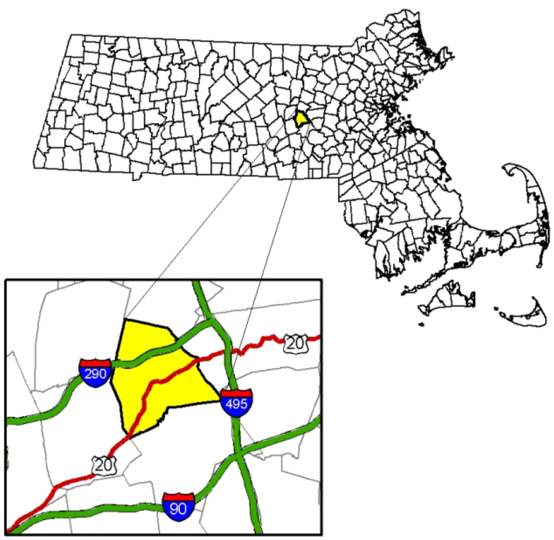
Town of Northborough, MA
Financial Trend Monitoring Report
Fiscal Year 2017



FTM Report covers the period July 1, 2006 (FY2007) through June 30, 2017 (FY2017)

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I. INTRODUCTION—THE FINANCIAL TREND MONITORING SYSTEM

Welcome to the Town of Northborough's Financial Trend Monitoring System (FTMS) Report. The purpose of the FTMS is to analyze key financial indicators in order to assess the financial direction of the Town. The report is designed to bring issues and opportunities to the attention of decision-makers through a systematic method of trend analysis. If employed correctly, the FTMS will help Town officials:

- Gain a better understanding of the Town's current financial condition.
- Identify hidden and emerging problems before they reach serious proportions.
- Present a straightforward picture of the Town's financial strengths and weaknesses to elected and appointed officials, citizens, and credit rating firms.
- Reinforce the need for long-range considerations during the annual budget process.
- Provide a starting place for setting, reviewing and updating of financial policies that guide financial decision-making.

The ultimate goal of the FTMS is to help local officials better assess and protect the Town of Northborough's overall financial condition.

Aspects of Financial Condition

- *<u>Cash Solvency</u>: A government's ability to pay immediate obligations,*
- *<u>Budgetary Solvency</u>: Its ability to pay financial obligations within the current fiscal period,*
- *<u>Long-Run Solvency</u>: Its ability to continue paying obligations in future fiscal periods, and*
- *<u>Service-Level Solvency</u>: The government's ability to continue providing the level of services expected by its constituents.*

What is Financial Condition?

Financial condition is broadly defined as the ability of a Town to maintain existing service levels, withstand local and regional economic disruptions, and meet the demands of natural growth, decline and change. It is often discussed from the perspectives of cash solvency, budgetary solvency, long-run solvency and service-level solvency.

In the narrowest sense, financial condition means the ability of the Town to pay its immediate obligations over the next 30 to 90 days in order to maintain operations. This is typically referred to as "cash solvency."

Beyond meeting its monthly cash obligations, a Town must also be able to generate enough revenues during a fiscal year to meet all its expenditures, without incurring operational deficits. With few exceptions, such as snow and ice overdrafts, the Town is legally obligated to maintain "budgetary solvency," or a balanced fiscal year budget, while providing services to residents.

In a broader sense, financial condition means the Town's ability in the long-run to pay all the costs of doing business, including those which may not appear during the current fiscal year, such as pension costs and liabilities for other post-employment benefits. This long-run balance between revenues and costs is referred to as "long-run solvency" and includes items such as debt commitments and investments designed to maintain capital facilities such as buildings and roads. As many municipalities know all too well, it is possible to defer such costs in the short-run, but failure to adequately invest in capital needs will cost more in the future and could even create issues of budgetary solvency if the needs go unmet for too long.

Lastly, financial condition must also be viewed from the perspective of the services that residents desire. "Service-level solvency" refers to the level and quality of the services that residents expect in order to maintain the health, safety and welfare of the community. A Town lacking service-level solvency might in all other respects be in sound financial condition, but be unable to support critical services at an adequate level. In a financial crisis situation, trying to maintain service-level solvency might result in a municipality experiencing cash, budgetary, or long-run solvency problems. That is why it is important to view the issue of financial condition from all four perspectives. During a prolonged period of chronic fiscal constraint, the goal is to prevent fiscal distress, which is a temporary imbalance, from becoming fiscal crisis where obligations can no longer be met.

Fiscal Distress vs. Fiscal Crisis

- *__Fiscal Distress__: imbalance between the level of financial resources the Town has committed and its potential available resources*
- *__Fiscal Crisis__: occurs when the local government can no longer pay its bills or provide existing levels of service*

Although unforeseen events can sometimes create a fiscal crisis, the signs of fiscal distress are often revealed in several recurring indicators. These include structural, economic, demographic and institutional factors. The indicators might manifest in an erosion of the economic base, a significant change in population size, or an interruption in the tax base. A loss of financial independence (through a greater reliance on intergovernmental revenues), a decline in productivity, or a large amount of immediate local government costs can also be indicative of the development of financial imbalances. For the Town of Northborough, which is in relatively good financial condition despite several years of fiscal constraints, the FTMS will help provide a systematic way to monitor changes and anticipate future problems.

What is a Financial Trend Monitoring System?

The Financial Trend Monitoring System (FTMS), as adapted from the system developed by the International City/County Management Association (ICMA), "identifies the factors that affect financial condition and arranges them in a rational order so that they can be more easily analyzed and measured." It is a management tool that pulls together the pertinent information from the Town's budgetary and financial reports, mixes it with the appropriate economic and demographic data, and creates a series of Town-specific financial indicators that, when plotted over a period of time, can be used to monitor changes in financial condition. The financial indicators include such things as revenue and expenditure trends, financial reserves, changes in the tax base, one-time revenue dependencies, debt, and external revenue dependencies.

What are Financial Indicators?

Financial indicators are the primary tools of the Financial Trend Monitoring System. They represent a way to quantify changes in the factors with which they are associated. Many aspects of financial condition cannot be measured explicitly; however, by quantifying indicators and plotting them over a period of time, decision-makers can begin to monitor and evaluate the Town's financial performance. The use of these indicators will not provide answers as to why a problem is occurring or what the appropriate solution is, but it may provide the opportunity to make an informed management response.

<u>Expenditure Indicators</u>

Expenditures are a rough measure of a local government's service output. Generally, the more a local government spends in constant dollars, the more services it is providing, although this axiom does not take into account how effective the services are or how efficiently they are delivered. To determine whether a government is living within its revenues, the first issue to consider is expenditure growth rate.

Because local governments are required to have a balanced budget, it would seem unlikely that expenditure growth would exceed revenue growth. Nevertheless, the annual budget can be balanced in a number of subtle ways that will create a long-run imbalance in which expenditure outlays and commitments grow faster than revenues. Some of the more common ways are to use non-recurring revenues (one-time monies), to borrow (pay for operating capital through a long-term capital improvement plan), or make use of reserve funds (Stabilization or Free Cash) to fund operational expenses. Other ways are to defer maintenance on capital items or to defer funding of a future liability, such as a pension obligation or other retiree benefits. In each case, the annual budget remains balanced, but the long-run budget develops a deficit. Although long-run deficits might, conceivably, be made up through windfalls such as additional State Aid, grants, or other revenue surges, allowing such deficits to develop is risky.

A second issue to consider is expenditure flexibility. Expenditure flexibility is a measure of a local government's freedom to adjust its service levels to changing conditions, and considers the level of mandatory or fixed costs. Ideally, a government's expenditure growth rate will not exceed its revenue growth rate, and the government will have maximum flexibility to adjust spending. An increase in mandatory costs, such as debt service, employee benefits, and property and other insurances, renders a government less able to adjust to change.

Objectives of the FTMS

- *<u>Predict</u>: so that the Town can be prepared to deal with fiscal distress before it becomes fiscal crisis,*
- *<u>Avert</u>: and take action to avoid fiscal crisis,*
- *<u>Mitigate</u>: through corrective action and/or policy changes regain sound financial footing, or at least contain the problem, and*
- *<u>Prevent</u>: a recurrence of fiscal distress after the Town addresses the current issue or crisis (i.e., reliance on one-time revenues or health insurance increases).*

Revenue Indicators

Revenues determine the capacity of a local government to provide service. Important issues to consider in revenue analysis are growth, flexibility, dependability, diversity, administration, and elasticity. Under ideal conditions, revenues would grow at a rate equal to or greater than the combined effects of inflation and expenditures. They would be sufficiently flexible (free from spending restrictions) to allow adjustments to changing conditions. They would be balanced between elastic and inelastic in relation to inflation and the economic base; that is, some would grow with inflation and the economic base and others would remain relatively constant. Revenue sources would be diversified-not overly dependent on residential, commercial, or industrial land uses, or on external funding sources, such as discretionary State Aid. User fees would be regularly evaluated to cover cost increases.

Analyzing revenue structure will help to identify the following types of problems:

- Deterioration of the revenue base
- Practices or policies that may adversely affect revenue yields
- Poor revenue-estimating practices
- Inefficiency in the collection and administration of revenues
- Overdependence on obsolete or intergovernmental revenue sources
- User fees that are not covering the cost of services

This analysis may be used to provide the framework for the development of new, and update of existing fiscal policies to guide budget development.

Which Fiscal Indicators are included in the report?

Although the comprehensive ICMA model contains dozens of potential indicators for measuring municipal financial condition, a relevant sample has been selected as part of Northborough's Financial Trend Monitoring Report (FTMR). Others were omitted because either they are not applicable to Northborough's situation or because we do not have the data to be able to consistently develop these indicators at this time. In FY2015 we added a new indicator, Capital Investment, to the report, and hope to further expand the indicators included in the report in the future. The fourteen indicators that have been selected for use in monitoring the Town of Northborough's financial condition are displayed graphically on the following pages and were chosen based upon the availability of data and their appropriateness for Northborough.

The selected indicators include:

1. Property Tax Revenues
2. Uncollected Property Taxes
3. Revenues & Expenditures per Capita
4. State Aid (Intergovernmental Revenues)
5. Economic Growth Revenues
6. Use of One-Time Revenues
7. Personnel Costs
8. Employee Benefits
9. Pension Liability
10. Other Post-Employment Benefits (OPEB) Liability
11. Debt Service Expenditures
12. Financial Reserves/Fund Balance
13. Capital Investment – Overall Fixed Assets
14. Capital Investment – Pavement Management

The FTMR is intended to assist the Town's Administration, Board of Selectmen, Appropriations Committee and the Financial Planning Committee in setting long-range policy priorities, and can provide a logical way of introducing long-range considerations into the annual budget process. The following report has been developed using the ICMA manual entitled Evaluating Financial Condition, A Handbook for Local Government.

What Methodology was used to compile the data in the report?

The Financial Trend Monitoring System (FTMS) analysis covers the period of July 1, 2006 through June 30, 2017. Actual data has been presented for the Town's General Fund for the Fiscal Years 2007 through 2017. The actual data is taken from the Audited Financial Statements; Budget Comparison Schedules and Department of Revenue (DOR) Tax Rate Recapitulation reports as well as from various other DOR reports. Adjustments and exceptions are noted in the report.

Constant dollars are nominal dollars adjusted for inflation using data from the U.S. Department of Labor, Bureau of Labor Statistics for the Boston-Brockton-Nashua statistical area. Six months of calendar year 2016 was used for FY2017. CPI-U data is the Consumer Price Index for all urban consumers in the New England region. For the purpose of this analysis, FY2007 is the base year beginning at 100.

Population data used in the per capita computations is taken from the Town Clerk's Annual Town Census.

Section II
Executive Summary

FTMR Executive Summary

- **Current Financial Condition**
  Northborough is in relatively good financial condition. The Town's financial reserves are strong and the use of the $4.2 million Stabilization Fund has been unnecessary. In fact, the Town contributed $200,000 to the Stabilization Fund during FY2017. Debt is manageable and our bond rating was upgraded to Aa1 in May of 2015. The Town continues to have favorable economic growth, a strong diversified tax base and reliance on one-time revenues in the operating budget has been significantly curtailed. Further, the impact of rising health insurance costs has been mitigated by negotiation of plan design changes with our local bargaining units.
- **Identify Emerging Problems**
  Based on the analysis, it is apparent that long-run solvency surrounding unfunded pension liability, OPEB obligations and capital investment in Pavement Management are potential emerging problems. Uncertainty surrounding State Aid levels and future health insurance premium increases remain significant areas of exposure for the annual operating budget. From a service-level solvency standpoint, the Town implemented the recommendations from the completed Public Safety staffing studies and incrementally increased staffing in both police and fire services. Obviously, any increases in full-time staffing will have a multiplier effect on the budget for health insurance, pension and OPEB costs, which is why any staffing expansions must continue to be incremental and measured.
- **Financial Strengths and Weaknesses**
  The adoption of the Free Cash Policy in 2010 strengthened the Town's financial condition with less reliance on one-time revenues in the operating budget. In addition, the use of Free Cash for significant capital investment has insured that one-time funds are only utilized for one-time expenditures. The growth in revenue from property taxes, which has kept pace with inflation, as well as excellent tax collections are financial strengths for the Town. While expenditures per capita have risen indicating an increase in service needs, the Town's revenues per capita have increased proportionally.
- **Long-Range Budget Considerations**
  The Town of Northborough experienced significant economic growth in recent years and a corresponding increase in staffing; especially public safety. The need to monitor this growth and maintain service-level solvency in the future will be an ongoing process.
- **Policy Updates**
  Moving forward it will be important for the Town to continue to fund the OPEB liability. The OPEB Trust Fund was established at the April 2011 Town Meeting for this purpose, and during FY2015 the first annual transfer was made to the Trust ($500,000). Now two more appropriations of $500,000 in FY2016 & FY2017 have also been made to the Trust. Identification of additional revenue sources like the Meals Tax or Room Occupancy surcharge (adopted in FY2014), should also be explored to alleviate the tax burden on residents. Economic development policies and programs should be reviewed in order to stimulate ongoing development of the tax base.

Financial Indicator Summary — FY2017

		FY2017
1	Property Tax Revenues	Favorable
2	Uncollected Property Taxes	Favorable
3	Revenues & Expenditures per Capita	Favorable
4	State Aid (Intergovernmental Revenues)	Unfavorable/Uncertain
5	Economic Growth Revenues	Uncertain
6	Use of One-Time Revenues	Favorable
7	Personnel Costs	Marginal/Stable
8	Employee Benefits	Favorable/Uncertain
9	Pension Liability	Unfavorable
10	Other Post Employment (OPEB) Liability	Unfavorable/Improving
11	Debt Service Expenditures	Favorable
12	Financial Reserve/Fund Balance	Favorable
13	Capital Investment – Overall Fixed Assets	Favorable
14	Capital Investment – Pavement Management	Unfavorable/Improving

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Section III
Fiscal Indicator Analysis

Indicator 1: Property Tax Revenues

Formula:
<u>Net Property Tax Revenues</u>
Consumer Price Index

Northborough Trend

X	Favorable
	Marginal
	Unfavorable
	Uncertain

Warning Trend: A decline in property tax revenues (measured in constant dollars).

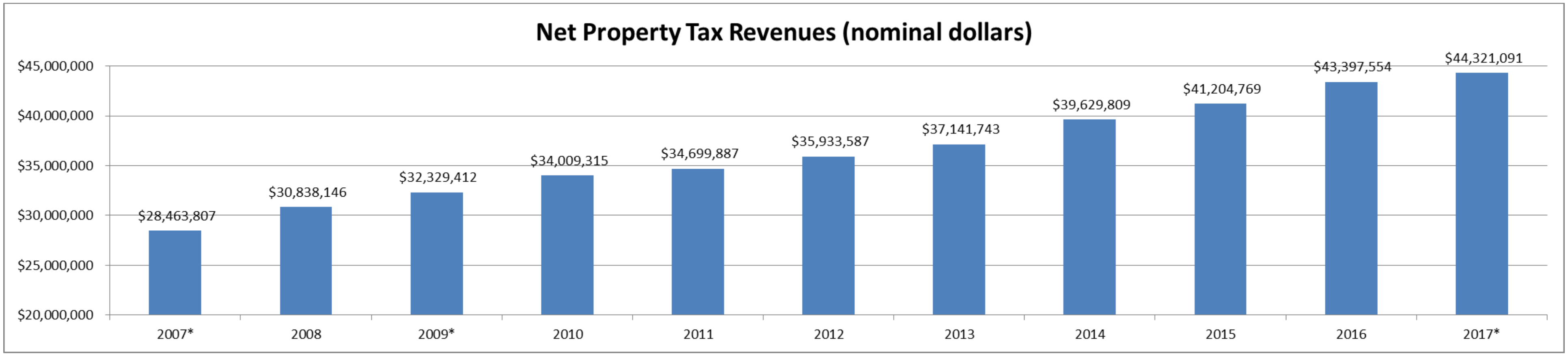
<u>Description:</u>

Property taxes are the primary source of revenue for municipal government and accounts for approximately 80% of Northborough's revenue. A decline in or diminished growth rate of property taxes can have a number of causes. It may reflect an overall decline in property values, a decline in economic health, default on property taxes by property owners, or the movement of retail or industrial operations to other communities. Increases to property taxes are limited by the confines of Proposition 2 ½ and any potential revenue increases from an override would need to be weighed carefully with the additional tax impact upon residents.

