,943,263	7,768,086	3,283,112	(3,532,366)	(1,927,971)	7,534,124	47,023,326	6,552,622	900,000	25,788,077	67,651,642
2032	95,048,505	1,998,891	7,768,086	3,291,633	(3,541,534)	(1,918,803)	7,598,273	47,038,933	6,722,893	950,000	28,493,242	66,555,263
2033	96,647,217	2,062,215	7,768,086	3,292,726	(3,542,709)	(1,917,628)	7,662,690	46,938,880	6,902,970	1,000,000	31,437,769	65,209,448
2034	98,233,099	2,126,882	7,768,086	3,285,722	(3,535,174)	(1,925,163)	7,720,353	46,789,459	7,010,001	2,880,547	34,638,413	63,594,686
2035	99,884,516	2,200,391	7,768,086	3,275,262	(3,523,920)	(1,936,417)	7,783,402	46,621,833	7,091,255	2,880,547	39,943,648	59,940,868
2036	101,643,297	2,272,290	7,768,086	3,263,529	(3,511,295)	(1,949,042)	7,843,568	46,370,864	7,234,764	2,880,547	45,620,250	56,023,047
2037	103,448,498	2,341,963	7,768,086	3,245,961	(3,492,394)	(1,967,943)	7,895,673	46,014,143	7,392,621	2,880,547	51,694,214	51,754,284
2038	105,285,718	2,423,282	7,768,086	3,220,990	(3,465,528)	(1,994,809)	7,952,021	45,571,267	7,535,124	2,880,547	58,193,356	47,092,362
2039	107,186,047	2,538,062	0	3,189,989	(3,432,173)	(2,028,164)	267,714	37,337,317	7,641,891	2,880,547	65,147,437	42,038,610
2040	109,227,973	2,633,647	0	2,613,613	(2,812,038)	(2,648,299)	(213,077)	28,424,231	7,840,236	2,880,547	72,588,304	36,639,669
2041	111,302,892	2,751,191	0	1,989,697	(2,140,754)	(3,319,583)	(719,449)	18,918,688	7,926,321	2,880,547	80,550,032	30,752,860
2042	113,556,719	2,859,439	0	1,324,309	(1,424,850)	(4,035,487)	(1,276,589)	8,661,238	8,121,088	2,880,547	89,069,081	24,487,638
2043	115,875,726	2,988,495	0	606,287	(652,316)	652,316	3,594,782	3,162,048	8,234,199	2,880,547	98,184,463	17,691,263
2044	118,374,124	3,110,053	0	221,344	(238,148)	238,148	3,331,397	(1,945,839)	8,439,284	2,880,547	107,937,922	10,436,202
2045	120,958,036	3,245,618	0	(136,208)	146,549	5,260	3,261,219	(7,312,897)	8,628,277	2,583,913	118,374,123	2,583,913
2046	123,665,721	3,388,476	0	(511,902)	550,766	5,260	3,432,600	(12,664,504)	8,784,207	0	129,244,225	(5,578,504)

Town of Middleborough, MA
GASB 45 Funding Scenarios

Total Medical, Dental & Life Insurance - Funding over 30 years at 7.00% discount rate - increasing at $25,000 per year until pension funding available

