

Townsend Financial Forecast: Users' Guide and Assumptions

December 2016

Edward J. Collins, Jr. Center for Public Management

MCCORMACK GRADUATE SCHOOL OF POLICY AND GLOBAL STUDIES



THIS PAGE IS INTENTIONALLY BLANK

Table of Contents

Introduction	1
Revenue Projections	3
Property Tax Levy.....	3
State Aid Cherry Sheet	4
Chapter 70.....	4
Unrestricted General Government Aid (UGGA).....	4
Veterans Benefits and Exemptions for Veterans and Elderly	4
State-Owned Land.....	4
Aid to Public Libraries	4
Local Estimated Receipts	4
Enterprise Funds	5
Water Enterprise Fund.....	5
Ambulance Receipts.....	5
Other Available Funds.....	5
Free Cash.....	6
Expenditure Projections.....	7
Municipal Departments	7
Education	7
Employee Benefits	8
Retirement	8
Health Insurance	8
Medicare	8
Unemployment/Life Insurance	8
Debt Service	8
General Fund Non-Excluded	8
General Fund Prop 2 ½ Excluded	9
Enterprise Funds	9
State and County Assessments	9
Miscellaneous Expenses	9
Property/Liability Insurance.....	9
Workers Compensation	10
Cherry Sheet Offset.....	10

Reserves/Other	10
Overlay	10
General and Capital Stabilization	10
Snow and Ice Deficit.....	10
Process to Update Forecast	11
Description of Worksheets	11
Steps to Update	12
Appendix: FY2018-FY2022 Forecast Spreadsheets.....	15

INTRODUCTION

The object of the Town of Townsend's financial forecast is to conservatively project revenues and expenditures five years into the future (FY2018-FY2022). The forecast is intended to provide policymakers with the information they need to make informed decisions around the Town's financial strategies and policies, long-term financial and capital planning, and long-term contracts or obligations.

Revenue and expenditure forecasting is a powerful financial planning tool that can be used to isolate the impact of particular future events and determine their effects on the Town's financial picture. The forecasting model is designed using reasonable assumptions about a wide variety of future events and, by using these assumptions along with known facts, a comprehensive view of the Town's fiscal outlook emerges. Though potential exists that any one item in the forecast may be less than accurate, when taken as a whole, a well-built model presents a fair representation of the Town's future finances.

The approach used in the forecast model for the Town of Townsend assumes that current service levels will be maintained in the future years of the forecast. The model also assumes that existing Massachusetts General Laws and regulations will remain unchanged over the forecast period. However, as new information becomes available here forward, the assumptions and estimates used in the current projections will need to be regularly re-evaluated by Town officials to determine if they are still appropriate and reasonable.

The forecast is structured as a series of Excel worksheets. The totals from the detailed Revenue Projections and Expenditure Projections worksheets that flow into a "Summary" worksheet which reveals projected future operating surpluses or deficits. A series of worksheet calculate the impacts of cost-of-living and step increases (COLA and Wages), employee benefits (Benefits), and labor, benefit, and operating expenses for the water enterprise fund (Enterprise Funds), all of which tie to the projections worksheets. In addition, static prior year or current data is available for more in-depth analysis of issues like new growth (Growth), debt service (Debt and Debt Detail), and local receipts (Revenue History).

THIS PAGE IS INTENTIONALLY BLANK

REVENUE PROJECTIONS

PROPERTY TAX LEVY

Annual tax levy growth is constrained by Proposition 2 1/2, the Massachusetts General Law that limits the annual growth in a municipality's total tax levy to 2.5 percent, plus an allowance for certain new construction and other additions to the tax rolls. The law also allows a city or town to increase taxes beyond this levy limit with voter approval. An override of this limit by voters becomes a permanent part of the tax levy calculation in future years and is best used for recurring expenses in the regular operating budget. A debt exclusion may also be approved by voters to increase the levy limit temporarily to fund capital projects. Generally, these projects are financed by borrowing and the annual debt service is added to the levy limit each year until the project is paid off.