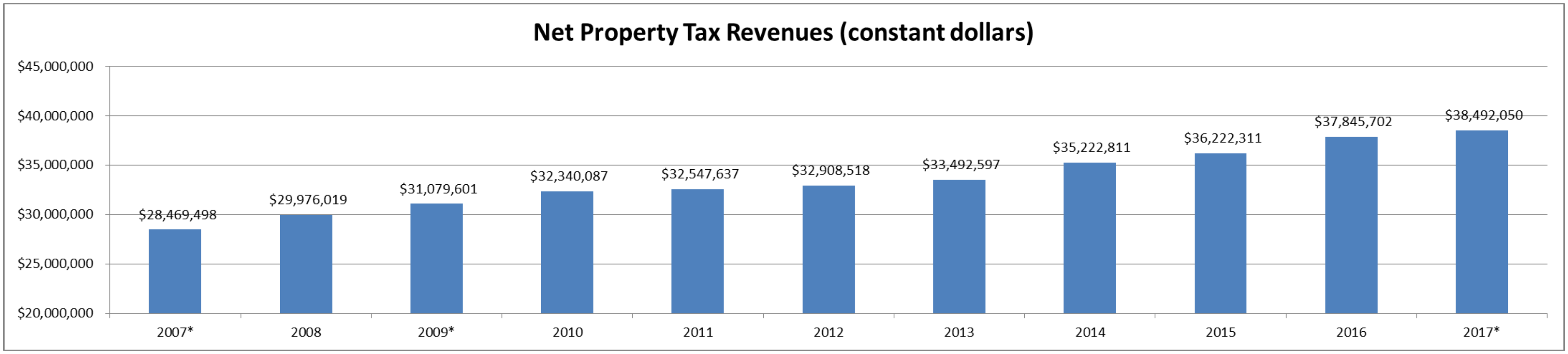
<u>Analysis:</u> The analysis shows that property tax revenue adjusted to constant dollars is positive and therefore has kept pace with inflation. Further, the Town's revenue growth has occurred with minimal operating Proposition 2 ½ overrides. Overrides were approved to provide additional funding for public schools in the amounts of $362,734 in FY2007 and $316,047 in FY2009. The other years that had property tax revenue increases over the Proposition 2 ½ limit used excess levy capacity from the preceding year to increase the tax levy. This excess levy capacity was generated from conservative budget estimates of new growth.

Fiscal Year		2007*	2008	2009*	2010	2011	2012	2013	2014	2015	2016	2017*
Property Tax Collections **		$ 30,400,203	$ 32,721,073	$ 34,270,290	$ 35,765,428	$ 36,555,771	$ 38,335,354	$ 39,581,324	$ 41,265,841	$ 42,786,189	$ 45,305,861	$ 46,657,080
Less Debt Exclusions ***		$ (1,936,396)	$ (1,882,927)	$ (1,940,878)	$ (1,756,113)	$ (1,855,884)	$ (2,401,767)	$ (2,439,581)	$ (1,636,032)	$ (1,581,420)	$ (1,908,307)	$ (2,335,989)
Net Property Tax Revenues (nominal dollars)		$ 28,463,807	$ 30,838,146	$ 32,329,412	$ 34,009,315	$ 34,699,887	$ 35,933,587	$ 37,141,743	$ 39,629,809	$ 41,204,769	$ 43,397,554	$ 44,321,091
Percent increase Tax Revenues over prior year		4.4%	8.3%	4.8%	5.2%	2.0%	3.6%	3.4%	6.7%	4.0%	5.3%	2.1%
CPI-U, 2007 Base Year ****		225.1	231.6	234.2	236.7	240.0	245.8	249.6	253.3	256.1	258.1	259.2
CPI-U adjustment for constant dollars		100.0%	97.2%	96.1%	95.1%	93.8%	91.6%	90.2%	88.9%	87.9%	87.2%	86.8%
Net Property Tax Revenues (constant dollars)		$ 28,469,498	$ 29,976,019	$ 31,079,601	$ 32,340,087	$ 32,547,637	$ 32,908,518	$ 33,492,597	$ 35,222,811	$ 36,222,311	$ 37,845,702	$ 38,492,050
Percent increase Tax Revenues over prior year		4.4%	5.3%	3.7%	4.1%	0.6%	1.1%	1.8%	5.2%	2.8%	4.5%	1.7%

Notes:
*Proposition 2 1/2 Overrides were approved in FY2007 ($362,734) & FY2009 ($316,047); FY2017 shows budget numbers rather than actual, Source: Mass. DOR Tax Recap
** Source: Audited Financial Statements, General Fund, Budget Comparison Schedule
*** Source: Mass. DOR, Tax Recaps
**** Source: U.S. Dept. of Labor - Bureau of Labor Statistics (Boston-Brockton-Nashua region), 6 months of calendar year 2016 used for FY2017



Note: The chart above shows net property tax revenues that have not been adjusted for inflation



Note: The chart above shows net property tax revenues adjusted for inflation using FY2007 as the base year

Indicator 2: Uncollected Property Taxes

Formula:
Uncollected Property Taxes (as of June 30)
Net Property Tax Levy

Northborough Trend

X	Favorable
	Marginal
	Unfavorable
	Uncertain

Warning Trend: Increasing amount of uncollected property taxes as a percentage of net property tax levy.

Description:

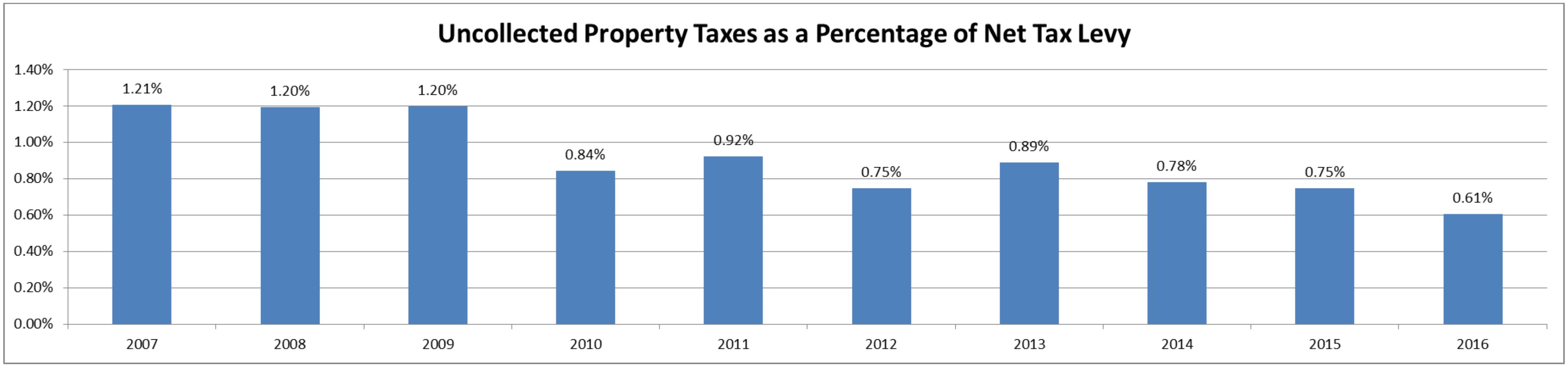
Uncollected property taxes as a percentage of the net tax levy of 5% or more is considered negative by bond rating organizations. An increase in uncollected property taxes could signal an overall decline or potential instability in the tax base of the town. As uncollected property taxes rise, liquidity is decreased and there is less cash on hand to pay bills or to invest. This early warning indicator is particularly critical to watch during periods of economic decline or uncertainty.

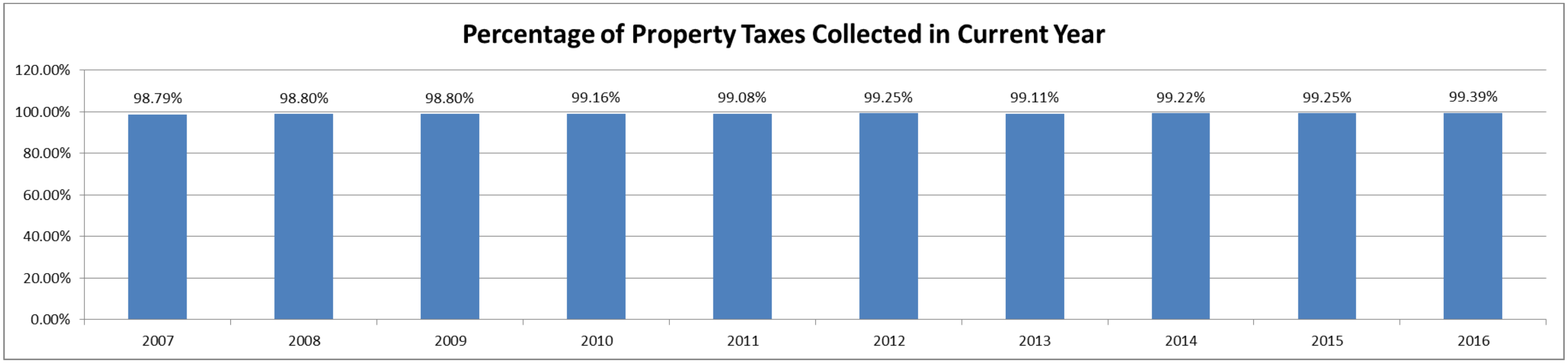
Analysis:

Property taxes provide approximately 80% of Northborough's operating revenue, representing the single most important source of revenue. The analysis below indicates that Northborough's property tax collection rate is excellent. The Town consistently collects 99% of property taxes in each fiscal year. The Town's stable trend is positive and even shows a slight increase in an already outstanding collection rate.

Fiscal Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Property Tax Levy *	$ 30,739,726	$ 32,600,217	$ 34,239,613	$ 35,640,190	$ 36,695,635	$ 38,402,738	$ 40,143,508	$ 41,333,959	$ 42,977,124	$ 45,068,900
Less Reserve for Abatements & Exemptions *	$ (262,428)	$ (249,386)	$ (215,351)	$ (284,717)	$ (342,209)	$ (351,739)	$ (679,291)	$ (530,787)	$ (462,432)	$ (623,081)
Net Property Tax Levy	$ 30,477,298	$ 32,350,830	$ 34,024,262	$ 35,355,473	$ 36,353,426	$ 38,050,999	$ 39,464,217	$ 40,803,172	$ 42,514,692	$ 44,445,819
Uncollected Taxes as of June 30 **	$ 367,275	$ 386,596	$ 408,354	$ 298,580	$ 336,037	$ 284,981	$ 351,243	$ 318,536	$ 317,223	$ 269,696
Uncollected taxes as a Percentage of Net Property Tax Levy	1.21%	1.20%	1.20%	0.84%	0.92%	0.75%	0.89%	0.78%	0.75%	0.61%
Percentage Collected in Current Year ***	98.79%	98.80%	98.80%	99.16%	99.08%	99.25%	99.11%	99.22%	99.25%	99.39%

Notes:
* Source: Mass. DOR, Tax Recaps
** Source: Mass. DOR Outstanding Receivables Report
*** Percent of Net Levy collected, abated, and/or taken during current year





Note: Property tax collections are shown net of reserves for abatements and exemptions, which the Town assumes will not be collected.

Indicator 3: Revenues and Expenditures per Capita

Formula:
Net Operating Revenues or Expenditures (constant dollars)
Population

Northborough Trend

X	Favorable
	Marginal/Improving
	Unfavorable
	Uncertain

Warning Trend: Decreasing revenues per capita and increasing operating expenditures per capita (measured in constant dollars) is considered a warning trend, especially if spending is increasing faster than revenues or if one-time revenues are consistently needed to achieve budgetary balance.

Description:
Revenues and expenditures per capita show changes relative to population. For enhanced analysis, revenues and expenditures per capita charted together provide a method to measure both sides of the municipal budget. As population increases, it might be expected that revenues and the need for services would increase proportionately and therefore the level of per capita revenues would remain constant. If per capita revenues are decreasing, the municipality may not be able to maintain existing service levels unless cost savings or new revenue sources are identified. Changes in per capita expenditures that reflect an increase may indicate that the cost of providing municipal services is outpacing the community's ability to pay for those services, especially if spending is greater than can be counted for by inflation or the addition of new services.

Analysis:
From FY2007 through FY2008, expenditures per capita exceeded revenues per capita due to the use of one-time funds in the operating budget, primarily from Free Cash. With a significant reduction in the Free Cash available for the FY2009 operating budget, the need for a policy revision was apparent. With the subsequent adoption of the Free Cash Policy in November 2010, the use of one-time revenue for the operating budget was phased down and capped at $500,000, with an additional $150,000, increased to $175,000 in FY2016, used for the Appropriations Committee Reserve Fund[1]. Therefore from FY2010 forward, the Town's revenues per capita exceed expenditures per capita. The funds represented by the difference are now closed to surplus (i.e. Free Cash) and are then available to fund capital items and other one-time expenditures in accordance with the Free Cash Policy.

[1] The Reserve Fund is an amount set aside annually within the budget of the town to provide a funding source for extraordinary or unforeseen expenditures. The Appropriations Committee can authorize transfers from this fund. If unused, these funds return to Free Cash at the close of the Fiscal Year. Beginning in FY2016 the Reserve Fund was increased to $175,000.

Fiscal Year	2007*	2008	2009*	2010	2011	2012	2013	2014	2015	2016
Expenditures (Net of Capital Transfers)**	$ 40,358,092	$ 42,106,943	$ 43,394,613	$ 44,296,562	$ 44,332,468	$ 45,832,802	$ 47,661,629	$ 48,704,150	$ 51,777,346	$ 53,590,732
Revenues **	$ 39,476,229	$ 42,390,894	$ 43,343,178	$ 45,230,381	$ 45,181,626	$ 47,132,299	$ 48,704,343	$ 51,912,939	$ 52,817,953	$ 55,768,963
One Time Revenues Budgeted **	$ 1,100,000	$ 1,040,000	$ 473,250	$ 800,000	$ 661,703	$ 791,479	$ 650,000	$ 650,000	$ 870,000	$ 675,000
CPI-U, 2007 Base Year ***	225.1	231.6	234.2	236.7	240.0	245.8	249.6	253.3	256.1	258.1
CPI-U adjustment for constant dollars	100.0%	97.2%	96.1%	95.1%	93.8%	91.6%	90.2%	88.9%	87.9%	87.2%
Expenditures (constant dollars)	$ 40,366,162	$ 40,929,780	$ 41,717,036	$ 42,122,420	$ 41,582,760	$ 41,974,367	$ 42,978,913	$ 43,288,048	$ 45,516,457	$ 46,734,866
Revenues (constant dollars)	$ 39,484,122	$ 41,205,793	$ 41,667,589	$ 43,010,406	$ 42,379,249	$ 43,164,466	$ 43,919,181	$ 46,140,006	$ 46,431,235	$ 48,634,436
Population ****	14,685	14,550	14,575	14,498	14,632	14,798	14,643	14,754	14,550	14,553
Expenditures per capita (nominal dollars)	$ 2,748	$ 2,894	$ 2,977	$ 3,055	$ 3,030	$ 3,097	$ 3,255	$ 3,301	$ 3,559	$ 3,682
Revenues per capita (nominal dollars)	$ 2,688	$ 2,913	$ 2,974	$ 3,120	$ 3,088	$ 3,185	$ 3,326	$ 3,519	$ 3,630	$ 3,832
Expenditures per capita (constant dollars)	$ 2,749	$ 2,813	$ 2,862	$ 2,905	$ 2,842	$ 2,836	$ 2,935	$ 2,934	$ 3,128	$ 3,211
Revenues per capita (constant dollars)	$ 2,689	$ 2,832	$ 2,859	$ 2,967	$ 2,896	$ 2,917	$ 2,999	$ 3,127	$ 3,191	$ 3,342