Fiscal Year	Total APBO	Normal Cost	Expected Amortization	Interest on Net OPEB Obligation	Adjustment to ARC	Amortization of Actuarial (Gain) / Loss	Expected Annual OPEB Cost	OPEB Obligation as of June 30	Employer Share of Premiums / Claims	Excess Employer Payments (beyond claims)	Plan Assets at Beginning of year	Unfunded Accrued Actuarial Liability ("UAAL")
								23,839,865				
2013	53,882,081	1,553,761	7,768,086	1,668,791	(1,795,485)	(3,664,852)	5,530,301	25,584,777	2,925,616	0	4,248,664	49,633,417
2014	56,194,001	1,581,552	7,768,086	1,790,935	(1,926,902)	(3,533,435)	5,680,236	27,290,648	3,114,592	25,000	4,546,070	51,647,931
2015	58,487,229	1,607,667	7,768,086	1,910,346	(2,055,379)	(3,404,958)	5,825,762	28,976,296	3,280,341	50,000	4,889,295	53,597,934
2016	60,791,752	1,634,107	7,768,086	2,028,341	(2,182,332)	(3,278,005)	5,970,197	30,597,671	3,489,049	75,000	5,281,546	55,510,206
2017	63,062,388	1,654,997	7,768,086	2,141,837	(2,304,445)	(3,155,892)	6,104,583	32,269,650	3,572,831	100,000	5,726,254	57,336,134
2018	65,424,673	1,688,615	7,768,086	2,258,876	(2,430,369)	(3,029,968)	6,255,240	33,972,914	3,692,203	125,000	6,227,092	59,197,581
2019	67,860,618	1,716,792	7,768,086	2,378,104	(2,558,650)	(2,901,687)	6,402,645	35,670,111	3,845,675	150,000	6,787,988	61,072,630
2020	70,333,083	1,741,273	7,768,086	2,496,908	(2,686,473)	(2,773,864)	6,545,930	37,354,205	4,002,063	175,000	7,413,147	62,919,936
2021	72,837,353	1,761,478	7,768,086	2,614,795	(2,813,310)	(2,647,027)	6,684,022	39,000,490	4,177,964	200,000	8,107,067	64,730,286
2022	75,350,464	1,764,312	7,768,086	2,730,035	(2,937,299)	(2,523,038)	6,802,096	40,488,718	4,454,095	225,000	8,874,562	66,475,902
2023	77,748,999	1,758,286	7,768,086	2,834,211	(3,049,384)	(2,410,953)	6,900,246	41,823,174	4,706,017	250,000	9,720,781	68,028,218
2024	80,037,357	1,771,981	7,768,086	2,927,623	(3,149,887)	(2,310,450)	7,007,353	43,056,693	4,914,061	275,000	10,651,236	69,386,121
2025	82,277,945	1,772,906	7,768,086	3,013,969	(3,242,789)	(2,217,548)	7,094,624	44,129,181	5,162,363	300,000	11,671,823	70,606,122
2026	84,410,725	1,782,511	7,768,086	3,089,043	(3,323,563)	(2,136,774)	7,179,303	45,033,691	5,415,020	325,000	12,788,851	71,621,874
2027	86,432,708	1,791,414	7,768,086	3,152,359	(3,391,685)	(2,068,652)	7,251,522	45,754,218	5,671,222	350,000	14,009,071	72,423,637
2028	88,331,601	1,812,534	7,768,086	3,202,796	(3,445,951)	(2,014,386)	7,323,079	46,299,190	5,918,334	375,000	15,339,706	72,991,895
2029	90,121,799	1,848,678	7,768,086	3,240,944	(3,486,996)	(1,973,341)	7,397,371	46,687,783	6,149,005	400,000	16,788,485	73,333,314
2030	91,829,035	1,886,411	7,768,086	3,268,145	(3,516,262)	(1,944,075)	7,462,305	46,901,597	6,388,718	425,000	18,363,679	73,465,356
2031	93,439,719	1,943,263	7,768,086	3,283,112	(3,532,366)	(1,927,971)	7,534,124	47,023,326	6,552,622	450,000	20,074,137	73,365,582
2032	95,048,505	1,998,891	7,768,086	3,291,633	(3,541,534)	(1,918,803)	7,598,273	47,038,933	6,722,893	475,000	21,929,327	73,119,178
2033	96,647,217	2,062,215	7,768,086	3,292,726	(3,542,709)	(1,917,628)	7,662,690	46,938,880	6,902,970	500,000	23,939,380	72,707,837
2034	98,233,099	2,126,882	7,768,086	3,285,722	(3,535,174)	(1,925,163)	7,720,353	46,789,459	7,010,001	4,017,184	26,115,137	72,117,962
2035	99,884,516	2,200,391	7,768,086	3,275,262	(3,523,920)	(1,936,417)	7,783,402	46,621,833	7,091,255	4,017,184	31,960,381	67,924,135
2036	101,643,297	2,272,290	7,768,086	3,263,529	(3,511,295)	(1,949,042)	7,843,568	46,370,864	7,234,764	4,017,184	38,214,792	63,428,505
2037	103,448,498	2,341,963	7,768,086	3,245,961	(3,492,394)	(1,967,943)	7,895,673	46,014,143	7,392,621	4,017,184	44,907,012	58,541,486
2038	105,285,718	2,423,282	7,768,086	3,220,990	(3,465,528)	(1,994,809)	7,952,021	45,571,267	7,535,124	4,017,184	52,067,687	53,218,031
2039	107,186,047	2,538,062	0	3,189,989	(3,432,173)	(2,028,164)	267,714	37,337,317	7,641,891	4,017,184	59,729,609	47,456,438
2040	109,227,973	2,633,647	0	2,613,613	(2,812,038)	(2,648,299)	(213,077)	28,424,231	7,840,236	4,017,184	67,927,866	41,300,107
2041	111,302,892	2,751,191	0	1,989,697	(2,140,754)	(3,319,583)	(719,449)	18,918,688	7,926,321	4,017,184	76,700,001	34,602,891
2042	113,556,719	2,859,439	0	1,324,309	(1,424,850)	(4,035,487)	(1,276,589)	8,661,238	8,121,088	4,017,184	86,086,185	27,470,534
2043	115,875,726	2,988,495	0	606,287	(652,316)	652,316	3,594,782	3,162,048	8,234,199	4,017,184	96,129,402	19,746,324
2044	118,374,124	3,110,053	0	221,344	(238,148)	238,148	3,331,397	(1,945,839)	8,439,284	4,017,184	106,875,644	11,498,480
2045	120,958,036	3,245,618	0	(136,208)	146,549	5,260	3,261,219	(7,312,897)	8,628,277	2,583,913	118,374,123	2,583,913
2046	123,665,721	3,388,476	0	(511,902)	550,766	5,260	3,432,600	(12,664,504)	8,784,207	0	129,244,225	(5,578,504)