The FY2018-FY2022 forecast projects new growth of \$116,000 over the years of the forecast. The projection is based upon a conservative average of New Growth over the previous five-year period. There is no special development other than normal anticipated during the forecast period. Generally, tax rates will rise slightly each year as the levy limit grows and property valuations are stable. New growth is reported to the State each year on Form LA-13 which is typically submitted in late summer or early fall prior to setting a tax rate.

The forecast anticipates that the Town will fully utilize its taxing capacity throughout the forecast period. However, based on the Town's recently approved budget for FY2017, the Town's unused levy capacity is \$12,620.

Also, taken into account in these calculations are debt exclusions for a series of projects including Building Improvements, Land Acquisition, Landfill Closure, Memorial Hall, and a fire truck. It is anticipated that a Sub-Station project with a debt exclusion will begin in FY 2018. These current excluded projects will be included in the property tax levy through FY2028. However, a significant decrease in excluded debt service begins in FY2019. (See Debt and Debt Detail tabs for specifics.)

The Northern Middlesex Regional School District (NMRSD) borrowed \$12.5 million over a 25-year period. Recently, the borrowing was expanded to \$20 million. Townsend is responsible for 39.2% of the annual assessment. As the project was approved as a debt exemption, the annual debt service is also added to the levy. In addition, the Neshoba Valley Technical School District (NVTSD) also has debt which has been exempt from the annual levy limit.

Debt costs for projects approved via debt exclusion will be covered by property tax dollars outside the limits of proposition 2 ½ and are therefore reflected in both the Revenue Projections and the Expenditure Projections tabs.

Levy limit information is published each year by the Division of Local Services (<https://dls.gateway.dor.state.ma.us/gateway/Login>) and should be reviewed by Town officials periodically in late summer and early fall as growth is certified.

STATE AID CHERRY SHEET

Chapter 70 – The Town of Townsend is a member of the Northern Middlesex Regional School District and the Nashoba Valley Technical School District. As such, the Town receives no Chapter 90 or other education-related State aid.

Unrestricted General Government Aid (UGGA) –UGGA represents the largest portion (80%) of State aid to the Town of Townsend. It is projected to increase by a conservative 1% per year throughout the period of the forecast. In recent years, when new aid has been added to this account, it has been distributed based on the proportion of existing aid received by a community relative to the total amount of aid to all communities. For example, if a community's existing UGGA represents 2 percent of the total amount statewide, any new distribution to this community will be 2 percent of the amount added to the state total.

To keep UGGA and the other cherry sheet accounts up to date, Town officials will need to monitor the local aid estimates published by the Division of Local Services at each juncture of the State budget process: <http://www.mass.gov/dor/local-officials/municipal-databank-and-local-aid-unit/cherry-sheets/>. The first of these estimates will come after the release of the Governor's FY2018 budget in late January of 2017 followed by the House Ways and Means Committee budget in mid-April, the final House budget in late April, the Senate Ways and Means budget in mid-May, and final Senate budget in late May. The Conference Committee's budget, which resolves differences in the two legislative versions of the budget, is typically issued in late June. Final cherry sheets reflect any vetoes by the Governor and/or any legislative overrides of these vetoes.

Veterans Benefits and Exemptions for Veterans and Elderly – These accounts consist of reimbursements for veterans' benefits and certain local property exemptions for qualified individuals. In FY2017, the Town will receive \$69,285 in reimbursements. This forecast conservatively anticipates no increase over the five-year period.

State-Owned Land – This item is for payment-in-lieu-of-taxes (PILOT) for State-owned land. In FY2017, the Town will receive \$184,589 for State-owned land. The forecast assumes level funding.

Aid to Public Libraries -- This item is a Cherry Sheet offset and may be spent without an appropriation by the Town's library. This account has no real impact on the forecast since it is also raised on the expenditure side, essentially pulling these revenues out of the general revenue mix for direct use by the library department without appropriation.

LOCAL ESTIMATED RECEIPTS

Local estimated receipts are locally generated revenues, other than real and personal property taxes. Examples include motor vehicle excise, investment income, payments in lieu of taxes, penalties and interest on taxes, departmental revenue, fines, and permit fees. Projected growth in local receipts is shown in the Revenue Projections tab while prior year information can be found in the Revenue History tab.