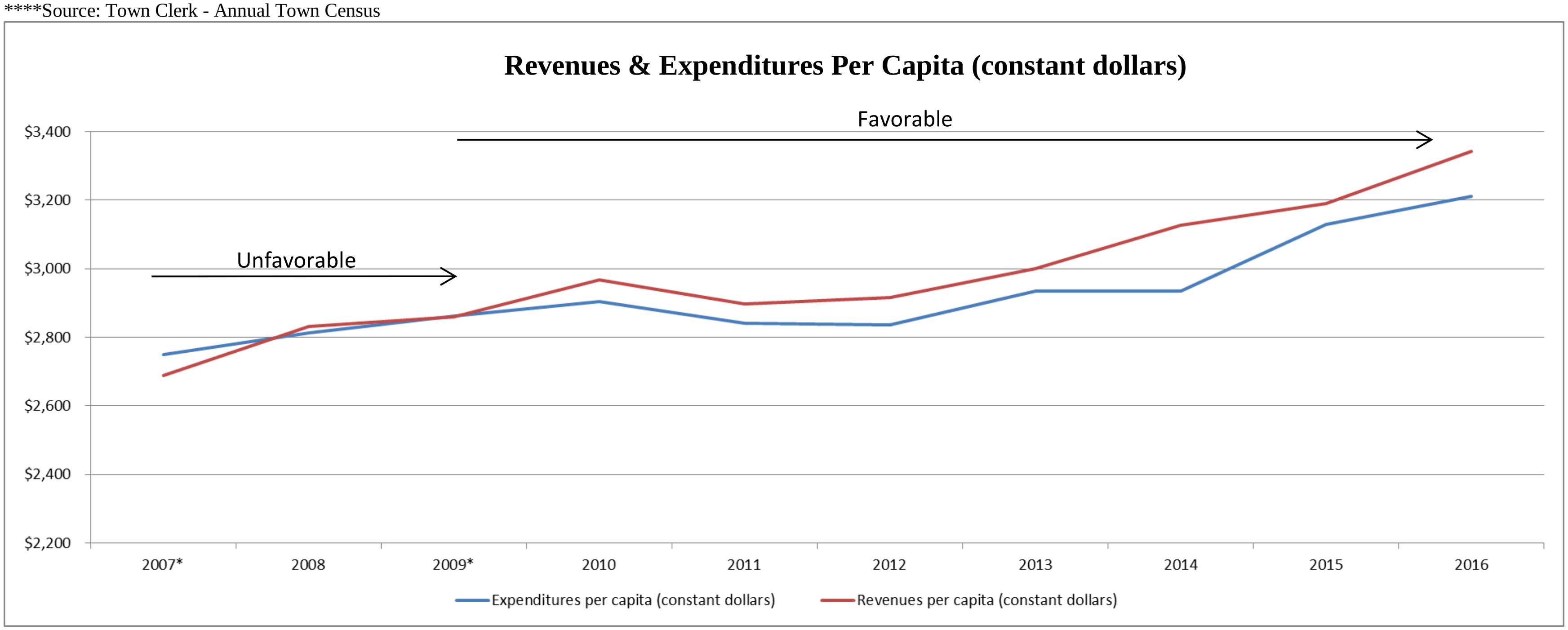
Notes:

*Proposition 2 1/2 Overrides were approved in FY2007 ($362,734) & FY2009 ($316,047)

** Source: Audited Financial Statements, General Fund, Budget Comparison Schedule, including operating transfers but adjustments were made to exclude transfers to capital project funds: $804,000 in FY2012, $615,000 in FY2013, $2,202,807 in FY2014, $2,194,000 in FY2015, and $1,813,460 in FY2016 following Town's Free Cash Policy. The amounts do include transfers for the Solid Waste Enterprise Fund subsidy: $301,447 in FY2011, $247,570 in FY2012 & FY2013, $239,099 in FY2014, and $217,160 in FY2015 & FY2016. The amounts also include transfers to Stabilization: $100,000/year in FY2007 & FY2008 and $200,000 in FY2015 & FY2016. FY2015 & FY2016 also include $20,000 transferred to the 250th Anniversary Celebration Fund. The FY2015 & FY2016 transfers to Stabilization and Anniversary Fund came from Free Cash (One Time Revenues). FY2016 was also adjusted to negate effect of $375,760 Mass Land Grant transferred to Conservation Fund.

*** Source: U.S. Dept. of Labor - Bureau of Labor Statistics (Boston-Brockton-Nashua region)

****Source: Town Clerk - Annual Town Census



Indicator 4: State Aid (Intergovernmental Revenues)

Formula:
Net State Aid Revenues
Operating Revenues

Northborough Trend

	Favorable
	Marginal
X	Unfavorable
X	Uncertain

Warning Trend: Volatility of State Aid (Intergovernmental Revenues) as a percentage of operating revenues.

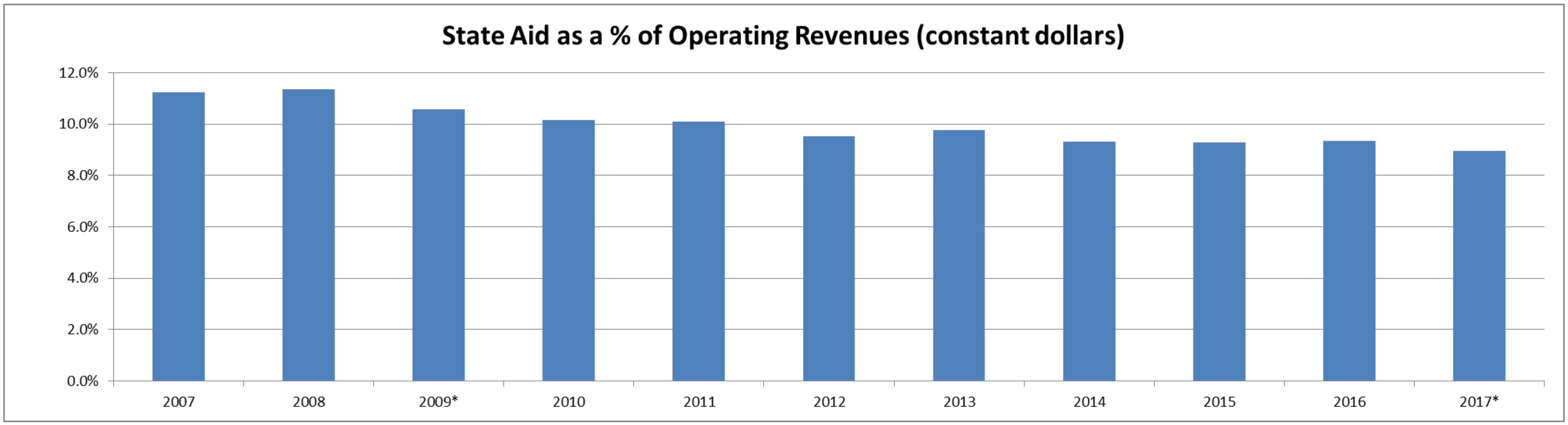
Description:
A reduction in State Aid as a percentage of operating revenues is generally perceived as a warning trend. However, intergovernmental revenues as a percentage of the operating budget are also important because an overdependence upon such revenues can be harmful. State governments struggle with their own budget problems and when the economy is not robust, frequently they have reduced aid to local governments. The reduction of intergovernmental funds leaves the municipal government with the dilemma of cutting programs or funding them from general fund revenues. Any decline in intergovernmental funding is difficult for a municipality to absorb.

Analysis:
The level of State Aid and other intergovernmental revenues provided to municipalities is a continuing concern in Massachusetts[2]. State mandates are imposed on already strained municipal budgets with no corresponding funding. State Aid to Northborough generally represents approximately 10% of total municipal revenue. Northborough's State Aid has yet to be restored to the peak levels reached in FY2003, when controlling for inflation (constant dollars) it represented 13.1% of revenues. As a percentage of revenue it has steadily declined from 11.4% in FY2008 to 9.0% in FY2017. Due to the uncertainty in the level of State Aid provided from year to year, this represents an unfavorable trend with an uncertain outlook for the Town of Northborough. The potential for the Commonwealth to cut State Aid requires the Town to carefully monitor these revenues, and to have contingency plans if State Aid were reduced.

[2] This indicator may not reflect changes in Federal/State grant programs that are reported outside of the General Fund.

Fiscal Year*	2007	2008	2009*	2010	2011	2012	2013	2014	2015	2016	2017*
Operating Revenues**	$ 39,476,229	$ 42,390,894	$ 43,343,178	$ 45,230,381	$ 45,181,626	$ 47,132,299	$ 48,704,343	$ 51,912,939	$ 52,817,953	$ 55,768,963	$ 57,069,081
State Aid Revenues***	$ 5,090,155	$ 5,464,855	$ 5,201,804	$ 5,213,984	$ 4,945,569	$ 4,873,203	$ 5,134,652	$ 5,211,800	$ 5,283,338	$ 5,594,248	$ 5,496,628
Less School Building Reimbursement	$ (650,933)	$ (650,933)	$ (615,942)	$ (615,941)	$ (382,543)	$ (382,543)	$ (382,543)	$ (382,543)	$ (382,543)	$ (382,543)	$ (382,543)
Net State Aid Revenues	$ 4,439,222	$ 4,813,922	$ 4,585,862	$ 4,598,043	$ 4,563,026	$ 4,490,660	$ 4,752,109	$ 4,829,257	$ 4,900,795	$ 5,211,705	$ 5,114,085
CPI-U, 2007 Base Year ****	225.1	231.6	234.2	236.7	240.0	245.8	249.6	253.3	256.1	258.1	259.2
CPI-U adjustment for constant dollars	100.0%	97.2%	96.1%	95.1%	93.8%	91.6%	90.2%	88.9%	87.9%	87.2%	86.8%
Operating Revenues (constant dollars)	$ 39,484,122	$ 41,205,793	$ 41,667,589	$ 43,010,406	$ 42,379,249	$ 43,164,466	$ 43,919,181	$ 46,140,006	$ 46,431,235	$ 48,634,436	$ 49,563,445
Net State Aid Revenue (constant dollars)	$ 4,440,109	$ 4,679,342	$ 4,408,579	$ 4,372,364	$ 4,280,005	$ 4,112,614	$ 4,285,218	$ 4,292,224	$ 4,308,194	$ 4,544,971	$ 4,441,489
State Aid as a % of Operating Revenues (constant dollars)	11.2%	11.4%	10.6%	10.2%	10.1%	9.5%	9.8%	9.3%	9.3%	9.3%	9.0%

Notes:
* FY2009 reflects a $352,035 cut in CH70 Education Aid which was replaced by a Federal ARRA grant (outside of general fund); FY2017 reflects budgeted revenues per Mass. DOR Tax Recap
** Source: Audited Financial Statements, General Fund, Budget Comparison Schedule
*** Source: Budget Comparison Schedule (adjustment to exclude FEMA/MEMA and School Medicaid)
**** Source: U.S. Dept of Labor - Bureau of Labor Statistics (Boston-Brockton-Nashua region), 6 months of calendar year 2016 used for FY2017



*Note: FY2017 reflects budgeted revenues per the Mass. DOR Tax Recap

Indicator 5: Economic Growth Revenues

Formula:
Economic Growth Revenues
Net Operating Revenues

Northborough Trend

	Favorable
	Marginal
	Unfavorable
X	Uncertain

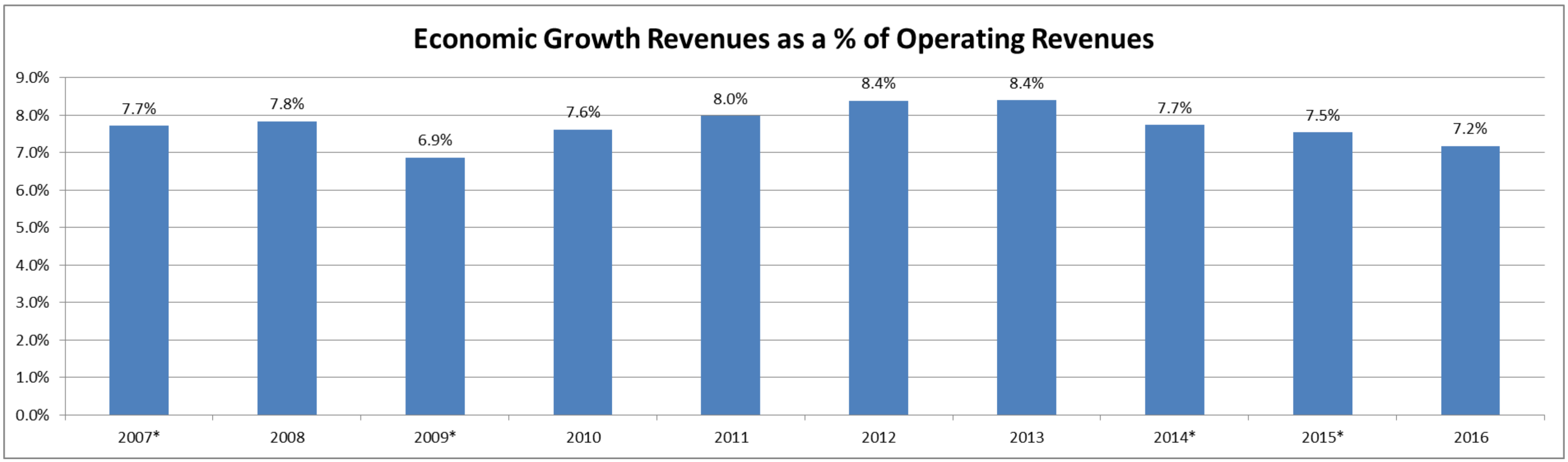
Warning Trend: Decreasing amount of economic growth operating revenues as a percentage of net operating revenues

Description:
Revenues related to economic growth (elastic revenue sources) include tax levy growth from new development, motor vehicle excise taxes, as well as building permits and construction related permit fees. These revenues are sensitive to changes in the level of economic activity. A decrease in new economic development and building permit fees may be a leading indicator of smaller future increases in the tax levy.

Analysis:
Northborough's revenues from economic growth increased from FY2009 through FY2013 despite a weak State and national economy. An important component was the construction of a 382 unit apartment complex known as Avalon Bay beginning in FY2010 and the completion of the 640,000 square foot Northborough Crossing Shopping Center in FY2013. Although recent years have seen a positive trend in Northborough's economic revenues, future growth is uncertain as these major projects are now completed and there are fewer significant developments currently in the permitting stage. Looking forward, the Town's future revenue from economic growth remains uncertain. However, all the variables that have contributed to the Town's past economic development success, available land, preferential business tax structure, streamlined development process and prime location all remain and it is simply a matter of when the next significant development will occur.

Fiscal Year	2007*	2008	2009*	2010	2011	2012	2013	2014*	2015*	2016
Revenues **	$ 39,476,229	$ 42,390,894	$ 43,343,178	$ 45,230,381	$ 45,181,626	$ 47,132,299	$ 48,704,343	$ 51,912,939	$ 52,817,953	$ 55,768,963
Less Debt Exclusions ***	$ (1,936,396)	$ (1,882,927)	$ (1,940,878)	$ (1,756,113)	$ (1,855,884)	$ (2,401,767)	$ (2,439,581)	$ (1,636,032)	$ (1,581,420)	$ (1,908,307)
Net Revenues (nominal dollars)	$ 37,539,833	$ 40,507,967	$ 41,402,300	$ 43,474,268	$ 43,325,742	$ 44,730,532	$ 46,264,762	$ 50,276,907	$ 51,236,533	$ 53,860,656
Building Related Fees & Permits ****	$ 260,864	$ 411,490	$ 215,027	$ 749,803	$ 405,896	$ 388,874	$ 297,249	$ 349,709	$ 354,927	$ 423,959
Motor Vehicle Excise ***	$ 1,858,223	$ 2,011,037	$ 1,887,442	$ 1,799,335	$ 2,019,845	$ 2,040,212	$ 2,080,090	$ 2,401,053	$ 2,454,484	$ 2,469,504
Other Excise ****	$ 64,208	$ 78,852	$ 65,676	$ 42,643	$ 57,196	$ 92,342	$ 69,372	$ 314,356	$ 421,973	$ 441,201
Levy Growth (New Growth) ***	$ 711,720	$ 673,617	$ 676,247	$ 720,133	$ 975,576	$ 1,229,983	$ 1,439,307	$ 826,728	$ 629,818	$ 529,520
Total Economic Growth Revenues	$ 2,895,015	$ 3,174,995	$ 2,844,392	$ 3,311,913	$ 3,458,513	$ 3,751,411	$ 3,886,019	$ 3,891,846	$ 3,861,201	$ 3,864,185
Economic Growth Revenues as a % of Operating Revenues	7.7%	7.8%	6.9%	7.6%	8.0%	8.4%	8.4%	7.7%	7.5%	7.2%

Notes:
*Proposition 2 1/2 Overrides were approved in FY2007 ($362,734), & FY2009 ($316,047); Meals Tax Surcharge (.75%) added & Hotel/Motel excise increased (from 4-6%) in FY2014 (10 Months), full year of these new excise taxes are recognized starting in FY2015
** Source: Audited Financial Statements, General Fund, Budget Comparison Schedule
*** Source: Mass. DOR Tax Recaps
**** Source: General Ledger Detail, Revenue from Building, Wiring, Planning Board, ZBA Fees & Permits; Other Excise includes Hotel/Motel and Meals Tax



*Note: FY2014 reflects 10 months of an adopted excise tax increase on hotel rooms (from 4% to 6%), and adoption of a restaurant meals tax (.75%). FY2015 reflects a full 12 months of these enhanced revenues.

Indicator 6: Use of One-Time Revenues

Formula:
One-Time Operating Revenues
Operating Budget

Northborough Trend

X	Favorable
	Marginal
	Unfavorable
	Uncertain

Warning Trend: Increasing use of one-time operating revenues as a percentage of operating budget.

Description:
One-time revenues are sources that cannot reasonably be expected to recur, such as a single-purpose federal grant, an inter-fund transfer, or use of reserves. Municipalities will sometimes use reserves and one-time revenues to balance an operating budget. However the continued use of one-time revenues to support operations is not sustainable. Continual use of one-time revenues to balance the annual budget can indicate that the revenue base is not strong enough to support current service levels. It can also mean that the municipality is incurring operating deficits and would have little room to maneuver if there were a downturn in revenue. Use of one-time revenues also increases the probability that a municipality will have to make significant cutbacks if such revenues cease to be available as may happen when reserves are depleted. Therefore, increased dependence on one–time revenues to support operations can place operations and municipal services at risk.