Town of Middleborough, MA
GASB 45 Funding Scenarios

Total Medical, Dental & Life Insurance - Funding over 30 years at 7.00% discount rate (funding 100.00% of Pension Contributions)

Fiscal Year	Total APBO	Normal Cost	Expected Amortization	Interest on Net OPEB Obligation	Adjustment to ARC	Amortization of Actuarial (Gain) / Loss	Expected Annual OPEB Cost	OPEB Obligation as of June 30	Employer Share of Premiums / Claims	Excess Employer Payments (beyond claims)	Plan Assets at Beginning of year	Unfunded Accrued Actuarial Liability ("UAAL")
								23,839,865				
2013	53,882,081	1,553,761	7,768,086	1,668,791	(1,795,485)	(3,664,852)	5,530,301	25,584,777	2,925,616	0	4,248,664	49,633,417
2014	56,194,001	1,581,552	7,768,086	1,790,935	(1,926,902)	(3,533,435)	5,680,236	27,290,648	3,114,592	0	4,546,070	51,647,931
2015	58,487,229	1,607,667	7,768,086	1,910,346	(2,055,379)	(3,404,958)	5,825,762	28,976,296	3,280,341	0	4,864,295	53,622,934
2016	60,791,752	1,634,107	7,768,086	2,028,341	(2,182,332)	(3,278,005)	5,970,197	30,597,671	3,489,049	0	5,204,796	55,586,956
2017	63,062,388	1,654,997	7,768,086	2,141,837	(2,304,445)	(3,155,892)	6,104,583	32,269,650	3,572,831	0	5,569,132	57,493,256
2018	65,424,673	1,688,615	7,768,086	2,258,876	(2,430,369)	(3,029,968)	6,255,240	33,972,914	3,692,203	0	5,958,971	59,465,702
2019	67,860,618	1,716,792	7,768,086	2,378,104	(2,558,650)	(2,901,687)	6,402,645	35,670,111	3,845,675	0	6,376,099	61,484,519
2020	70,333,083	1,741,273	7,768,086	2,496,908	(2,686,473)	(2,773,864)	6,545,930	37,354,205	4,002,063	0	6,822,426	63,510,657
2021	72,837,353	1,761,478	7,768,086	2,614,795	(2,813,310)	(2,647,027)	6,684,022	39,000,490	4,177,964	0	7,299,996	65,537,357
2022	75,350,464	1,764,312	7,768,086	2,730,035	(2,937,299)	(2,523,038)	6,802,096	40,488,718	4,454,095	0	7,810,996	67,539,468
2023	77,748,999	1,758,286	7,768,086	2,834,211	(3,049,384)	(2,410,953)	6,900,246	41,823,174	4,706,017	0	8,357,766	69,391,233
2024	80,037,357	1,771,981	7,768,086	2,927,623	(3,149,887)	(2,310,450)	7,007,353	43,056,693	4,914,061	0	8,942,810	71,094,547
2025	82,277,945	1,772,906	7,768,086	3,013,969	(3,242,789)	(2,217,548)	7,094,624	44,129,181	5,162,363	0	9,568,807	72,709,138
2026	84,410,725	1,782,511	7,768,086	3,089,043	(3,323,563)	(2,136,774)	7,179,303	45,033,691	5,415,020	0	10,238,623	74,172,102
2027	86,432,708	1,791,414	7,768,086	3,152,359	(3,391,685)	(2,068,652)	7,251,522	45,754,218	5,671,222	0	10,955,327	75,477,381
2028	88,331,601	1,812,534	7,768,086	3,202,796	(3,445,951)	(2,014,386)	7,323,079	46,299,190	5,918,334	0	11,722,200	76,609,401
2029	90,121,799	1,848,678	7,768,086	3,240,944	(3,486,996)	(1,973,341)	7,397,371	46,687,783	6,149,005	0	12,542,754	77,579,045
2030	91,829,035	1,886,411	7,768,086	3,268,145	(3,516,262)	(1,944,075)	7,462,305	46,901,597	6,388,718	0	13,420,747	78,408,288
2031	93,439,719	1,943,263	7,768,086	3,283,112	(3,532,366)	(1,927,971)	7,534,124	47,023,326	6,552,622	0	14,360,199	79,079,520
2032	95,048,505	1,998,891	7,768,086	3,291,633	(3,541,534)	(1,918,803)	7,598,273	47,038,933	6,722,893	0	15,365,413	79,683,092
2033	96,647,217	2,062,215	7,768,086	3,292,726	(3,542,709)	(1,917,628)	7,662,690	46,938,880	6,902,970	0	16,440,992	80,206,225
2034	98,233,099	2,126,882	7,768,086	3,285,722	(3,535,174)	(1,925,163)	7,720,353	46,789,459	7,010,001	9,864,061	17,591,861	80,641,238
2035	99,884,516	2,200,391	7,768,086	3,275,262	(3,523,920)	(1,936,417)	7,783,402	46,621,833	7,091,255	10,258,623	28,687,352	71,197,164
2036	101,643,297	2,272,290	7,768,086	3,263,529	(3,511,295)	(1,949,042)	7,843,568	46,370,864	7,234,764	10,668,968	40,954,090	60,689,207
2037	103,448,498	2,341,963	7,768,086	3,245,961	(3,492,394)	(1,967,943)	7,895,673	46,014,143	7,392,621	11,095,727	54,489,845	48,958,653
2038	105,285,718	2,423,282	7,768,086	3,220,990	(3,465,528)	(1,994,809)	7,952,021	45,571,267	7,535,124	11,539,556	69,399,861	35,885,857
2039	107,186,047	2,538,062	0	3,189,989	(3,432,173)	(2,028,164)	267,714	37,337,317	7,641,891	12,001,138	85,797,407	21,388,640
2040	109,227,973	2,633,647	0	2,613,613	(2,812,038)	(2,648,299)	(213,077)	28,424,231	7,840,236	12,481,184	103,804,364	5,423,609
2041	111,302,892	2,751,191	0	1,989,697	(2,140,754)	(3,319,583)	(719,449)	18,918,688	7,926,321	12,980,431	123,551,853	(12,248,961)
2042	113,556,719	2,859,439	0	1,324,309	(1,424,850)	(4,035,487)	(1,276,589)	8,661,238	8,121,088	13,499,648	137,059,826	(23,503,107)
2043	115,875,726	2,988,495	0	606,287	(652,316)	652,316	3,594,782	3,162,048	8,234,199	14,039,634	151,919,463	(36,043,737)
2044	118,374,124	3,110,053	0	221,344	(238,148)	238,148	3,331,397	(1,945,839)	8,439,284	14,601,220	168,154,176	(49,780,052)
2045	120,958,036	3,245,618	0	(136,208)	146,549	5,260	3,261,219	(7,312,897)	8,628,277	0	185,897,911	(64,939,875)
2046	123,665,721	3,388,476	0	(511,902)	550,766	5,260	3,432,600	(12,664,504)	8,784,207	0	190,126,558	(66,460,837)