The forecast uses the FY 2016 actual local receipts, as reflected in the FY 2017 RECAP sheet, for the first year of the forecast, excluding any non-recurring revenue. Motor vehicle excise revenue (\$1.126 million in FY2016) is the Town's largest local receipt constituting about 68 percent of the total estimated receipts. It is anticipated that this revenue will grow to \$1.2 million in FY2018 (based upon the FY2016 actuals) and then grow by approximately 1% per year during the remaining years of the forecast.

Revenue from the meals tax increased by 14% between FY2015 and FY2016, from \$85,300 to \$97,300. This revenue source is projected to reach \$100,000 in FY2018 and then grow by 1% thereafter. In the forecast, Licenses and Permits is expected to grow modestly at 1% per year.

Other significant local receipts include penalties and interest on taxes, Investment Income, PILOT's, fees, rentals, fines and forfeits, and departmental revenue. Together these receipts total \$261,752 of the Town's FY2017 budget estimates. No growth is conservatively estimated from these revenues sources.

Going forward, Town officials will need to closely monitor actual receipts as compared to budget estimates and update the forecast accordingly.

ENTERPRISE FUNDS

The Town receives revenue from enterprise funds in order cover the cost of the operation and capture overhead expenses.

Water Enterprise Fund - Water revenue is anticipated to be \$971,814 in FY2017. During the period of the forecast, personnel costs are increased by 0.5% to account for steps and 1% on most non-personnel costs. Approximately \$189,000 of the water revenue is used to fund employee benefits and the water fund's share of various insurances. The remaining \$782,742 supports direct Water Department services, including salaries, operating expenses, and debt service. Personnel costs are projected to increase by 0.5% between FY2017 and FY2018, and by 2.5% thereafter, while 1% growth is projected in operating expenses for each year in the forecast.

Ambulance Receipts - Ambulance revenue has been budgeted at \$275,000 in FY2017, and is expected to grow by approximately 2.5% annually through the period of this forecast. PEGG Access and Ambulance Receipts funds were one-time revenue in FY2017 and are not expected to continue during the period of the forecast.

OTHER AVAILABLE FUNDS

Other available receipts include Wetland Protections Funds, WTRR Receipts Reserved, Cemetery revenue, Comcast, and Premiums recognized as revenues. These combined sources represent a total of \$72,459 in FY2018. These sources, with the exception of the premiums, are recognized as revenues, and are level-funded during the period of the forecast. The premium is considered a one-time revenue, available only when the Town issues a debt offering, and is not included in the forecast.

All data and assumptions are based on information gathered from the Town Accountant's records.

FREE CASH

In recent years, Free Cash has been used by Townsend as a source of funding for special warrant articles, snow deficits and other minor issues. As a best practice, the Town has not used free cash for ongoing operations. In the forecast, it is projected that the Town will use approximately \$600,000 in free cash each year for general stabilization, capital stabilization, and snow and ice reserves.

EXPENDITURE PROJECTIONS

Detailed expenditure projections are contained in six “Expenditures” worksheets, including Expenditure Projections, COLA and Wages, Enterprise Funds, Benefits, Debt, and Debt Detail.

MUNICIPAL DEPARTMENTS

In the forecast, Town departments have been grouped by two major categories, salaries and non-personnel, consistent with town and state expenditure reporting. Additional detail is provided separating expenditures in the general categories of General Government, Public Safety, Public Works, Human Services and Culture & Recreation and Other.

For projection purposes, the forecast utilizes a 2% COLA, but this is intended as an example of cost impact moving forward and not a recommendation for any wage settlements. In addition, some Town employees are eligible for annual step increases and the forecast utilizes a 0.5% step increase across the board. As the Town’s detailed budget is prepared, this cost factor will be modified based on the actual employees eligible for a step increase. Cost impacts have been included in the Expenditure Projections worksheet within each Salary and Wages line item. The COLA and Wages worksheet allows for simulation of other wage agreements and step amounts.