Analysis:
Northborough's use of one-time revenue to fund the operating budget was significantly curtailed during the past several years. The Free Cash Policy adopted in 2010 limited the use of Free Cash to one-time expenditures with a limited amount to be used toward the operating budget. Any additional Free Cash above this level is used to fund one-time capital expenditures, or for emergency spending. One-time revenue in the operating budget has declined from a high of 4.1%, or $1.5 Million in FY2005, to 1.6%, or $895,000 in FY2016, where it will remain stable in accordance with the Free Cash Policy. In FY2016 and FY2017, Free Cash was used to fund a $200,000 annual transfer to Stabilization and a $20,000/year transfer to a special 250th Anniversary Celebration. Free Cash has been used to fund $7.6 million in pay as you go capital investment from FY2012 through FY2017.

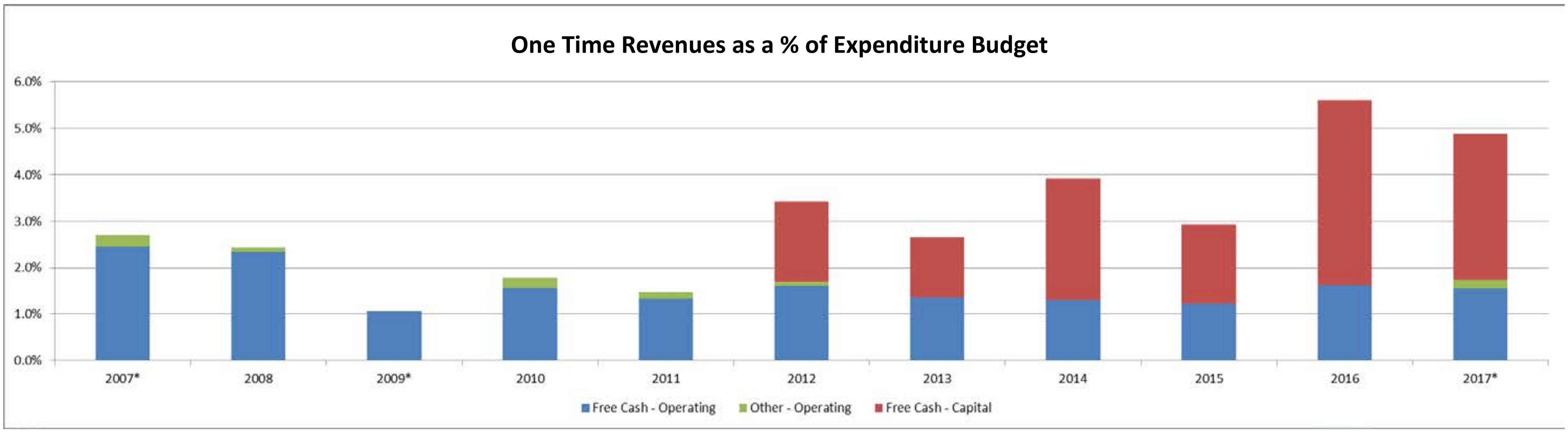
Fiscal Year	2007*	2008	2009*	2010	2011	2012	2013	2014	2015	2016	2017*
Expenditure Budget **	$ 40,820,271	$ 42,760,582	$ 44,350,863	$ 44,912,699	$ 44,910,225	$ 46,665,590	$ 47,769,858	$ 49,997,242	$ 52,697,038	$ 55,128,393	$ 57,855,289
Revenues Budgeted **	$ 39,720,271	$ 41,720,582	$ 43,877,613	$ 44,112,699	$ 44,248,522	$ 45,874,111	$ 47,734,858	$ 49,347,242	$ 51,827,038	$ 54,233,393	$ 57,069,081
One Time Revenues Budgeted **	$ 1,100,000	$ 1,040,000	$ 473,250	$ 800,000	$ 661,703	$ 1,595,479	$ 1,265,000	$ 1,959,307	$ 1,543,500	$ 3,089,000	$ 2,819,668
Free Cash Used for Operating Budget ***	$ 1,000,000	$ 1,000,000	$ 470,000	$ 700,000	$ 600,000	$ 750,000	$ 650,000	$ 650,000	$ 650,000	$ 895,000	$ 895,000
Free Cash Used for Capital	$ -	$ -	$ -	$ -	$ -	$ 804,000	$ 615,000	$ 1,309,307	$ 893,500	$ 2,194,000	$ 1,813,460
Other One Time Revenues Used for Operating Budget ****	$ 100,000	$ 40,000	$ 3,250	$ 100,000	$ 61,703	$ 41,479	$ -	$ -	$ -	$ -	$ 111,208
Percentage Free Cash Used for Operating Budget	2.4%	2.3%	1.1%	1.6%	1.3%	1.6%	1.4%	1.3%	1.2%	1.6%	1.5%
Percentage Free Cash Used for Capital	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	1.3%	2.6%	1.7%	4.0%	3.1%
Percentage Other Reserves used for Operating Budget	0.2%	0.1%	0.0%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.2%
Total Percentage of One Time Revenue used for Operating Budget	2.7%	2.4%	1.1%	1.8%	1.5%	1.7%	1.4%	1.3%	1.2%	1.6%	1.7%
Total Percentage of One time Revenue Used	2.7%	2.4%	1.1%	1.8%	1.5%	3.4%	2.6%	3.9%	2.9%	5.6%	4.9%

Notes: *Proposition 2 1/2 Overrides were approved in FY2007 ($362,734) & FY2009 ($316,047); Fiscal Year 2017 Source: Mass. DOR Tax Recap

**Source: Audited Financial Statements, General Fund, Budget Comparison Schedule, including operating transfers but adjustments were made to exclude transfers to capital project funds (CIP): $804,000 in FY2012, $615,000 in FY2013, $2,202,807 in FY2014 (note: this year reflects $1,309,307 FY2014 CIP & $893,500 FY2015 CIP), $2,194,000 in FY2015 (FY2016 CIP), and $1,813,460 in FY2016 (FY2017 CIP). The amounts include the operating transfer subsidizing the Solid Waste Enterprise Fund: $301,447 in FY2011, $247,570 in FY2012 & FY2013, $239,099 in FY2014, and $217,160 in FY2015-FY2017. The amounts also include transfers to Stabilization: $100,000/year in FY2007 & FY2008 and $200,000 in FY2016&FY2017. In addition, FY2016 & FY2017 also include $20,000 transferred to the 250th Anniversary Celebration Fund. Note that the FY2016 & FY2017 transfers to Stabilization and Anniversary Fund came from Free Cash (One Time Revenues). FY2016 was also adjusted to negate effect of $375,760 Mass Land Grant transferred to Conservation Fund.

*** From FY2007-FY2011, the amount reflects solely direct operating budget support. In FY2012 - FY2017 $500,000 is for direct operating budget. For FY2012 $100,000 supplemental appropriation made from Free Cash for Emergency Expenses Starting FY2012, the Reserve Fund is funded from Free Cash, and FY2012 – FY2015 includes $150,000 while FY2016&FY2017 includes $175,000 for the Reserve; FY2016 & FY2017 also include $20,000 transferred to the 250th Anniversary Celebration Fund in addition to $200,000 transferred to Stabilization.

**** Other One Time Revenues from FY2003-2010 are Overlay Surplus and from FY2011-2012, & 2017 are Debt Exclusion Reserves.



Indicator 7: Personnel Costs

Formula:
Personnel Wages & Benefits
Net Operating Budget

Northborough Trend

	Favorable
X	Marginal/Stable
	Unfavorable
	Uncertain

Warning Trend: Increasing personnel costs as a percentage of operating expenditures.

Description:

Increasing salaries and wages as a percent of operating expenditures may be an indicator of two trends. First, it may point to future increased pension and health insurance costs since both of these items are related to the number and compensation level of employees. Second, if salaries and wages as a percentage of operating expenditures are increasing, it may be an indicator that resources are not available to adequately fund capital and/or infrastructure needs.

Analysis:

Overall, personnel wages and benefits represent approximately 76% of the Town's operating budget and remain relatively stable. Although health insurance previously increased at double-digit rates annually, the Town has been able to mitigate these increases since FY2009 through negotiated plan design changes with the employees. More detail regarding the plan design changes is explained under Indicator #8.

Wages, salaries and employee benefits as a percentage of operating expenditures increased 1.1% from FY2007 to FY2016. The largest increase was in retirement assessments with an increase of .9%, employee benefits accounted for .8% which includes the first two annual contributions toward OPEB of $500,000, whiles wages and salaries have decreased by .6%. In recent years many municipalities have experienced a dramatic increase in health insurance obligations. This expenditure trend, although increasing, represents a stable rate of growth. Looking forward, the rate of growth is contingent upon negotiating future collective bargaining agreements that are sustainable, as well as balancing the addition of any new staff with new, recurring revenue sources.

FY2016 is the last year of the previously negotiated collective bargaining agreements for Police Patrol Officers, Police Sergeants, Dispatchers, Fire and the Northborough Municipal Employees Association. Successful negotiation of successor agreements for fiscal years 2017, 2018 and 2019 will be critical to maintaining future stability of this indicator.

Fiscal Year	2007*	2008	2009*	2010	2011	2012	2013	2014	2015	2016
Expenditures (Net of Capital Transfers)**	$ 40,358,092	$ 42,106,943	$ 43,394,613	$ 44,296,562	$ 44,332,468	$ 45,832,802	$ 47,661,629	$ 48,704,150	$ 51,777,346	$ 53,590,732
Less Education Assessments ****	$ (9,806,323)	$ (9,922,381)	$ (9,886,394)	$ (9,438,465)	$ (9,508,787)	$ (9,602,833)	$ (9,978,962)	$ (10,096,005)	$ (10,500,042)	$ (10,961,605)
Expenditures (Net of Capital Transfers & Education Assessments)	$ 30,551,769	$ 32,184,562	$ 33,508,219	$ 34,858,097	$ 34,823,681	$ 36,229,969	$ 37,682,667	$ 38,608,145	$ 41,277,304	$ 42,629,127
Municipal & K-8 School Department Wages ***	$ 18,336,853	$ 19,021,305	$ 19,919,684	$ 20,101,625	$ 21,007,614	$ 21,670,351	$ 22,885,953	$ 23,714,419	$ 24,902,080	$ 25,322,987
Employee Benefits ****	$ 3,756,553	$ 4,077,623	$ 4,516,875	$ 4,606,672	$ 4,600,048	$ 4,381,576	$ 4,537,088	$ 4,643,198	$ 5,305,019	$ 5,588,201
Retirement Assessment ****	$ 732,717	$ 773,438	$ 892,411	$ 974,865	$ 1,006,365	$ 1,118,191	$ 1,210,083	$ 1,241,407	$ 1,306,702	$ 1,415,244
Total Wage & Benefit Costs	$ 22,826,123	$ 23,872,366	$ 25,328,970	$ 25,683,162	$ 26,614,027	$ 27,170,118	$ 28,633,124	$ 29,599,024	$ 31,513,801	$ 32,326,432
Salaries & Wages as a percentage of Operating Expenditures	60.0%	59.1%	59.4%	57.7%	60.3%	59.8%	60.7%	61.4%	60.3%	59.4%
Benefits as a percentage of Operating Expenditures	12.3%	12.7%	13.5%	13.2%	13.2%	12.1%	12.0%	12.0%	12.9%	13.1%
Retirement Assessments as a percentage of Operating Expenditures	2.4%	2.4%	2.7%	2.8%	2.9%	3.1%	3.2%	3.2%	3.2%	3.3%
Total Wage & Benefit Costs as a percentage of Operating Expenditures	74.7%	74.2%	75.6%	73.7%	76.4%	75.0%	76.0%	76.7%	76.3%	75.8%

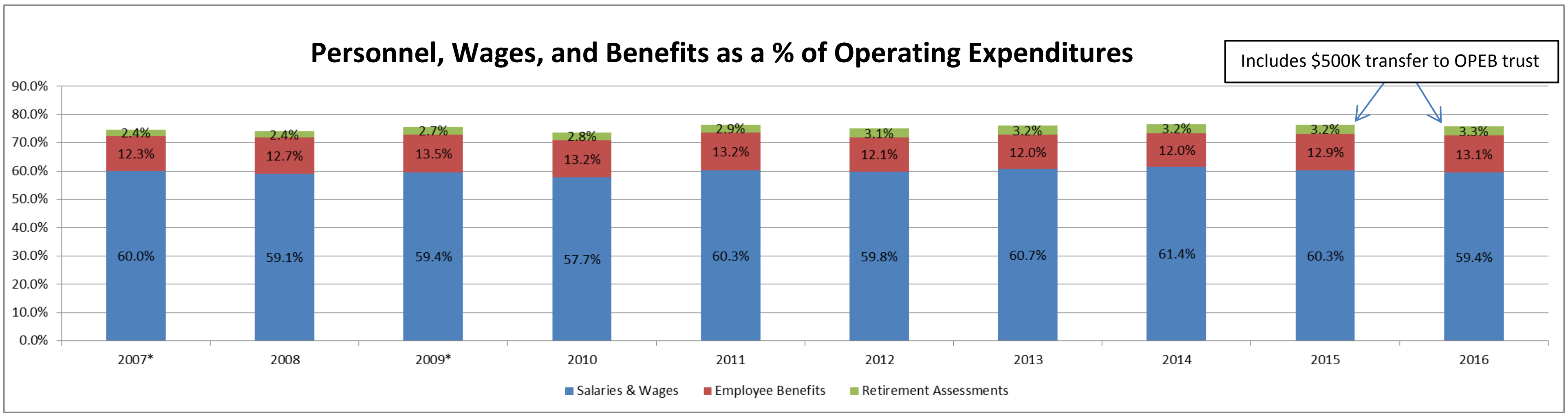
Notes:

*Proposition 2 1/2 Overrides were approved in FY2007 ($362,734) & FY2009 ($316,047)

** Source: Audited Financial Statements, General Fund, Budget Comparison Schedule, adjustment made to exclude transfers to capital project funds (FY2012-FY2016)

*** From Mass. DOR Schedule A report - General Fund Salaries; Does not include Enterprise Funds

**** Source: Audited Financial Statements, General Fund, Budget Comparison Schedule, Retirement and Education Assessments taken from detail, FY2015 & FY2016 includes $500,000 transfer to OPEB trust fund. Note that Education assessments are deducted because the underlying percentages of the assessments related to salaries and wages are not available. It would not be accurate to view the education assessments as an expenditure without recognizing that a large percentage of regional school districts expenses are salaries and wages, therefore the related totals are removed from this calculation.



Indicator 8: Employee Benefits

Formula:
Employee Benefits
Wages & Salaries

Northborough Trend

X	Favorable
	Marginal
	Unfavorable
X	Uncertain

Warning Trend: Increasing employee benefit costs as a percentage of salaries and wages.

Description:
The two most significant benefit items to consider in personnel discussions are health insurance and pensions. Both of these are, for the most part, prescribed by Commonwealth law, and municipalities are limited in the changes they can make to these items (pensions more so than health insurance). As employers, municipalities must offer health insurance to all benefit-eligible employees and current employees become vested in the pension system after ten years of creditable service. Municipalities do have some ability to manage and control both health insurance and pension costs. For example, communities can work to reduce their health insurance premium contribution rates, increase co-pays/deductibles, or move to the State Group Insurance Commission (GIC). Prudent management of staffing levels is also critical as increases in staffing increase both health insurance and pension costs.

Analysis:
Overall, employee benefits as a percentage of wages and salaries have increased 3.2% from FY2007 through FY2016. This includes the retirement assessment, which has risen from 4.0% in FY2007 to 5.6% in FY2016, primarily due to implementation of a funding plan to eliminate the unfunded liability by 2035. Employee benefits alone, which are primarily composed of the cost of health insurance, increased to a peak of 22.9% in FY2010. Health insurance plan design changes implemented in FY2010 halted that increasing trend, and FY2016 employee benefits are less than FY2010 at 22.1%, inclusive of $500,000 annually contributed to the OPEB liability trust. It should be noted that if health insurance premiums were to return to 10-15% annual increases, there would be a significant impact on future operating budgets for all departments.

The FY2017 health insurance budget of $5.1 million represents an increase of $148,472, or 3%, from the amount budgeted in FY2016. Overall plan design changes and the adoption of Chapter 32B, Section 18 in FY2010 have helped limit budgetary increases over time. In addition, the Town worked closely with the School Department to increase teacher contributions during FY2012 from 20% to 25% for Health Insurance. However, given the escalating market trends emerging for premium increases, plan designs were further modified to limit the overall budget increase to 3% in FY2017. Escalation and uncertainty in the market continue to be problematic leading into FY2018.