Town of Middleborough, MA
GASB 45 Funding Scenarios

Total Medical, Dental & Life Insurance - Funding over 30 years at 7.00% discount rate (funding 55.00% of Pension Contributions)

Fiscal Year	Total APBO	Normal Cost	Expected Amortization	Interest on Net OPEB Obligation	Adjustment to ARC	Amortization of Actuarial (Gain) / Loss	Expected Annual OPEB Cost	OPEB Obligation as of June 30	Employer Share of Premiums / Claims	Excess Employer Payments (beyond claims)	Plan Assets at Beginning of year	Unfunded Accrued Actuarial Liability ("UAAL")
								23,839,865				
2013	53,882,081	1,553,761	7,768,086	1,668,791	(1,795,485)	(3,664,852)	5,530,301	25,584,777	2,925,616	0	4,248,664	49,633,417
2014	56,194,001	1,581,552	7,768,086	1,790,935	(1,926,902)	(3,533,435)	5,680,236	27,290,648	3,114,592	0	4,546,070	51,647,931
2015	58,487,229	1,607,667	7,768,086	1,910,346	(2,055,379)	(3,404,958)	5,825,762	28,976,296	3,280,341	0	4,864,295	53,622,934
2016	60,791,752	1,634,107	7,768,086	2,028,341	(2,182,332)	(3,278,005)	5,970,197	30,597,671	3,489,049	0	5,204,796	55,586,956
2017	63,062,388	1,654,997	7,768,086	2,141,837	(2,304,445)	(3,155,892)	6,104,583	32,269,650	3,572,831	0	5,569,132	57,493,256
2018	65,424,673	1,688,615	7,768,086	2,258,876	(2,430,369)	(3,029,968)	6,255,240	33,972,914	3,692,203	0	5,958,971	59,465,702
2019	67,860,618	1,716,792	7,768,086	2,378,104	(2,558,650)	(2,901,687)	6,402,645	35,670,111	3,845,675	0	6,376,099	61,484,519
2020	70,333,083	1,741,273	7,768,086	2,496,908	(2,686,473)	(2,773,864)	6,545,930	37,354,205	4,002,063	0	6,822,426	63,510,657
2021	72,837,353	1,761,478	7,768,086	2,614,795	(2,813,310)	(2,647,027)	6,684,022	39,000,490	4,177,964	0	7,299,996	65,537,357
2022	75,350,464	1,764,312	7,768,086	2,730,035	(2,937,299)	(2,523,038)	6,802,096	40,488,718	4,454,095	0	7,810,996	67,539,468
2023	77,748,999	1,758,286	7,768,086	2,834,211	(3,049,384)	(2,410,953)	6,900,246	41,823,174	4,706,017	0	8,357,766	69,391,233
2024	80,037,357	1,771,981	7,768,086	2,927,623	(3,149,887)	(2,310,450)	7,007,353	43,056,693	4,914,061	0	8,942,810	71,094,547
2025	82,277,945	1,772,906	7,768,086	3,013,969	(3,242,789)	(2,217,548)	7,094,624	44,129,181	5,162,363	0	9,568,807	72,709,138
2026	84,410,725	1,782,511	7,768,086	3,089,043	(3,323,563)	(2,136,774)	7,179,303	45,033,691	5,415,020	0	10,238,623	74,172,102
2027	86,432,708	1,791,414	7,768,086	3,152,359	(3,391,685)	(2,068,652)	7,251,522	45,754,218	5,671,222	0	10,955,327	75,477,381
2028	88,331,601	1,812,534	7,768,086	3,202,796	(3,445,951)	(2,014,386)	7,323,079	46,299,190	5,918,334	0	11,722,200	76,609,401
2029	90,121,799	1,848,678	7,768,086	3,240,944	(3,486,996)	(1,973,341)	7,397,371	46,687,783	6,149,005	0	12,542,754	77,579,045
2030	91,829,035	1,886,411	7,768,086	3,268,145	(3,516,262)	(1,944,075)	7,462,305	46,901,597	6,388,718	0	13,420,747	78,408,288
2031	93,439,719	1,943,263	7,768,086	3,283,112	(3,532,366)	(1,927,971)	7,534,124	47,023,326	6,552,622	0	14,360,199	79,079,520
2032	95,048,505	1,998,891	7,768,086	3,291,633	(3,541,534)	(1,918,803)	7,598,273	47,038,933	6,722,893	0	15,365,413	79,683,092
2033	96,647,217	2,062,215	7,768,086	3,292,726	(3,542,709)	(1,917,628)	7,662,690	46,938,880	6,902,970	0	16,440,992	80,206,225
2034	98,233,099	2,126,882	7,768,086	3,285,722	(3,535,174)	(1,925,163)	7,720,353	46,789,459	7,010,001	5,425,233	17,591,861	80,641,238
2035	99,884,516	2,200,391	7,768,086	3,275,262	(3,523,920)	(1,936,417)	7,783,402	46,621,833	7,091,255	5,642,243	24,248,525	75,635,991
2036	101,643,297	2,272,290	7,768,086	3,263,529	(3,511,295)	(1,949,042)	7,843,568	46,370,864	7,234,764	5,867,933	31,588,165	70,055,132
2037	103,448,498	2,341,963	7,768,086	3,245,961	(3,492,394)	(1,967,943)	7,895,673	46,014,143	7,392,621	6,102,650	39,667,269	63,781,229
2038	105,285,718	2,423,282	7,768,086	3,220,990	(3,465,528)	(1,994,809)	7,952,021	45,571,267	7,535,124	6,346,756	48,546,628	56,739,090
2039	107,186,047	2,538,062	0	3,189,989	(3,432,173)	(2,028,164)	267,714	37,337,317	7,641,891	6,600,626	58,291,648	48,894,399
2040	109,227,973	2,633,647	0	2,613,613	(2,812,038)	(2,648,299)	(213,077)	28,424,231	7,840,236	6,864,651	68,972,689	40,255,284
2041	111,302,892	2,751,191	0	1,989,697	(2,140,754)	(3,319,583)	(719,449)	18,918,688	7,926,321	7,139,237	80,665,428	30,637,464
2042	113,556,719	2,859,439	0	1,324,309	(1,424,850)	(4,035,487)	(1,276,589)	8,661,238	8,121,088	7,424,807	93,451,245	20,105,474
2043	115,875,726	2,988,495	0	606,287	(652,316)	652,316	3,594,782	3,162,048	8,234,199	7,721,799	107,417,639	8,458,087
2044	118,374,124	3,110,053	0	221,344	(238,148)	238,148	3,331,397	(1,945,839)	8,439,284	8,030,671	122,658,673	(4,284,549)
2045	120,958,036	3,245,618	0	(136,208)	146,549	5,260	3,261,219	(7,312,897)	8,628,277	0	130,647,174	(9,689,138)
2046	123,665,721	3,388,476	0	(511,902)	550,766	5,260	3,432,600	(12,664,504)	8,784,207	0	131,008,269	(7,342,548)