Expenses have been projected to increase by 1 percent per year, reflective of recent relatively low inflation rates, although the forecast does allow for different rates of growth for different departments. Additional funding for COLAs or other adjustments are included in the Miscellaneous Expenses, Raise and Appropriate Articles row.

EDUCATION

Townsend participates in two regional school districts. The first and largest of these districts is the Northern Middlesex Regional School District (NMRSD). The Town’s assessment for FY2017 was \$9,859,482, or 39.2% of the total assessment. This amount is further broken down in to three categories: General Assessment (\$8,695,207), Transportation Assessment (\$877,947) and Debt Assessment (\$286,328). In the forecast, the General and Transportation Assessments have been combined and are projected to increase by 3.5% per year during the period under consideration. The Debt service is based upon a twenty-five-year term for borrowing and detail has been added to differentiate between general debt and septic debt.

The second regional school district is the Nashoba Valley Technical High School (NVTHS). The Town’s assessment for FY2017 is \$1,075,803, or 15.01% of the total assessment. The amount is further broken down into three categories: General Assessment (\$924,587), Transportation Assessment (\$60,058), and Debt Service Assessment (\$91,158). The General and Transportation Assessments have been combined and projected to increase by 3.5% during the period of this forecast. The Debt service is based upon twenty-five-year term borrowing. Funding for Bond Anticipation Notes (BANs) are projected in FY2018-FY2020 based upon future capital projects.

EMPLOYEE BENEFITS

Retirement - Town pension costs are projected based on the estimated appropriations issued by the Public Employee Retirement Administration Commission (PERAC) for Middlesex County. The appropriation letter from PERAC breaks down the assessments to the member towns, school districts, and housing authorities and shows the percentage of the total borne by each entity. The forecast applies this percentage to the future appropriation amounts identified by PERAC as necessary to maintain the pension funding schedule going forward. Though this is the best information available at this time, Town officials should be aware that the Middlesex County appropriation needs are due to be updated in FY2018. The prior year actuary included an inflation factor of 6.5% through FY 2020 and a 4% increase thereafter. There will likely result in changes to these projected pension costs for Townsend and should be monitored in future years to reflect any revisions in the necessary funding. Pension costs for FY 2017 are \$690,007, or 37.9% of the overall personnel benefits cost.

Health Insurance – The Town receives its health insurance through the Massachusetts Interlocal Insurance Association (MIIA) a health insurance program representing many Massachusetts communities. Based on a recent communication from the Town administration, the Town may consider a change if better pricing is available. The forecasted health insurance expenses have been projected to grow each year, but by a declining percentage each year (e.g., projected growth is 10% for FY2018, 9% for FY2019, 8% for FY2020, 7% for FY2021, and 6% for FY2022). Health insurance for FY2017 is \$1.065 million, or 58.4% of the overall personnel benefits cost. These estimate swill need to be updated by the Town over the next few months as MIIA reviews costs and the Town reviews its health insurance options.

Medicare – Medicare has been forecast to increase to \$52,000 in FY2017, or 2.9% of the overall personnel benefits cost. This is projected to increase by 2.5% annually.

Unemployment/Life Insurance – Unemployment is level funded at \$15,000 each year of the forecast, reflecting the fact that the Town has not incurred significant unemployment costs as a result of layoffs in recent years. Life Insurance is level funded at \$450 each year of the forecast.

DEBT SERVICE

General Fund Non-Excluded - Debt Service costs in this category are funded within the limits of Proposition 2 ½, i.e., they are funded within the Town's annual operating budget. Projects funded from non-excluded resources include the landfill closure and part of a fire truck (see Debt Detail tab.) At present, existing non-excluded debt service will increase modestly until FY2023, when it will total \$150,873. After this, debt service for these projects will decline annual until they are fully paid in FY2029.

There is currently a \$200,000 BAN for a Sub-Station that the Town plans to roll forward as long-term debt, beginning in early FY2018. The FY2018 projection includes the BAN interest. The forecast assumes that the \$1,000,000 borrowing will have a ten-year term at 4.25% interest. The first and last year interest is split between two fiscal years.