Fiscal Year	2007*	2008	2009*	2010	2011	2012	2013	2014	2015	2016
Municipal & K-8 School Department Wages **	$ 18,336,853	$ 19,021,305	$ 19,919,684	$ 20,101,625	$ 21,007,614	$ 21,670,351	$ 22,885,953	$ 23,714,419	$ 24,902,080	$ 25,322,987
Employee Benefits ***	$ 3,756,553	$ 4,077,623	$ 4,516,875	$ 4,606,672	$ 4,600,048	$ 4,381,576	$ 4,537,088	$ 4,643,198	$ 4,805,019	$ 5,088,201
Transfer to OPEB Trust Fund ***	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 500,000	$ 500,000
Retirement Assessment ****	$ 732,717	$ 773,438	$ 892,411	$ 974,865	$ 1,006,365	$ 1,118,191	$ 1,210,083	$ 1,241,407	$ 1,306,702	$ 1,415,244
Total Benefit Costs	$ 4,489,270	$ 4,851,061	$ 5,409,286	$ 5,581,537	$ 5,606,413	$ 5,499,767	$ 5,747,171	$ 5,884,605	$ 6,611,721	$ 7,003,445
Benefits as a percentage of Wages & Salaries	20.5%	21.4%	22.7%	22.9%	21.9%	20.2%	19.8%	19.6%	19.3%	20.1%
OPEB Transfer as a percentage of Wages & Salaries	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	2.0%
Retirement as a percentage of Wages & Salaries	4.0%	4.1%	4.5%	4.8%	4.8%	5.2%	5.3%	5.2%	5.2%	5.6%
Total Benefits Spending as percentage of Wages & Salaries	24.5%	25.5%	27.2%	27.8%	26.7%	25.4%	25.1%	24.8%	26.6%	27.7%

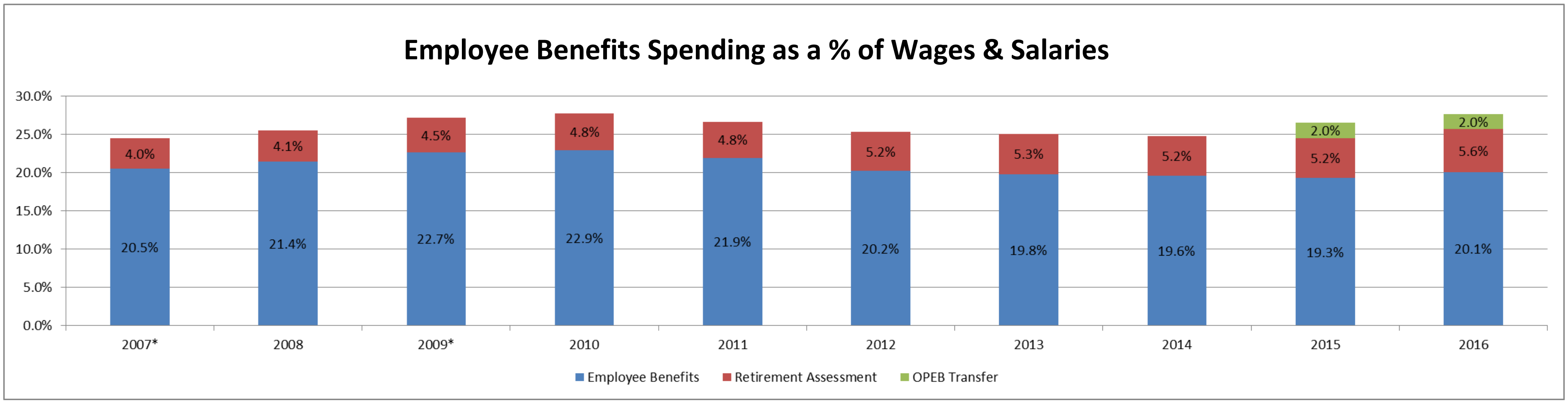
Notes:

*Proposition 2 1/2 Overrides were approved in FY2007 ($362,734) & FY2009 ($316,047)

** From Mass. DOR Schedule A report - General Fund Salaries; Does not include Enterprise Funds

*** Source: Audited Financial Statements, General Fund, Budget Comparison Schedule, FY2015&FY2016 Includes $500,000 transfer to OPEB trust fund

**** From General Ledger Detail, General Fund Retirement Assessment



Indicator 9: Pension Liability

Formula:
Pension Assets
Pension Liability

Northborough Trend

	Favorable
	Marginal
X	Unfavorable
	Uncertain

Warning Trend: Unfunded liability or increase in unfunded liability.

Description:
An unfunded liability is one that has been incurred during the current or prior year, which does not have to be paid until a future year and for which reserves have not been set aside. It is a legal commitment to pay at some time in the future. If such obligations are permitted to grow over a long period of time, they can have a substantial effect on a government's financial condition.

Analysis:
Northborough is one of 96 governmental units that comprise the Worcester Regional Retirement System (WRRS). This regional system provides pension benefits for the retired municipal employees of the Town of Northborough. As of January 1, 2014, there were 367 Northborough participants with 212 active, 55 inactive and 100 retired members.

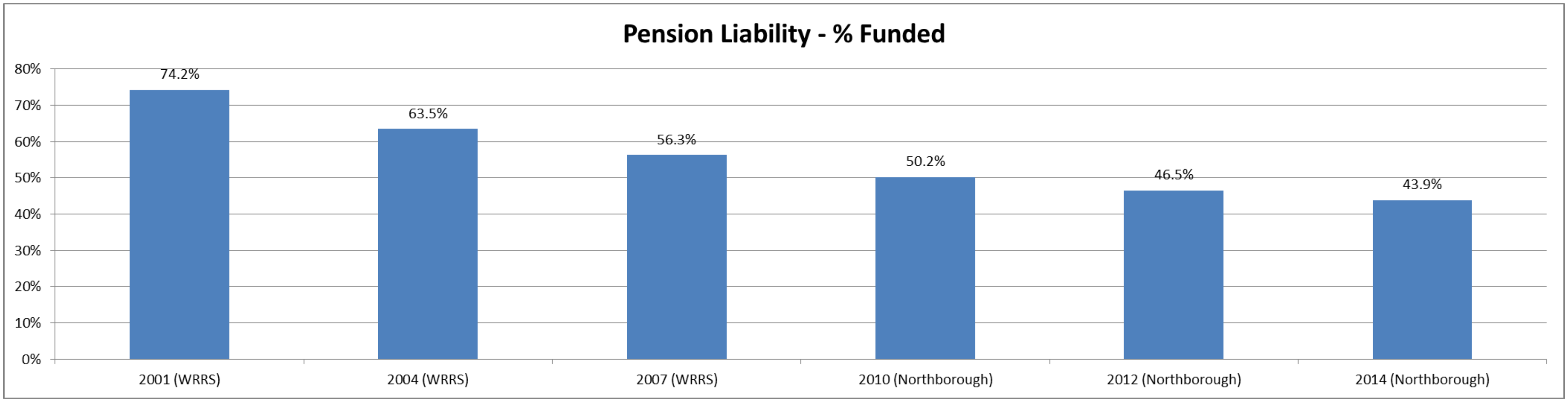
The majority of assets of the Worcester Regional Retirement System were transferred to the Massachusetts Pension Reserve Investment Trust (PRIT) Fund in July 2007. The $57.9 billion PRIT Fund manages the pension investments for the Massachusetts State Employees, the Teachers Retirement System as well as several local retirement systems. The PRIT Fund is professionally managed by the Pension Reserves Investment Management Board.

Actuarial valuations are now individually prepared for each member unit and are completed every two years. Recent pension reform legislation introduced benefit changes intended to reduce the Town's future pension liability. In accordance with MGL, Chapter 32, Section 22F, the retirement system is required to be fully funded by the year 2040; however, the Worcester Regional Retirement System has implemented a more ambitious funding schedule and plans to be fully funded in 2035, well in advance of the mandatory deadline.

Northborough's unfunded pension liability remains an area of concern to be monitored. The system is funded through employee contributions, investment performance and assessments to member communities. The overall decrease in funding level of our pension liability represents a negative trend for Northborough. Investment performance has been volatile and as we progress toward the full funding plan for 2035 and the mandate of 2040, annual assessments to member communities may increase. It is important to note that while Town of Northborough officials must continue to track progress toward full funding, they do not control the funding schedule directly.

Year		1/1/2001	1/1/2004	1/1/2007	1/1/2010	1/1/2012	1/1/2014
Worcester Regional Retirement System - Estimated Accrued Liability		426,280,953	552,773,550	692,768,325	863,002,067	982,796,782	1,087,769,903
Worcester Regional Retirement System- Pension Assets		316,389,108	350,879,900	389,758,785	413,976,785	436,671,982	488,346,471
Worcester Regional Retirement System - Pension Liability - Unfunded		109,891,845	201,893,650	303,009,540	449,025,282	546,124,800	599,423,432
Worcester Regional Retirement System - Percent Funded		74.2%	63.5%	56.3%	48.0%	44.4%	44.9%
Northborough - Estimated Accrued Liability					33,802,878	37,199,035	41,707,744
Northborough - Pension Assets					16,976,508	17,296,679	18,293,648
Northborough - Pension Liability-Unfunded					16,826,370	19,902,356	23,414,096
Northborough - Percent Funded					50.2%	46.5%	43.9%

Sources:
Public Employee Retirement Administration Annual Report
Worcester Regional Retirement System Valuation Results Report



Indicator 10: Other Post-Employment Benefits (OPEB) Liability

Formula:
OPEB Assets
OPEB Liability

Northborough Trend

	Favorable
	Marginal
X	Unfavorable/Improving
	Uncertain

Warning Trend: Unfunded liability for Other Post-Employment Benefits (OPEB).

Description:
An unfunded liability is one that has been incurred during the current or prior year, which does not have to be paid until a future year and for which reserves have not been set aside. It is a legal commitment to pay at some time in the future. If such obligations are permitted to grow over a long period of time, they can have a substantial effect on a government's financial condition.

Analysis:
OPEBs are the set of benefits offered to retirees and their dependents other than pensions. These benefits mainly consist of medical insurance. Currently, employees who retire at age 55 having worked for at least 20 hours per week for at least ten years are eligible to receive these medical benefits for life. Unlike pensions, these medical benefits are not adjusted to account for full or part-time work, years of service, or age of the recipient at the time of retirement.

Obligations for Other Post-Employment Benefits (OPEBs) represent a $30 billion liability for municipalities in the Commonwealth. The magnitude of these costs becomes even more relevant as the Governmental Accounting Standards Board (GASB) now requires that OPEB liabilities be reported on municipal balance sheets. This information is of particular interest to bond rating agencies and investors.

In 2011, the state enacted municipal health insurance reform, giving municipal officials a set of tools to change plan design features for active employees and retirees. But even with this authority, municipalities have little or no control over the primary drivers of general health care costs. With communities having little or no recourse for raising revenues in the Proposition 2 ½ era, if unaddressed, this unsustainable cost will crowd out funding for other key line items in municipal budgets, threatening jobs and core municipal services.

On December 20, 2012, a special commission charged with studying OPEBs issued its final report which recognized that the current thresholds for benefits are unsustainable. If adopted, the Commission's recommendations to increase eligibility standards are estimated to save communities between $9 billion and $12 billion in OPEB costs over the next 30 years. Legislation, which contains many of the Commission's recommendations, has been proposed but is still being debated by the Legislature.

In terms of what has been done to date in Northborough, in addition to FY2010 plan design changes the Town also unanimously adopted MGL Chapter 32B, Section 18 at the Annual Town Meeting in April 2009. The adoption of Chapter 32B, Section 18 required Medicare eligible retirees to move out of the HMO active health plans on 7/1/10 and into Medicare supplement or "Senior Plans," which are specifically designed for the medical needs of seniors and effectively shares these health care costs with the Medicare program. By adopting Section 18 the Town's GASB 45 Unfunded Actuarial Accrued Liability (UAAL) for Other Post-Employment Benefits (OPEB) for retiree medical benefits was immediately reduced from $90.4 million to $34.3 million. Upon the first revaluation the liability was further reduced to an estimated $28.1 million, however without committing funds to an irrevocable trust fund the UAAL has grown to $34.9 million upon the most recent valuation.

The Town created an OPEB Trust Fund at the April 2011 Annual Town Meeting for setting aside future OPEB funds to reduce this liability and then appropriated $500,000 in FY2015, and another $500,000 in FY2016 with the intention to continue that level of contribution annually. The OPEB funds have been invested with the Pension Reserves Investment Trust (PRIT) Fund. The PRIT Fund is a pooled investment trust fund established to invest the assets of the Massachusetts Teachers and Employees Retirement Systems as well as the assets of various County, Authority, District and Municipal Retirement Systems throughout the Commonwealth. The PRIT Fund is professionally managed by the Pension Reserves Investment Management Board.

While the Town is waiting to assess the outcome of possible legislative changes at the State level as described above, the Town is currently working with an actuary to develop future funding plan options for the Town. Discussion on how best to address OPEB liabilities will continue to be a key issue during future budget cycles.

Actuarial Valuation Date	7/1/2008 Original	7/1/2008 Revised	7/1/2009 Estimated	7/1/2010	7/1/2011 Estimated	7/1/2012	7/1/2013 Estimated	7/1/2014	7/1/2015 Estimated
Unfunded Actuarial Accrued Liability	$90,444,000	$34,289,000	$36,023,000	$28,072,976	$29,623,142	$32,638,652	$35,252,772	$34,881,934	$36,696,603
Actuarial Value of Assets	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 500,000	$ 1,051,207
Funded Ratio	0%	0%	0%	0%	0%	0%	0%	1%	3%

Source: Town Actuarial Valuation Studies
Original study conducted effective July 1, 2008 (FY2009), and revaluations conducted for July 1, 2010, July 1, 2012, and July 1, 2014
Per GASB 45 full valuations must be done no less frequently than every two years.

Indicator 11: Debt Service Expenditures

Formula:
Debt Service Expenditures
Operating Expenditures

Northborough Trend

X	Favorable
	Marginal
	Unfavorable
	Uncertain

Warning Trend: Increasing debt service expenditures as a percentage of total net operating expenditures.

Description:

Debt service is defined here as the amount of principal and interest that a municipality must pay each year on bonded long and short term debt. Increasing debt service reduces expenditure flexibility by adding to the Town's obligations. Overlapping debt is the bonded debt of another jurisdiction that is issued against the tax base of the community. Taken together, the total debt service represents a significant part of a municipality's fixed costs and its increase may indicate excessive debt and fiscal strain.

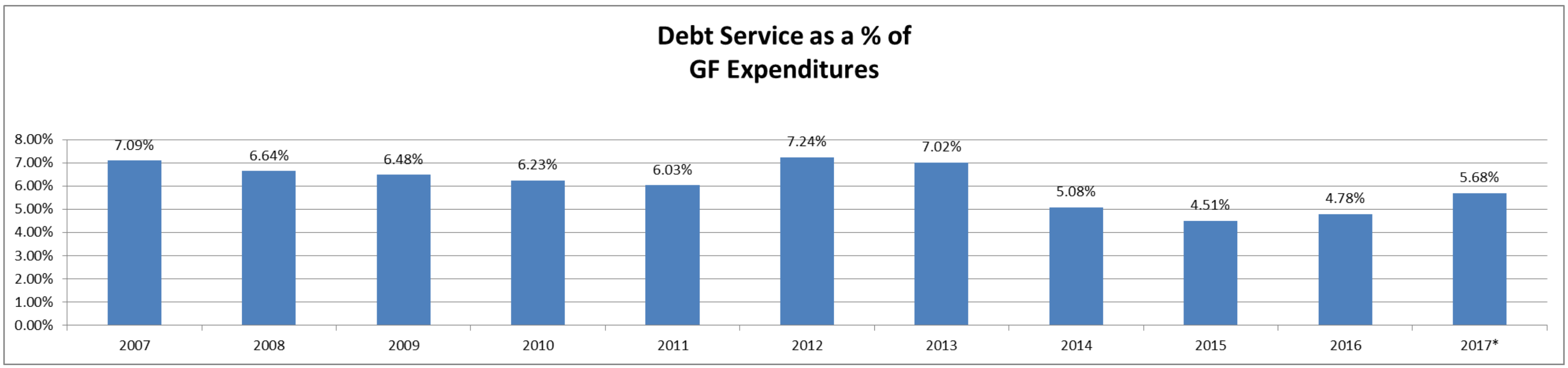
Analysis:

The total debt service for Northborough is comprised of both the general obligation bonds of the Town as well as the overlapping debt associated with the Northborough's share for the Algonquin Regional High School (ARHS) and Assabet Valley Regional Vocational High School. Once permanent bonds are issued, these fixed expenses are mandatory. Therefore, significant levels of debt service can serve to limit flexibility in funding operating budgets. The Town's Debt Policy provides that the Town will endeavor to manage debt so as not to exceed a ratio of 5% to 10% of the net general fund debt service to total general fund expenditures. Since FY2004, our levels of debt service have remained well within this range with the exception of FY2004 which was the first year of the $10 million, 10-year bond issued for the ARHS Building Project with the debt structured with a significant $1,850,000 principal payment in the first year.