Town of Middleborough, MA
GASB 45 Funding Scenarios

Total Medical, Dental & Life Insurance - Funding over 30 years at 7.00% discount rate (funding 25.00% of Pension Contributions)

Fiscal Year	Total APBO	Normal Cost	Expected Amortization	Interest on Net OPEB Obligation	Adjustment to ARC	Amortization of Actuarial (Gain) / Loss	Expected Annual OPEB Cost	OPEB Obligation as of June 30	Employer Share of Premiums / Claims	Excess Employer Payments (beyond claims)	Plan Assets at Beginning of year	Unfunded Accrued Actuarial Liability ("UAAL")
2013	53,882,081	1,553,761	7,768,086	1,668,791	(1,795,485)	(3,664,852)	5,530,301	23,839,865				
2014	56,194,001	1,581,552	7,768,086	1,790,935	(1,926,902)	(3,533,435)	5,680,236	25,584,777	2,925,616	0	4,248,664	49,633,417
2015	58,487,229	1,607,667	7,768,086	1,910,346	(2,055,379)	(3,404,958)	5,825,762	27,290,648	3,114,592	465,299	4,546,070	51,647,931
2016	60,791,752	1,634,107	7,768,086	2,028,341	(2,182,332)	(3,278,005)	5,970,197	28,976,296	3,280,341	483,911	5,329,594	53,157,635
2017	63,062,388	1,654,997	7,768,086	2,141,837	(2,304,445)	(3,155,892)	6,104,583	30,597,671	3,489,049	503,267	6,186,577	54,605,175
2018	65,424,673	1,688,615	7,768,086	2,258,876	(2,430,369)	(3,029,968)	6,255,240	32,269,650	3,572,831	523,398	7,122,905	55,939,483
2019	67,860,618	1,716,792	7,768,086	2,378,104	(2,558,650)	(2,901,687)	6,402,645	33,972,914	3,692,203	544,334	8,144,906	57,279,767
2020	70,333,083	1,741,273	7,768,086	2,496,908	(2,686,473)	(2,773,864)	6,545,930	35,670,111	3,845,675	566,107	9,259,383	58,601,235
2021	72,837,353	1,761,478	7,768,086	2,614,795	(2,813,310)	(2,647,027)	6,684,022	37,354,205	4,002,063	588,752	10,473,647	59,859,436
2022	75,350,464	1,764,312	7,768,086	2,730,035	(2,937,299)	(2,523,038)	6,802,096	39,000,490	4,177,964	612,302	11,795,554	61,041,799
2023	77,748,999	1,758,286	7,768,086	2,834,211	(3,049,384)	(2,410,953)	6,900,246	40,488,718	4,454,095	636,794	13,233,545	62,116,919
2024	80,037,357	1,771,981	7,768,086	2,927,623	(3,149,887)	(2,310,450)	7,007,353	41,823,174	4,706,017	662,266	14,796,687	62,952,312
2025	82,277,945	1,772,906	7,768,086	3,013,969	(3,242,789)	(2,217,548)	7,094,624	43,056,693	4,914,061	688,756	16,494,721	63,542,636
2026	84,410,725	1,782,511	7,768,086	3,089,043	(3,323,563)	(2,136,774)	7,179,303	44,129,181	5,162,363	716,306	18,338,108	63,939,837
2027	86,432,708	1,791,414	7,768,086	3,152,359	(3,391,685)	(2,068,652)	7,251,522	45,033,691	5,415,020	744,959	20,338,082	64,072,643