General Fund Prop 2 ½ Excluded - Debt Service costs in this category are approved by the voters and are funded outside the limits of Proposition 2 ½ via a debt exclusion. Approved projects include land acquisition, landfill closure, Memorial Hall, and part of a fire truck. Excluded debt is raised via an increase in property tax and is acknowledged on the Revenue Projections and Expenditure Projections tabs. (see also Debt Detail tab.)

School debt service, including excluded and non-excluded are grouped with the Education Services appropriation category.

Water debt service is grouped within the Water Enterprise appropriation category.

ENTERPRISE FUNDS

The Town has established an enterprise fund for all Water Department activities. This full cost recovery program is estimated to be \$971,814 for FY2017. The costs associated with this revenue are broken down into two categories: Water-Only expenses and Transfer to Town for employee benefits and overhead charges, if applied. Direct service costs include personnel, contractual, supplies, other, capital and debt service. These cost centers equal \$667,742, or 78% of the overall expenses. The forecast includes a 2.5% increase in personnel to account for steps, COLA, and other related personnel costs. Contractual services, supplies, and other are inflated by 1% annually. Capital is level funded at \$10,000 annually while debt service is matched against a specific debt service schedule.

Overhead charges are costs assumed by the Town on behalf of the Enterprise Fund, and then reimbursed to the Town. These charges include Retirement, Health Insurance, Medicare, and Workers Compensation, and general insurance. No increase in healthcare is projected for FY2018, but 7-8% growth is projected for the years following.

STATE AND COUNTY ASSESSMENTS

All State assessments included in the forecast are based on the Cherry Sheet estimates published by the Division of Local Services based on the legislature versions of the FY2017 budget. This cost center represents an extremely small 0.4% of the overall budget. The most significant of the State assessments in Townsend are Regional School Transportation, the MBTA, RMV Non-Removal, and Air Pollution.

Similar to the Cherry Sheet state aid accounts on the revenue side, Town officials will need to monitor the State budget process for FY2017 and follow the release of local assessment estimates until the State budget process concludes with the issuance of final FY2017 Cherry Sheets and local assessments. All assessments other than the RMV expense are forecast to increase by 2.5% annually.

MISCELLANEOUS EXPENSES

Property/Liability Insurance - This insurance covers municipal buildings and contents, motor vehicles and public official liability insurance. A \$17,000 increase in liability insurance was reported after the

FY2017 budget was adopted and will be funded by the General Reserve this year. The FY2018 projection has been increased to take the \$17,000 into account and to grow modestly at 2.5% thereafter.

Workers Compensation - It is anticipated that \$42,410 will be expended for Workers Compensation in FY 2018. This amount is projected to increase by 2.5% thereafter.

Cherry Sheet Offset - The cherry sheet offset in Townsend is for Library services is forecast to remain stable. As an offset, however, any change has no impact on the budget as these receipts are earmarked for library spending without appropriation. As such, any growth in this revenue is offset on the expenditure side of the forecast to essentially remove this aid from the Town's general revenues.

RESERVES/OTHER

Overlay – Reserves/Other includes the annual allowance for abatements and exemptions (Overlay). The overlay has been projected as 0.75% of the annual tax levy per year. However, in a revaluation year, a community typically has more abatement requests, so a good practice is to increase the overlay to reflect the risk of additional abatements.

General and Capital Stabilization – The forecast anticipates that \$200,000 will be deposited each year in the Town's General Stabilization Fund and Capital Stabilization Fund, for a total of \$400,000, from free cash generated in the prior fiscal year. This practice will allow the Town to increase both reserve funds – the first to be used in the event of an emergency and the second to be used to establish an annual allocation of funding to address capital needs.

Snow and Ice Deficit – The forecast anticipates that the Town will deposit \$200,000 from free cash into a snow and ice deficit fund that will provide funding for unanticipated expenses in the Town's response to snow and ice conditions.