Overall, the Town's level of debt service is within the 5% to 10% suggested by the debt policy and represents an appropriate level of capital investment in infrastructure. The credit rating agency, Moody's Investors Service, indicated in a recent review that the Town's "overall debt burden will remain manageable" and noted that the principal amortization of 71.4% within 10 years was favorable. Debt service as a percentage of the budget decreased from 7.02% in FY2013 to 4.51% in FY2015 due to the $10 million ARHS Building project bond being fully satisfied in FY2013. However, the percentage will increase again in the future years as the $14.85 million total debt for the Lincoln Street School building project was issued in two phases during 2015 and 2016. Even with the addition of the Lincoln Street School bond, debt is projected to remain well within policy limits.

Fiscal Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017*
Debt Service**	$ 1,509,743	$ 1,561,156	$ 1,790,064	$ 2,265,276	$ 1,923,505	$ 2,489,898	$ 2,481,623	$ 2,307,032	$ 2,050,723	$ 2,488,169	$ 3,034,131
Less School Building Reimbursement	$ (392,632)	$ (409,777)	$ (382,543)	$ (382,543)	$ (382,543)	$ (382,543)	$ (382,543)	$ (382,543)	$ (382,543)	$ (382,543)	$ (382,543)
Net Debt Service	$ 1,117,111	$ 1,151,379	$ 1,407,521	$ 1,882,733	$ 1,540,962	$ 2,107,355	$ 2,099,080	$ 1,924,489	$ 1,668,180	$ 2,105,626	$ 2,651,588
Overlapping Debt - Assabet Debt Assessment								$ 1,044	$ 8,186	$ 15,006	$ 192,135
Overlapping Debt - ARHS Debt Assessment	$ 1,745,150	$ 1,645,780	$ 1,404,375	$ 875,871	$ 1,131,427	$ 1,267,629	$ 1,289,094	$ 659,761	$ 657,234	$ 656,493	$ 661,206
Less ARHS Legal Settlement ***										$ (213,831)	$ (215,948)
Net Overlapping ARHS Debt Assessment	$ 1,745,150	$ 1,645,780	$ 1,404,375	$ 875,871	$ 1,131,427	$ 1,267,629	$ 1,289,094	$ 659,761	$ 657,234	$ 442,662	$ 445,258
Total Debt Service	$ 2,862,261	$ 2,797,159	$ 2,811,896	$ 2,758,604	$ 2,672,389	$ 3,374,984	$ 3,388,174	$ 2,585,294	$ 2,333,600	$ 2,563,294	$ 3,288,981
General Fund Expenditures	$ 40,358,092	$ 42,106,943	$ 43,394,613	$ 44,296,562	$ 44,332,468	$ 46,636,802	$ 48,276,629	$ 50,906,957	$ 51,777,346	$ 53,590,732	$ 57,855,289
Net Debt Service as % of GF Expenditures	2.77%	2.73%	3.24%	4.25%	3.48%	4.52%	4.35%	3.78%	3.22%	3.93%	4.58%
Overlapping Debt - ARHS as % of GF Expenditures	4.32%	3.91%	3.24%	1.98%	2.55%	2.72%	2.67%	1.30%	1.27%	1.23%	1.14%
Total Debt Service as a % of GF Expenditures	7.09%	6.64%	6.48%	6.23%	6.03%	7.24%	7.02%	5.08%	4.51%	4.78%	5.68%

Notes:
* FY2017 as Budgeted
** Source: Audited Financial Statements, General Fund, Budget Comparison Schedule, as budgeted (adjusted for principal paid down)
*** Court judgement following over-assessment, payments to come annually from FY2016 through FY2023



Indicator 12: Financial Reserves/Fund Balance

Formula:
<u>Financial Reserves</u>
Net Operating Revenues

Northborough Trend

X	Favorable
	Marginal
	Unfavorable
	Uncertain

Warning Trend: Declining financial reserves as a percentage of net operating revenues.

<u>Description:</u>

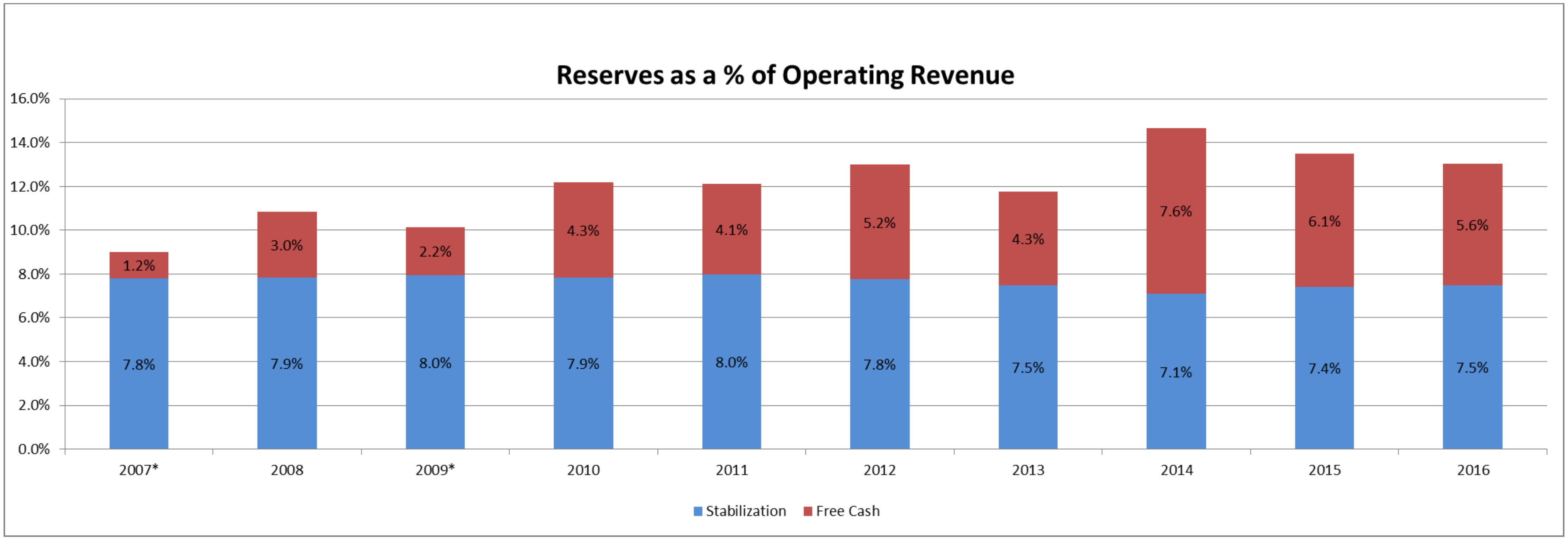
The size of a local government's fund balance can affect its ability to withstand financial emergencies. It can also affect its ability to accumulate funds for capital purchases without having to borrow. Municipalities usually try to operate each year at a surplus to maintain positive fund balance and thus maintain adequate reserves. An unplanned decline in fund balance may mean that the municipality will be unable to meet a future need.

<u>Analysis:</u>

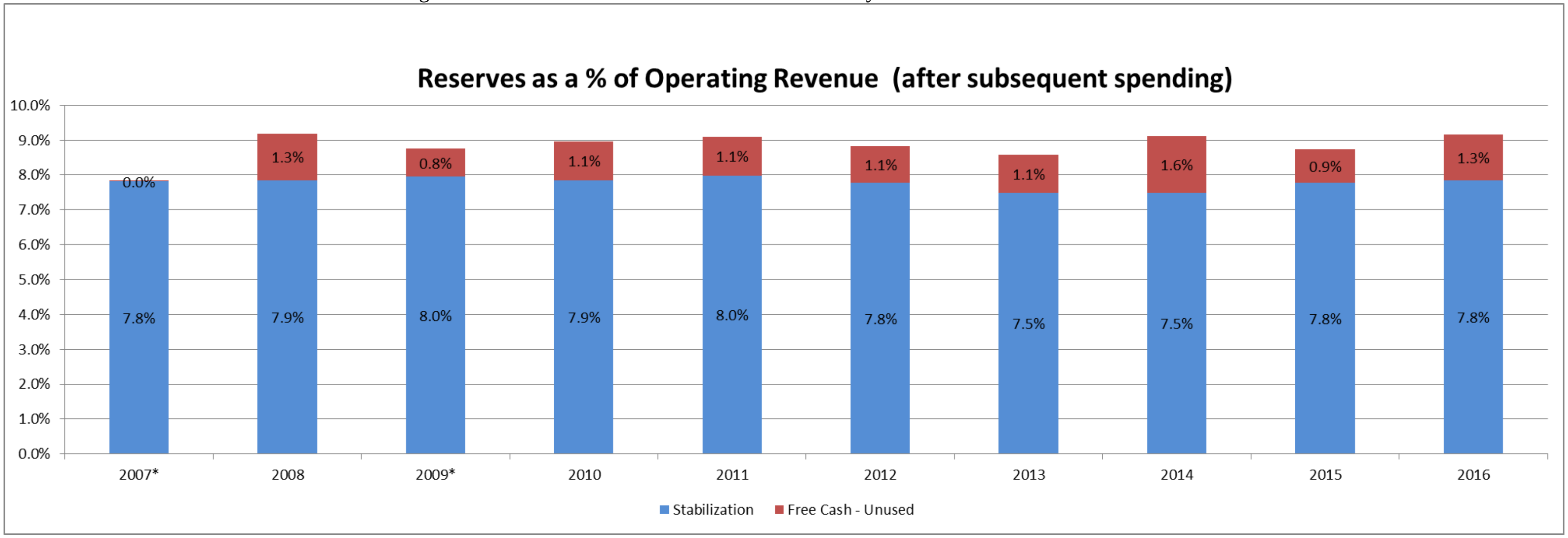
The Government Finance Officers Association (GFOA) recommends an undesignated fund balance between 5% and 15% of operating revenues. Northborough's financial policy provides for reserves to average between 5% and 10% of the Town's General Fund (Operating Budget) expenditures. The reserves are defined to include the Town's Stabilization Fund and Free Cash. The Town's level of reserves is in accordance with this policy. In FY2016 & FY2017, $200,000 was added to the Stabilization Fund to ensure appropriate levels are maintained.

Fiscal Year	2007*	2008	2009*	2010	2011	2012	2013	2014	2015	2016
Certified Free Cash **	$ 470,988	$ 1,265,111	$ 946,294	$ 1,954,708	$ 1,869,209	$ 2,459,307	$ 2,074,920	$ 3,932,028	$ 3,208,889	$ 3,104,766
Stabilization Fund Balance **	$ 3,085,177	$ 3,329,086	$ 3,447,529	$ 3,551,789	$ 3,605,888	$ 3,660,077	$ 3,646,820	$ 3,686,792	$ 3,913,018	$ 4,173,427
Operating Revenues ***	$ 39,476,229	$ 42,390,894	$ 43,343,178	$ 45,230,381	$ 45,181,626	$ 47,132,299	$ 48,704,343	$ 51,912,939	$ 52,817,953	$ 55,768,963
Free Cash Percentage of Operating Revenue	1.2%	3.0%	2.2%	4.3%	4.1%	5.2%	4.3%	7.6%	6.1%	5.6%
Stabilization Percentage of Operating Revenue	7.8%	7.9%	8.0%	7.9%	8.0%	7.8%	7.5%	7.1%	7.4%	7.5%
Net Reserves Percentage of Operating Revenue	9.0%	10.8%	10.1%	12.2%	12.1%	13.0%	11.7%	14.7%	13.5%	13.1%
Free Cash Subsequently Used****	$ 470,000	$ 700,000	$ 600,000	$ 1,454,000	$ 1,365,000	$ 1,959,307	$ 1,543,500	$ 3,089,000	$ 2,708,889	$ 2,372,000
Free Cash Subsequently Used-Operating	$ 470,000	$ 700,000	$ 600,000	$ 650,000	$ 750,000	$ 650,000	$ 650,000	$ 895,000	$ 895,000	$ 875,000
Free Cash Subsequently Used-Capital	$ -	$ -	$ -	$ 804,000	$ 615,000	$ 1,309,307	$ 893,500	$ 2,194,000	$ 1,813,889	$ 1,497,000
Free Cash Not Used	$ 988	$ 565,111	$ 346,294	$ 500,708	$ 504,209	$ 500,000	$ 531,420	$ 843,028	$ 500,000	$ 732,766
Percent Free Cash Subsequently Used	1.2%	1.7%	1.4%	3.2%	3.0%	4.2%	3.2%	6.0%	5.1%	4.3%
Percent Free Cash Not Used	0.0%	1.3%	0.8%	1.1%	1.1%	1.1%	1.1%	1.6%	0.9%	1.3%
Projected Stabilization Balance after transfer	7.8%	7.9%	8.0%	7.9%	8.0%	7.8%	7.5%	7.5%	7.8%	7.8%
Percent of Reserves after subs spending	7.8%	9.2%	8.8%	9.0%	9.1%	8.8%	8.6%	9.1%	8.7%	9.2%

Notes: *Proposition 2 1/2 Overrides were approved in FY2007 ($362,734) & FY2009 ($316,047); ** Source: Free Cash & Stabilization at end of fiscal year, Mass. DOR Databank; *** Source: Audited Financial Statements, General Fund, Budget Comparison Schedule, **** Source: Mass. DOR Tax Recaps, amounts subsequently spent by Town Meeting, e.g. 2009 Free Cash voted for use by April, 2009 ATM toward FY2010 budget; Figures shown for FY2016 are projected FY2018 budget



*Note: The chart above shows what Northborough's financial reserves are at the close of each fiscal year



*Note: The chart above shows Northborough's financial reserves at the start of the new fiscal year after a portion of Free Cash is spent in accordance with the Town's Free Cash Policy.

Indicator 13: Capital Investment – Overall Fixed Assets

Formula:
Fixed Asset Values
Consumer Price Index

Northborough Trend

X	Favorable
	Marginal
	Unfavorable
	Uncertain

Warning Trend: Declining values

Description:

The majority of the Town's Assets shown on its balance sheet are its fixed assets. These are sometimes referred to as "physical assets" or the "capital plant." The assets consist of town-owned land, buildings, equipment and its entire infrastructure, which includes roads, sidewalks, catch basins, water/sewer mains, etc. For the financial statements most gross values are then "depreciated" over the useful life of the asset, meaning that the expense for purchasing the asset is recorded incrementally over its useful life rather than solely in the year it was acquired, while the value of the asset is lessened over time.

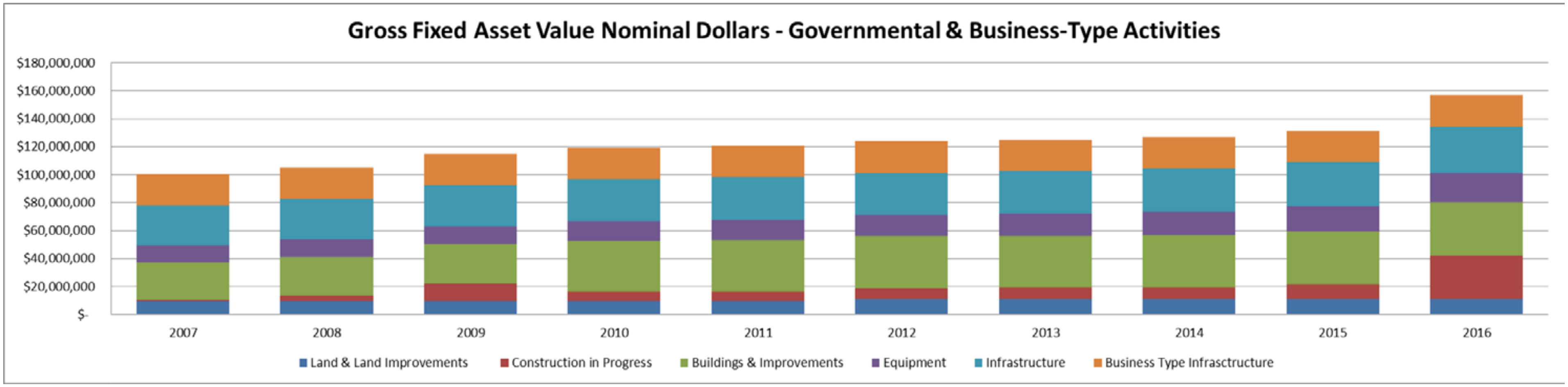
Local governments will frequently defer investment in capital assets, in order to devote resources to operating expenses in the face of scarce resources. When maintenance is deferred, it can lead to increased costs for replacement rather than maintenance.