2028	88,331,601	1,812,534	7,768,086	3,202,796	(3,445,951)	(2,014,386)	7,323,079	45,754,218	5,671,222	774,757	22,506,706	63,926,002
2029	90,121,799	1,848,678	7,768,086	3,240,944	(3,486,996)	(1,973,341)	7,397,371	46,299,190	5,918,334	805,747	24,856,933	63,474,668
2030	91,829,035	1,886,411	7,768,086	3,268,145	(3,516,262)	(1,944,075)	7,462,305	46,687,783	6,149,005	837,977	27,402,666	62,719,133
2031	93,439,719	1,943,263	7,768,086	3,283,112	(3,532,366)	(1,927,971)	7,534,124	46,901,597	6,388,718	871,496	30,158,830	61,670,205
2032	95,048,505	1,998,891	7,768,086	3,291,633	(3,541,534)	(1,918,803)	7,598,273	47,023,326	6,552,622	906,356	33,141,444	60,298,275
2033	96,647,217	2,062,215	7,768,086	3,292,726	(3,542,709)	(1,917,628)	7,662,690	47,038,933	6,722,893	942,610	36,367,701	58,680,804
2034	98,233,099	2,126,882	7,768,086	3,285,722	(3,535,174)	(1,925,163)	7,720,353	46,938,880	6,902,970	980,315	39,856,051	56,791,166
2035	99,884,516	2,200,391	7,768,086	3,275,262	(3,523,920)	(1,936,417)	7,783,402	46,789,459	7,010,001	2,466,015	43,626,289	54,606,810
2036	101,643,297	2,272,290	7,768,086	3,263,529	(3,511,295)	(1,949,042)	7,843,568	46,621,833	7,091,255	2,564,656	49,146,144	50,738,372
2037	103,448,498	2,341,963	7,768,086	3,245,961	(3,492,394)	(1,967,943)	7,895,673	46,370,864	7,234,764	2,667,242	55,151,030	46,492,267
2038	105,285,718	2,423,282	7,768,086	3,220,990	(3,465,528)	(1,994,809)	7,952,021	46,014,143	7,392,621	2,773,932	61,678,844	41,769,654
2039	107,186,047	2,538,062	0	3,189,989	(3,432,173)	(2,028,164)	267,714	45,571,267	7,535,124	2,884,889	68,770,295	36,515,423
2040	109,227,973	2,633,647	0	2,613,613	(2,812,038)	(2,648,299)	(213,077)	37,337,317	7,641,891	3,000,285	76,469,105	30,716,942
2041	111,302,892	2,751,191	0	1,989,697	(2,140,754)	(3,319,583)	(719,449)	28,424,231	7,840,236	3,120,296	84,822,227	24,405,746
2042	113,556,719	2,859,439	0	1,324,309	(1,424,850)	(4,035,487)	(1,276,589)	18,918,688	7,926,321	3,245,108	93,880,079	17,422,813
2043	115,875,726	2,988,495	0	606,287	(652,316)	652,316	3,594,782	8,661,238	8,121,088	3,374,912	103,696,792	9,859,927
2044	118,374,124	3,110,053	0	221,344	(238,148)	238,148	3,331,397	3,162,048	8,234,199	3,509,909	114,330,480	1,545,246
2045	120,958,036	3,245,618	0	(136,208)	146,549	5,260	3,261,219	(1,945,839)	8,439,284	3,650,305	125,843,522	(7,469,398)
2046	123,665,721	3,388,476	0	(511,902)	550,766	5,260	3,432,600	(7,312,897)	8,628,277	0	129,674,596	(8,716,560)
								(12,664,504)	8,784,207	0	129,967,611	(6,301,890)