PROCESS TO UPDATE FORECAST

Description of Worksheets

The Townsend Revenue/Expenditure Forecast file has a number of interconnected worksheets. The following describes the worksheets which include:

- Summary
- Revenue Projections
- Growth
- Revenue History
- Expenditure Projections
- COLA and Wages
- Benefits
- Enterprise Funds
- Debt
- Debt Detail

Summary – This worksheet rolls up from the Revenue and Expenditure forecast details to provide a quick overview of the five-year plan.

Revenue Projections – This worksheet is used to list the details of the various revenue categories and the assumptions that are used in the projections. The Final Recap column will require manual data entry each year to input actual revenues collected. Future year projections are calculated utilizing the straight-line percentage change column on the far right. If no growth is expected, a 0 should be input in the “percentage projection” column. If a revenue is not projected to grow linearly, the revenue expectations should be input manually into the forecast. Once the final tax recap is approved, any changes in the revenue detail must be made in this worksheet.

Growth – This worksheet is a summary of the new growth taxes that the Town has raised in the past 10 years and is used, in part, to estimate new growth in future years. After the final growth amount is calculated by the Assessors each year, the Selectmen set the tax rate, and the tax recap is approved by the State. At this point, the final amounts will need to be added to the worksheet. When updating the forecast each year, the Financial Team should discuss any changes in the growth projections.

Expenditure Projections – This worksheet lists the details of the various departments and other expenses categories that are in the Town budget warrant article. In addition, it lists all the financial appropriation warrant articles for Town Meeting. Finally, it lists other expenditure categories that do not require Town Meeting approval but that are expenses that must be included in the tax rate setting process. The wage line for each department is automatically changed when the user enters information into the COLA and Wages worksheet. The user must also enter manually or use the cost increase straight-line factor for the other cost items listed.

COLA and Wages – This worksheet provides the user with multiple “what if” scenarios on COLA and step

increases. Factors entered into the COLA and/or step cells automatically update the department wage line in the Expenditure Projections detail.

Benefits – This worksheet allows the user to calculate the cost of a variety of employee benefits including county retirement, health insurance, unemployment compensation, etc. Given the volatility of some of these benefits, the forecast allows for different growth factors to be input in different years.

Enterprise Funds – This worksheet projects the salary, operating, debt, and benefit costs for the Water Enterprise fund.

Debt and Debt Detail – These worksheets summarize the Town’s debt service by fiscal year for debt that is funded by the General Fund within the limits of Proposition 2 /12 (Non-exempt) or approved by the voters via a debt exclusion (Exempt). The cost information includes existing and anticipated debt. The Debt Detail worksheet must be updated whenever the Town issues permanent debt and/or adds new debt authorizations approved by Town Meeting.

Steps to Update

The process for updating the forecasting spreadsheet to reflect a new base year is fairly straightforward, but it must be done systematically and with care to update formulas as necessary. Consequently, it is strongly recommended that users save a separate back-up file of the spreadsheet before any changes are saved in the spreadsheet they are updating.

Generally, the updating of the Revenue and Expenditure spreadsheets should occur after the end of the current fiscal year, and after the Town’s budget for next year has been adopted by Town Meeting and final cherry sheets are issued. Both spreadsheets must be updated one final time when the tax recap approved by the State.

When all the data for the first projection year is finalized on the expenditure side by Town Meeting action and most revenues are close to final (final new growth will not be certified at this point), the data can be copied and pasted into a newly inserted column to the left of “Projection Percent” column such that it becomes the base year going forward.

Data for what was previously the base year of the forecast must also be updated with actuals. For the FY2018-FY2022 forecast, the base year was FY2017 and included revenues and expenditure expectations approved in the Town’s adopted budget. These must now be replaced with actual revenues and expenditures. The new base year (i.e., FY2018 during the first update) will then need to be updated using that year’s approved budget. The first update will change the forecast to FY2019-FY2023 and FY2018 will become the base year.

The next step will be to update the structure of the forecast to make room for a new Year 5. To do this, insert a column to the right of the last FYXXX Projection year in both the Revenue and Expenditure spreadsheets and copy the data and formulas from the prior column. This step will add the data for the last year of the five-year forecast. This same process should be followed for all tabs of the worksheet.