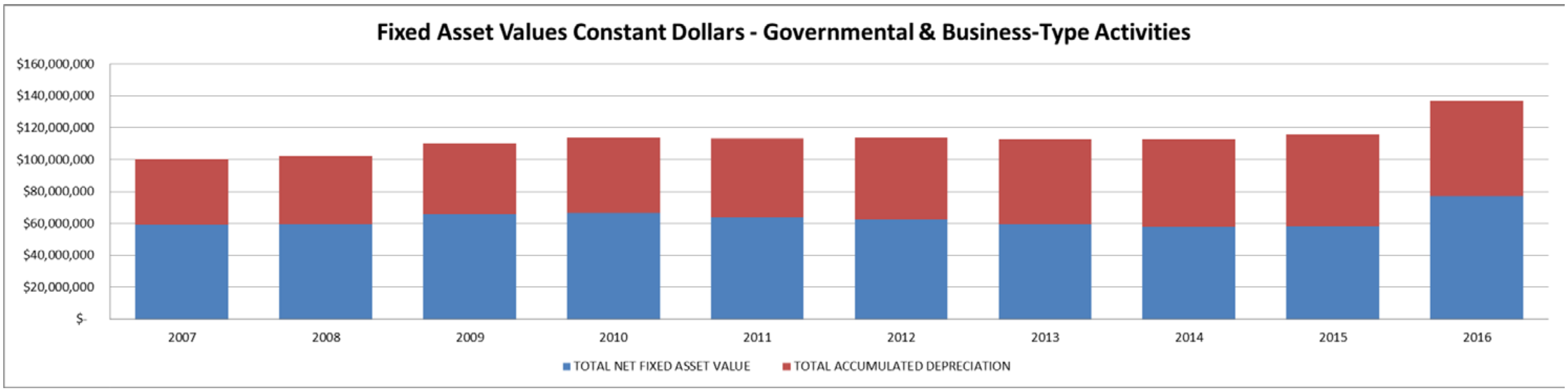
Analysis:

The analysis reflects that the Town has continued its effort to maintain its fixed asset values, while adjusting for the effects of inflation and depreciation. The first graph reflects the gross value of the assets, and the underlying categories that make up the Town's assets, while the second graph reflects that the net values of the assets in service remain relatively constant after accounting for depreciation and inflation.

The large increase in value during FY2016 was directly related to the $25 million Lincoln Street School building project, which increased category of "Construction in Progress." The project was conducted over a relatively short period of time and is back in use in FY2017. Once complete, it will then move to "Buildings & Improvements" and will begin to be depreciated.

Fiscal Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Governmental Activities										
Land & Land Improvements	$ 6,836,364	$ 6,844,803	$ 6,891,319	$ 6,891,319	$ 6,893,175	$ 8,133,175	$ 8,133,175	$ 8,133,175	$ 8,133,175	$ 8,133,175
Construction in Progress	$ 558,560	$ 3,338,904	$ 11,907,123	$ 6,357,921	$ 6,487,688	$ 7,051,508	$ 7,414,195	$ 7,620,105	$ 10,613,372	$ 30,053,278
Buildings & Improvements	$ 23,546,392	$ 23,616,707	$ 23,846,205	$ 31,601,625	$ 32,028,074	$ 32,564,954	$ 32,590,754	$ 32,597,691	$ 32,707,691	$ 32,957,457
Equipment	$ 10,903,486	$ 11,673,880	$ 11,632,195	$ 12,985,461	$ 13,247,370	$ 13,799,152	$ 14,333,553	$ 15,463,209	$ 16,071,873	$ 17,809,356
Infrastructure	$ 28,481,765	$ 28,971,274	$ 29,432,686	$ 29,948,314	$ 30,325,194	$ 30,373,250	$ 30,423,281	$ 30,902,882	$ 31,230,260	$ 33,071,226
Gross Fixed Asset Value	**$ 70,326,567**	**$ 74,445,568**	**$ 83,709,528**	**$ 87,784,640**	**$ 88,981,501**	**$ 91,922,039**	**$ 92,894,958**	**$ 94,717,062**	**$ 98,756,371**	**$ 122,024,492**
Less Accumulated Depreciation	**$ (29,913,832)**	**$ (32,280,563)**	**$ (34,172,749)**	**$ (36,566,516)**	**$ (39,313,220)**	**$ (42,024,286)**	**$ (44,587,392)**	**$ (47,180,124)**	**$ (49,695,524)**	**$ (52,462,991)**
Net Fixed Asset Value	**$ 40,412,735**	**$ 42,165,005**	**$ 49,536,779**	**$ 51,218,124**	**$ 49,668,281**	**$ 49,897,753**	**$ 48,307,566**	**$ 47,536,938**	**$ 49,060,847**	**$ 69,561,501**
Business-Type Activities										
Land & Land Improvements	$ 2,769,498	$ 2,769,498	$ 2,769,498	$ 2,771,038	$ 2,771,038	$ 2,771,038	$ 2,771,038	$ 2,771,038	$ 2,771,038	$ 2,771,038
Construction in Progress	$ 261,585	$ 471,848	$ 891,343	$ 390,198	$ 493,087	$ 840,138	$ 840,138	$ 840,138	$ 185,526	$ 1,203,064
Buildings & Improvements	$ 3,455,724	$ 3,955,724	$ 3,955,724	$ 4,703,635	$ 4,703,635	$ 4,703,635	$ 4,703,635	$ 4,703,635	$ 5,389,390	$ 5,389,390
Equipment	$ 1,216,628	$ 1,216,628	$ 1,216,628	$ 1,261,049	$ 1,289,093	$ 1,305,449	$ 1,393,986	$ 1,575,046	$ 1,882,889	$ 3,095,678
Infrastructure	$ 22,135,335	$ 22,321,383	$ 22,360,279	$ 22,360,279	$ 22,360,279	$ 22,360,279	$ 22,360,279	$ 22,360,281	$ 22,472,937	$ 22,472,937
Gross Fixed Asset Value	**$ 29,838,770**	**$ 30,735,081**	**$ 31,193,472**	**$ 31,486,199**	**$ 31,617,132**	**$ 31,980,539**	**$ 32,069,076**	**$ 32,250,138**	**$ 32,701,780**	**$ 34,932,107**
Less Accumulated Depreciation	**$ (11,277,673)**	**$ (11,825,067)**	**$ (12,352,409)**	**$ (12,903,256)**	**$ (13,434,041)**	**$ (13,919,503)**	**$ (14,412,089)**	**$ (14,899,201)**	**$ (15,411,023)**	**$ (16,059,245)**
Net Fixed Asset Value	**$ 18,561,097**	**$ 18,910,014**	**$ 18,841,063**	**$ 18,582,943**	**$ 18,183,091**	**$ 18,061,036**	**$ 17,656,987**	**$ 17,350,937**	**$ 17,290,757**	**$ 18,872,862**
Governmental & Business-Type Activities										
Land & Land Improvements	$ 9,605,862	$ 9,614,301	$ 9,660,817	$ 9,662,357	$ 9,664,213	$ 10,904,213	$ 10,904,213	$ 10,904,213	$ 10,904,213	$ 10,904,213
Construction in Progress	$ 820,145	$ 3,810,752	$ 12,798,466	$ 6,748,119	$ 6,980,775	$ 7,891,646	$ 8,254,333	$ 8,460,243	$ 10,798,898	$ 31,256,342
Buildings & Improvements	$ 27,002,116	$ 27,572,431	$ 27,801,929	$ 36,305,260	$ 36,731,709	$ 37,268,589	$ 37,294,389	$ 37,301,326	$ 38,097,081	$ 38,346,847
Equipment	$ 12,120,114	$ 12,890,508	$ 12,848,823	$ 14,246,510	$ 14,536,463	$ 15,104,601	$ 15,727,539	$ 17,038,255	$ 17,954,762	$ 20,905,034
Infrastructure	$ 28,481,765	$ 28,971,274	$ 29,432,686	$ 29,948,314	$ 30,325,194	$ 30,373,250	$ 30,423,281	$ 30,902,882	$ 31,230,260	$ 33,071,226
Business Type Infrasctructure	$ 22,135,335	$ 22,321,383	$ 22,360,279	$ 22,360,279	$ 22,360,279	$ 22,360,279	$ 22,360,279	$ 22,360,281	$ 22,472,937	$ 22,472,937
Gross Fixed Asset Value	**$ 100,165,337**	**$ 105,180,649**	**$ 114,903,000**	**$ 119,270,839**	**$ 120,598,633**	**$ 123,902,578**	**$ 124,964,034**	**$ 126,967,200**	**$ 131,458,151**	**$ 156,956,599**
Less Accumulated Depreciation	**$ (41,191,505)**	**$ (44,105,630)**	**$ (46,525,158)**	**$ (49,469,772)**	**$ (52,747,261)**	**$ (55,943,789)**	**$ (58,999,481)**	**$ (62,079,325)**	**$ (65,106,547)**	**$ (68,522,236)**
Net Fixed Asset Value	**$ 58,973,832**	**$ 61,075,019**	**$ 68,377,842**	**$ 69,801,067**	**$ 67,851,372**	**$ 67,958,789**	**$ 65,964,553**	**$ 64,887,875**	**$ 66,351,604**	**$ 88,434,363**
TOTAL GROSS FIXED ASSET VALUE	**$ 100,165,337**	**$ 105,180,649**	**$ 114,903,000**	**$ 119,270,839**	**$ 120,598,633**	**$ 123,902,578**	**$ 124,964,034**	**$ 126,967,200**	**$ 131,458,151**	**$ 156,956,599**
TOTAL ACCUMULATED DEPRECIATION	**$ (41,191,505)**	**$ (44,105,630)**	**$ (46,525,158)**	**$ (49,469,772)**	**$ (52,747,261)**	**$ (55,943,789)**	**$ (58,999,481)**	**$ (62,079,325)**	**$ (65,106,547)**	**$ (68,522,236)**
TOTAL NET FIXED ASSET VALUE	**$ 58,973,832**	**$ 61,075,019**	**$ 68,377,842**	**$ 69,801,067**	**$ 67,851,372**	**$ 67,958,789**	**$ 65,964,553**	**$ 64,887,875**	**$ 66,351,604**	**$ 88,434,363**
CPI-U, 2005 Base Year ****	225.1	231.6	234.2	236.7	240.0	245.8	249.6	253.3	256.1	258.1
CPI-U adjustment for constant dollars	100.0%	97.2%	96.1%	95.1%	93.8%	91.6%	90.2%	88.9%	87.9%	87.2%
TOTAL GROSS FIXED ASSET VALUE	**$ 100,185,365**	**$ 102,240,166**	**$ 110,461,005**	**$ 113,416,847**	**$ 113,118,538**	**$ 113,471,839**	**$ 112,686,420**	**$ 112,847,924**	**$ 115,562,302**	**$ 136,877,131**
TOTAL ACCUMULATED DEPRECIATION	**$ 41,199,741**	**$ 42,872,591**	**$ 44,726,558**	**$ 47,041,721**	**$ 49,475,627**	**$ 51,234,161**	**$ 53,202,831**	**$ 55,175,848**	**$ 57,233,898**	**$ 59,756,182**
TOTAL NET FIXED ASSET VALUE	**$ 58,985,624**	**$ 59,367,575**	**$ 65,734,447**	**$ 66,375,126**	**$ 63,642,910**	**$ 62,237,678**	**$ 59,483,590**	**$ 57,672,076**	**$ 58,328,404**	**$ 77,120,949**


Gross Fixed Asset Value Nominal Dollars - Governmental & Business-Type Activities
$180,000,000
$160,000,000
$140,000,000
$120,000,000
$100,000,000
$80,000,000
$60,000,000
$40,000,000
$20,000,000
$-
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
Land & Land Improvements
Construction in Progress
Buildings & Improvements
Equipment
Infrastructure
Business Type Infrasctructure


Fixed Asset Values Constant Dollars - Governmental & Business-Type Activities
$160,000,000
$140,000,000
$120,000,000
$100,000,000
$80,000,000
$60,000,000
$40,000,000
$20,000,000
$-
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
TOTAL NET FIXED ASSET VALUE
TOTAL ACCUMULATED DEPRECIATION

Indicator 14: Capital Investment - Pavement Management

Formula:
Average Pavement Condition Index (PCI)

Northborough Trend

	Favorable
	Marginal
X	Unfavorable/Improving
	Uncertain

Warning Trend: Declining overall average Pavement Condition Index (PCI)

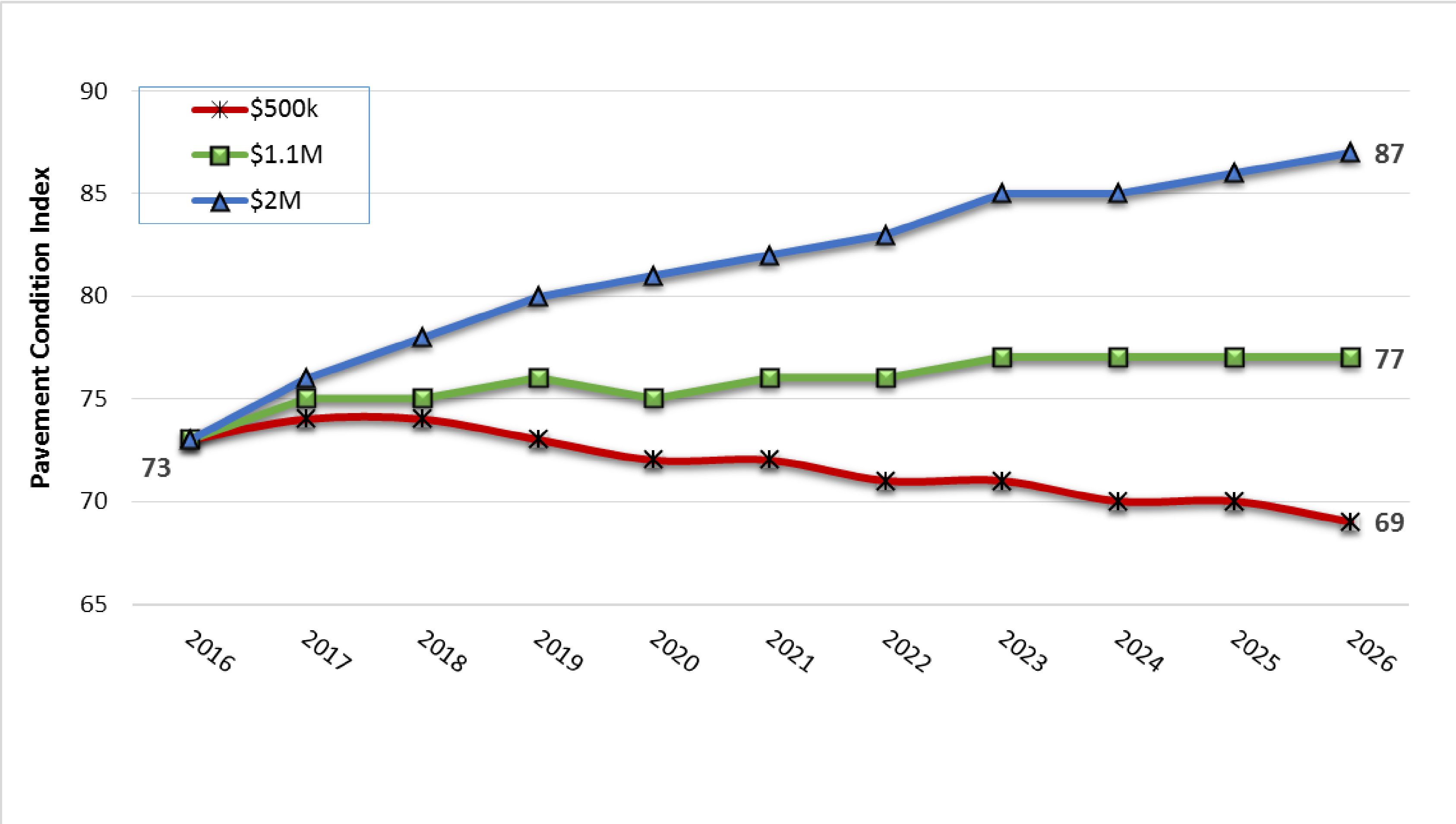
Description:

One of the Town's most significant assets is its pavement network, or roadways. Pavement management is the practice of planning for pavement maintenance and rehabilitation with the goal of maximizing the value and life of a pavement network. Pavement management involves inventorying, assessing, evaluating and scoring roads using a Pavement Condition Index (PCI) scale of 0 -100. This process ultimately allows the Town to define treatment options and test various budget scenarios and projects the impact on the Town's overall PCI based upon funding scenarios. Local governments will frequently defer investment in capital assets, in order to devote resources to operating expenses in the face of scarce resources. When maintenance is deferred, it can lead to increased costs for replacement rather than maintenance.

Analysis:

During FY2015, the Town completed a comprehensive pavement management study which assessed the condition of the Town's roadways. The results of the study are being used to assist officials in the development of a more aggressive roadway maintenance and rehabilitation plan, the implementation of which will involve a higher rate of investment in the "infrastructure" category using local resources as well as leveraging state resources. Notably, only 4% of the Town's roadways are currently in excellent condition and in need of no maintenance, and over one quarter (27%) of the roads are in such poor condition that they require reclamation or reconstruction. Ultimately, deferring investment in our roadways will negatively impact the Town's financial condition by increasing costs and reducing the Town's ability to fund other services.

The study projects that were the Town to continue its previous annual investment of $475,000 over the next ten years, the backlog of roadway maintenance work would increase from $17 million to almost $44 million. The Town is actively working to develop and fund a pavement management plan that maximizes the value and life of the Town's pavement network. The chart on the opposite page projects the Town's overall average PCI for its roads based upon three funding levels. The Town's goal in FY2016 was to fund the Pavement Management Plan at $1.1 million annually in order to maintain or improve the average PCI score. After two years of implementation of the plan Northborough's PCI improved slightly from 71 to 73. However, increased Chapter 90 Funds have not yet materialized. Moving forward, it is clear that the policy goal of improving the overall average PCI of the Town's roads will require identification of additional resources, including a commitment from the Legislature to increase Chapter 90 funds statewide from $200 million to $300 million.