Town of Middleborough, MA
GASB 45 Funding Scenarios

Total Medical, Dental & Life Insurance - Funding over 30 years at 7.00% discount rate (funding 40.00% of Pension Contributions)

Fiscal Year	Total APBO	Normal Cost	Expected Amortization	Interest on Net OPEB Obligation	Adjustment to ARC	Amortization of Actuarial (Gain) / Loss	Expected Annual OPEB Cost	OPEB Obligation as of June 30	Employer Share of Premiums / Claims	Excess Employer Payments (beyond claims)	Plan Assets at Beginning of year	Unfunded Accrued Actuarial Liability ("UAAL")
								23,839,865				
2013	53,882,081	1,553,761	7,768,086	1,668,791	(1,795,485)	(3,664,852)	5,530,301	25,584,777	2,925,616	0	4,248,664	49,633,417
2014	56,194,001	1,581,552	7,768,086	1,790,935	(1,926,902)	(3,533,435)	5,680,236	27,290,648	3,114,592	23,000	4,546,070	51,647,931
2015	58,487,229	1,607,667	7,768,086	1,910,346	(2,055,379)	(3,404,958)	5,825,762	28,976,296	3,280,341	24,000	4,887,295	53,599,934
2016	60,791,752	1,634,107	7,768,086	2,028,341	(2,182,332)	(3,278,005)	5,970,197	30,597,671	3,489,049	25,000	5,253,406	55,538,346
2017	63,062,388	1,654,997	7,768,086	2,141,837	(2,304,445)	(3,155,892)	6,104,583	32,269,650	3,572,831	26,000	5,646,144	57,416,244
2018	65,424,673	1,688,615	7,768,086	2,258,876	(2,430,369)	(3,029,968)	6,255,240	33,972,914	3,692,203	28,000	6,067,374	59,357,299
2019	67,860,618	1,716,792	7,768,086	2,378,104	(2,558,650)	(2,901,687)	6,402,645	35,670,111	3,845,675	30,000	6,520,090	61,340,528
2020	70,333,083	1,741,273	7,768,086	2,496,908	(2,686,473)	(2,773,864)	6,545,930	37,354,205	4,002,063	32,000	7,006,496	63,326,587
2021	72,837,353	1,761,478	7,768,086	2,614,795	(2,813,310)	(2,647,027)	6,684,022	39,000,490	4,177,964	34,000	7,528,951	65,308,402
2022	75,350,464	1,764,312	7,768,086	2,730,035	(2,937,299)	(2,523,038)	6,802,096	40,488,718	4,454,095	36,000	8,089,978	67,260,486
2023	77,748,999	1,758,286	7,768,086	2,834,211	(3,049,384)	(2,410,953)	6,900,246	41,823,174	4,706,017	38,000	8,692,276	69,056,723
2024	80,037,357	1,771,981	7,768,086	2,927,623	(3,149,887)	(2,310,450)	7,007,353	43,056,693	4,914,061	40,000	9,338,735	70,698,622
2025	82,277,945	1,772,906	7,768,086	3,013,969	(3,242,789)	(2,217,548)	7,094,624	44,129,181	5,162,363	42,000	10,032,446	72,245,499
2026	84,410,725	1,782,511	7,768,086	3,089,043	(3,323,563)	(2,136,774)	7,179,303	45,033,691	5,415,020	44,000	10,776,717	73,634,008
2027	86,432,708	1,791,414	7,768,086	3,152,359	(3,391,685)	(2,068,652)	7,251,522	45,754,218	5,671,222	46,000	11,575,087	74,857,621
2028	88,331,601	1,812,534	7,768,086	3,202,796	(3,445,951)	(2,014,386)	7,323,079	46,299,190	5,918,334	48,000	12,431,343	75,900,258
2029	90,121,799	1,848,678	7,768,086	3,240,944	(3,486,996)	(1,973,341)	7,397,371	46,687,783	6,149,005	50,000	13,349,537	76,772,262
2030	91,829,035	1,886,411	7,768,086	3,268,145	(3,516,262)	(1,944,075)	7,462,305	46,901,597	6,388,718	52,000	14,334,005	77,495,030
2031	93,439,719	1,943,263	7,768,086	3,283,112	(3,532,366)	(1,927,971)	7,534,124	47,023,326	6,552,622	55,000	15,389,385	78,050,334
2032	95,048,505	1,998,891	7,768,086	3,291,633	(3,541,534)	(1,918,803)	7,598,273	47,038,933	6,722,893	58,000	16,521,642	78,526,863
2033	96,647,217	2,062,215	7,768,086	3,292,726	(3,542,709)	(1,917,628)	7,662,690	46,938,880	6,902,970	61,000	17,736,157	78,911,060
2034	98,233,099	2,126,882	7,768,086	3,285,722	(3,535,174)	(1,925,163)	7,720,353	46,789,459	7,010,001	3,945,624	19,038,688	79,194,411
2035	99,884,516	2,200,391	7,768,086	3,275,262	(3,523,920)	(1,936,417)	7,783,402	46,621,833	7,091,255	4,103,449	24,317,021	75,567,495
2036	101,643,297	2,272,290	7,768,086	3,263,529	(3,511,295)	(1,949,042)	7,843,568	46,370,864	7,234,764	4,267,587	30,122,662	71,520,635
2037	103,448,498	2,341,963	7,768,086	3,245,961	(3,492,394)	(1,967,943)	7,895,673	46,014,143	7,392,621	4,438,291	36,498,836	66,949,662
2038	105,285,718	2,423,282	7,768,086	3,220,990	(3,465,528)	(1,994,809)	7,952,021	45,571,267	7,535,124	4,615,822	43,492,045	61,793,673
2039	107,186,047	2,538,062	0	3,189,989	(3,432,173)	(2,028,164)	267,714	37,337,317	7,641,891	4,800,455	51,152,311	56,033,736
2040	109,227,973	2,633,647	0	2,613,613	(2,812,038)	(2,648,299)	(213,077)	28,424,231	7,840,236	4,992,474	59,533,428	49,694,545
2041	111,302,892	2,751,191	0	1,989,697	(2,140,754)	(3,319,583)	(719,449)	18,918,688	7,926,321	5,192,172	68,693,242	42,609,650
2042	113,556,719	2,859,439	0	1,324,309	(1,424,850)	(4,035,487)	(1,276,589)	8,661,238	8,121,088	5,399,859	78,693,941	34,862,778
2043	115,875,726	2,988,495	0	606,287	(652,316)	652,316	3,594,782	3,162,048	8,234,199	5,615,854	89,602,376	26,273,350
2044	118,374,124	3,110,053	0	221,344	(238,148)	238,148	3,331,397	(1,945,839)	8,439,284	5,840,488	101,490,396	16,883,728
2045	120,958,036	3,245,618	0	(136,208)	146,549	5,260	3,261,219	(7,312,897)	8,628,277	5,840,488	114,435,212	6,522,824
2046	123,665,721	3,388,476	0	(511,902)	550,766	5,260	3,432,600	(12,664,504)	8,784,207	0	128,286,165	(4,620,444)