90
85
80
75
70
65
Pavement Condition Index
$500k
$1.1M
$2M
73
87
77
69
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026

Section IV
Five-Year Financial Forecast—
Revenue and Expenditure Projections

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IV. FIVE-YEAR FINANCIAL FORECAST—REVENUE AND EXPENDITURE PROJECTIONS

The following pages contain the Five-Year Financial Forecast of revenue and expenditures along with a projected financial outlook for the Town of Northborough.

A revenue driven model was the methodology used to prepare the financial projections. The projections began with FY2017 as the base and were calculated out five years using the Proposition 2 ½ allowable annual budget growth. The projections focused on the top three revenue sources, which are real estate taxes, state aid and motor vehicle excise taxes. Together these sources represent approximately 95% of our total revenue.

The revenue projections were calculated with the following assumptions:

- Real estate taxes increase by the allowable amount under Proposition 2 ½
- New growth is estimated at $30 million annually
- Existing unused levy capacity is available for use
- No operational budget overrides are requested
- State Aid increases by 1% annually
- Local receipts such as motor vehicle excise are level funded
- Adherence to the Town's adopted financial policies

The expenditure projections were calculated with the following assumptions:

- OPEB is funded at $500,000 each year
- Employee benefit costs increase 5% per year
- Major capital projects, including debt exclusions, proceed in accordance with the six-year Capital Improvement Plan
- School and General Government budgets increase a modest 3.5% in FY2018, then 4% annually

Financial Outlook

Additionally, a market adjustment has been applied to the valuation of an Average Single Family Home. The model assumes a 1% increase in FY2018 through FY2022. Given these assumptions, the revenue and expenditure projections indicate that real estate taxes will increase between 4.5% to 5.1% annually. This model assumes no major "budget surprises" and no significant staffing or increase in service levels. It is important to note that with these conservative estimates, the model indicates that the existing levy capacity will be depleted by FY2022, absent significant economic development and/or increases to State Aid.

Five-Year Revenue Projections

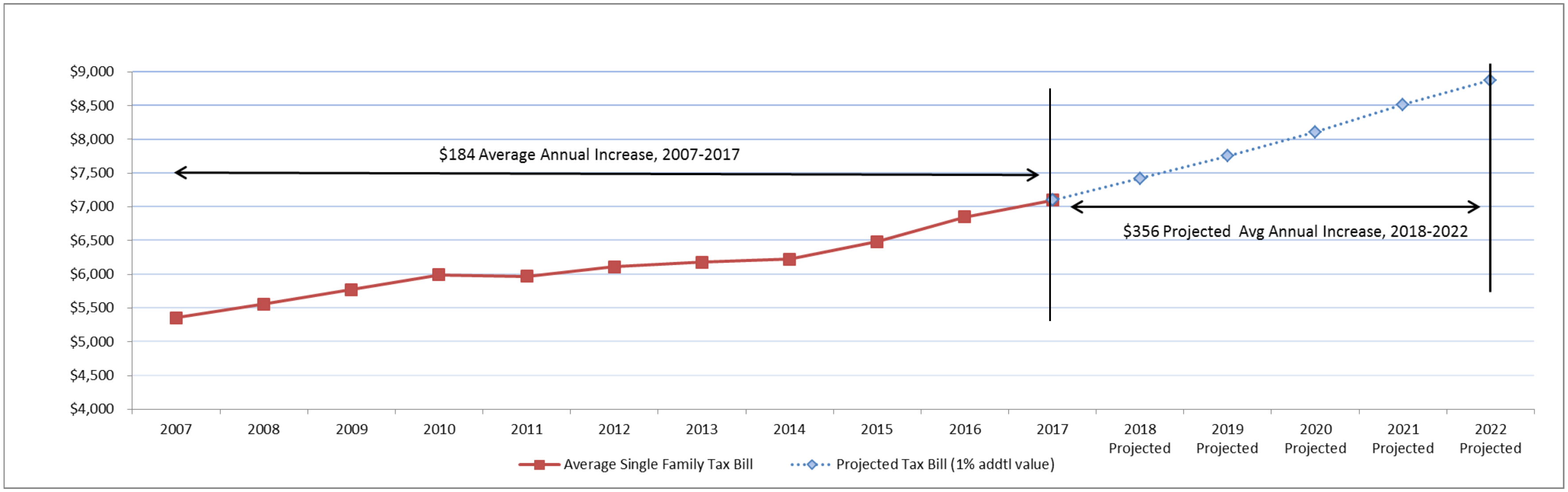
		FY2018 Projection	FY2019 Projection	FY2020 Projection	FY2021 Projection	FY2022 Projection
General Fund Revenues						
	Prior Year Levy Limit	47,349,942	49,055,391	50,803,475	52,595,262	54,431,844
	2.5%	1,183,749	1,226,385	1,270,087	1,314,882	1,360,796
	New Growth	521,700	521,700	521,700	521,700	521,700
	Levy Limit	49,055,391	50,803,475	52,595,262	54,431,844	56,314,340
	Debt Exclusions	805,523	822,842	778,051	784,074	763,246
	ARHS Debt Exclusions	449,206	450,515	449,700	448,186	448,270
	Lincoln St Sch Bldg Debt Exclusion	1,123,925	1,099,619	1,075,252	1,050,885	1,026,182
	Maximum Levy	51,434,045	53,176,452	54,898,266	56,714,989	58,552,038
	Unused Levy Capacity	(2,353,249)	(1,847,442)	(1,190,846)	(246,489)	353,029
Total Tax Levy		49,080,796	51,329,010	53,707,420	56,468,500	58,905,067
State Aid		5,187,046	5,238,916	5,291,306	5,344,219	5,397,661
Estimated Receipts		3,768,000	3,768,000	3,768,000	3,768,000	3,768,000
Other Local Receipts						
	Free Cash - Operating Budget	500,000	500,000	500,000	500,000	500,000
	Free Cash - Appropriated Reserve	175,000	175,000	175,000	175,000	175,000
	Free Cash - Capital/Other					
	MSBA	382,543	382,543	382,543		
	Meals/Rooms Tax	400,000	400,000	400,000	400,000	400,000
	Other Available Funds	784,024	784,024	784,024	784,024	784,024
Total General Fund Revenues		60,277,409	62,577,493	65,008,293	67,439,743	69,929,752

Five-Year Expense Projections

		FY2018 Projection	FY2019 Projection	FY2020 Projection	FY2021 Projection	FY2022 Projection
General Fund Expenses						
Education						
	Northborough K-8	23,515,038	24,455,639	25,433,865	26,451,219	27,509,268
	Algonquin 9-12	10,424,158	10,841,124	11,274,769	11,725,760	12,194,790
	ARHS Debt Service	661,206	662,515	661,700	660,186	660,270
	Assabet	786,971	818,450	851,188	885,235	920,645
	Assabet Renovation Project	151,232	145,316	141,488	137,660	133,832
	Lincoln Street School Building	1,124,675	1,099,619	1,075,252	1,050,885	1,026,227
Town Departments		12,170,119	12,656,924	13,163,201	13,689,729	14,237,318
Undistributed Expenses						
	Employee Benefits & Insurance	7,629,062	8,010,515	8,411,041	8,831,593	9,273,172
	Building & Liability Insurance	258,884	269,239	280,009	291,209	302,858
	Debt Service	1,703,005	1,728,303	1,787,412	1,749,273	1,645,357
	State Assessments	205,652	213,878	222,433	231,330	240,583
	Reserve Fund	175,000	175,000	175,000	175,000	175,000
	Special Warrant Articles - Capital					
	Solid Waste Subsidy	217,160	217,160	217,160	217,160	217,160
	OPEB Trust	550,000	550,000	550,000	550,000	550,000
	Stabilization Fund					
Reserve for Abatements		685,276	713,839	743,804	773,531	823,300
Library & School Lunch Aid - Offsets		19,972	19,972	19,972	19,972	19,972
Total General Fund Expenses		60,277,409	62,577,493	65,008,293	67,439,743	69,929,752

Projected Tax Impact

		FY2018	FY2019	FY2020	FY2021	FY2022
		Projection	Projection	Projection	Projection	Projection
Tax Impact						
	Valuation	2,725,456,677	2,755,456,677	2,785,456,677	2,815,456,677	2,845,456,677
	Avg Single Fam *	412,225	416,348	420,511	424,716	428,963
	Tax Rate	18.01	18.63	19.28	20.06	20.70
	Avg Tax Bill	7,423	7,756	8,108	8,518	8,880
	Increase ($)	326	332	352	410	362
	Increase (%)	4.6%	4.5%	4.5%	5.1%	4.2%
	* Assumes 1% increase in value in FY2018-FY2022					



Section V
Appendices

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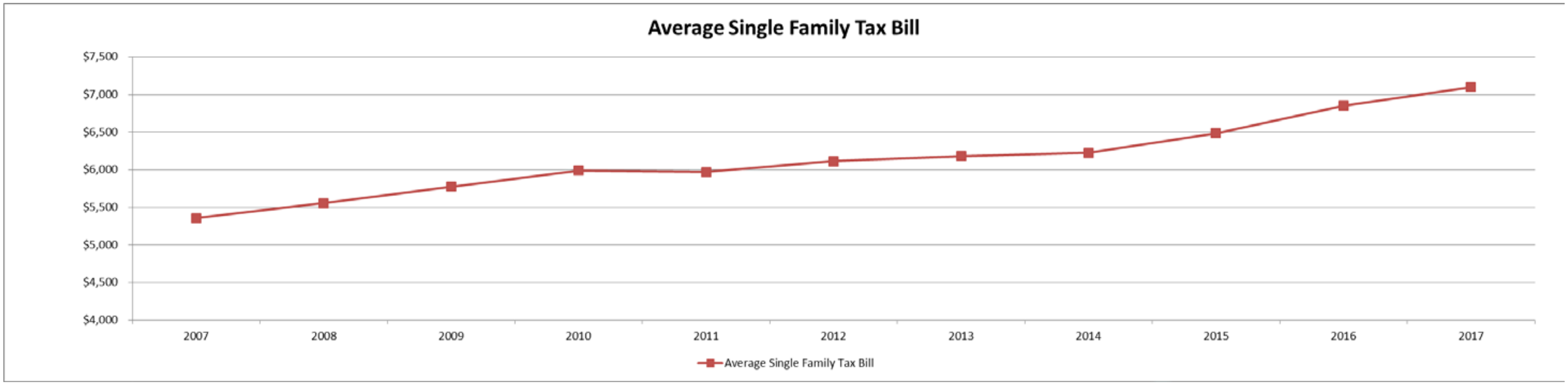
Appendix A: Average Residential Tax Bill

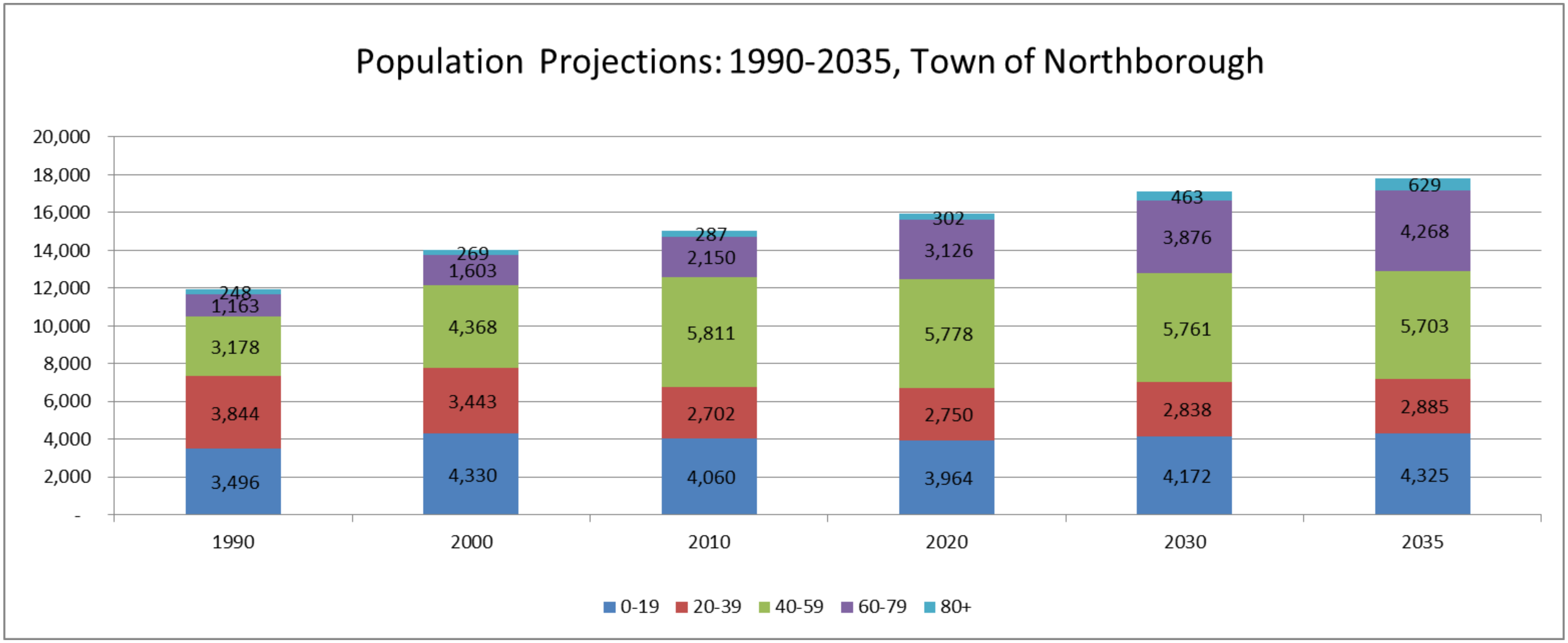


Fiscal Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Assessed Value	$ 1,723,718,900	$ 1,673,218,700	$ 1,679,332,500	$ 1,669,159,700	$ 1,583,648,800	$ 1,581,989,200	$ 1,536,502,300	$ 1,506,142,900	$ 1,558,995,700	$ 1,608,609,300	$ 1,649,717,300
Parcels	3,988	3,999	4,002	4,006	4,007	4,008	4,005	4,014	4,022	4,032	4,042
Average Single Family Home Value **	$ 432,226	$ 418,409	$ 419,623	$ 416,665	$ 395,221	$ 394,708	$ 383,646	$ 375,222	$ 387,617	$ 398,960	$ 408,144
Tax Rate Per Thousand	$ 12.39	$ 13.28	$ 13.76	$ 14.38	$ 15.11	$ 15.49	$ 16.11	$ 16.59	$ 16.73	$ 17.17	$ 17.39
Average Single Family Tax Bill	$ 5,355	$ 5,556	$ 5,774	$ 5,992	$ 5,972	$ 6,114	$ 6,181	$ 6,225	$ 6,485	$ 6,850	$ 7,098
Increase over prior year	$ 277	$ 201	$ 218	$ 218	$ (20)	$ 142	$ 67	$ 44	$ 260	$ 365	$ 247
Hi-Lo Rank**	51	50	52	49	53	55	59	63	63	63	62

The FY2017 real estate tax bill for an average single family home in the Town of Northborough is $7,098. This represents a $174 average annual increase over the 10 years since FY2007. The Massachusetts Department of Revenue's "Hi-Lo" ranking, which is the rank of Massachusetts Cities and Town's average single family tax bills, for Northborough's tax bill has dropped to a low point in FY2014. Northborough had the 63rd highest in the state in FY2014 through FY2016, and while that ranking has risen to 62nd highest for FY2017, the Town's rank has fallen from being the 49th highest in FY2010. The Board of Selectmen have established a budget goal to minimize the tax impact during the most recent 6 years, while preserving current service levels.

Notes:
* Source: Mass. DOR Tax Recap
** Source: Mass. DOR Databank

Appendix B: Population Projections



Age	1990	2000	2010	2020	2030	2035	Percent Change 2010-2035
0-19	3,496	4,330	4,060	3,964	4,172	4,325	6.53%
20-39	3,844	3,443	2,702	2,750	2,838	2,885	6.77%
40-59	3,178	4,368	5,811	5,778	5,761	5,703	-1.86%
60-79	1,163	1,603	2,150	3,126	3,876	4,268	98.51%
80+	248	269	287	302	463	629	119.16%
Total	**11,929**	**14,013**	**15,010**	**15,920**	**17,110**	**17,810**	**18.65%**

Population data and trends are extremely important to review and understand for the future allocation of resources. The projections provided by the Metropolitan Area Planning Council indicate that Northborough is expected to grow in population by 18.65% or 2,800 people over the next 25 years. The projections indicate Northborough's population is expected to rise gradually and will allow officials and policymakers to plan carefully for future needs. The school age population (0-19) is estimated to increase by 6.53%. and any future changes will need to be correlated with the estimates from the School Department to plan for the future needs of the children of Northborough. The largest growth is estimated in the over age 60 segment of the population with 2,460 more people over age 60 living in Northborough in the next 25 years.