After the base year has been updated and the new 5th year added, the user is now ready to prepare the five-year forecasts working with the appropriate individual worksheets. To forecast the first-year

revenues or expenditures, a percent change is applied to the base year to yield the projected amount. To project the second year, the percent change is applied to the first forecast year as the base. In other words, the selected percent change is applied to each year of the forecast. This is accomplished by modifying, if appropriate, the percentage change column to reflect recent experience and new information/expectations

In some instances, the user may find that it is easier to simply enter values for certain items. This is fine as long as the user remembers to replace the formulas later if they want to determine the projections based on percent change in other years.

Specific details include:

The formula used to project the first future forecast year is rendered as follows: **=E29*(1+F29)**. Column E refers to the FY2017 base revenue or expenditure amount and column F is the “Projection Percent” column. The formula takes the base FY2017 amount (E29 in this example) and applies a percentage increase to this base (1+F29) where F29 is the percent increase. In other words, if the user wants to increase this item by 5 percent, the user simply plugs in “5” into the Projection Percent column (highlighted in yellow). This cell is formatted as a percentage and when added to 1 in the equation totals 1.05 which is then multiplied by the base amount. The second and subsequent forecast years are calculated in the same manner, but the formula is slightly different to reflect a new base year; for example, FY2018 will now be the base year for the FY2019 projection. This formula is as follows: **=G29*(1+\$F\$29)**, where the FY2018 value (Column G) is the base year to which the percentage increase (Column F) is applied to yield the FY2019 projection in Column H.

In general, most sheets (other than prior year or reference sheets) should be updated by inserting a new column to the left of the “Projection Percent” column. After this is completed, cell references in the first forecast year should be updated. Specific processes for each sheet are described below.

Revenues – Add a column to the left of the Projection Percent column that is shaded in yellow. This will be the column into which the new budget data will be copied or entered based on the budget approved by town meeting. The easiest way to do this is to simply cut and paste the FY2018 projected revenues into the newly created column. Since most of these values are determined by formula, the user should do a “paste special” so that the values are copied rather than the formulas. Next, the formulas in the first projection year will need to be updated to reference the new column that was added to the left of the Projection Percent column. Formulas in subsequent years of the forecast should be updated, but care should be taken to make sure that they are working as expected. Finally, the fiscal year labels for the projection years will have to be updated (for example, as FY2018 becomes the base year of the forecast, FY2019 will become the first forecast year). A new column is then added at the far right for a fifth forecast year and formulas can be copied as appropriate from the adjacent, prior year column.

Expenditures – Similar to the Revenue worksheet update, a new column must be added to the left of the Projection Percent column. Then, the FY2018 expenditure data as approved by Town Meeting should be input into the newly created column. Cell references in the first projection year will then need to be updated so that they refer to the appropriate cells in the new column with the budget data. Labels on the column headings of the projection years will also need to be updated and a column added at the far right so that the model continues to be a five- year forecast. Formulas can be copied into this column from the adjacent column to the left.

Summary – In the Summary worksheet, cell references should be updated to reflect the new base year (e.g., FY2018 rather than FY2017) and a new column (with formulas) added to the right for a fifth forecast year.

Debt - The debt sheet contains projections of the Town's debt exclusions. These forecast exclusion amounts are then brought forward for use in the tax levy calculations in the Revenues Projection worksheet.

Growth – The new growth sheet provides a ten- year history of prior certified new levy growth for the town. Updating this sheet merely requires adding the actual certified growth as this occurs each year.

COLA – The COLA worksheet allows users to estimate the impact of future salary increase. To do this the worksheet estimates total salaries by major category (e.g., Public Safety) based on the most current budget year. If the employees are part of a collective bargaining unit and cost of living increases have been negotiated, these increases should be reflected in the forecast. If the contracts are expired or will in a year, the subsequent impact of a given percent increase can be estimated in this sheet. To update, new salary information will need to be entered based on FY2018 appropriations and formulas adjusted to capture the impact of potential salary increase.

APPENDIX: FY2018-FY2022 FORECAST SPREADSHEETS

THIS PAGE IS INTENTIONALLY BLANK

TOWNSEND**5 YEAR SUMMARY OF PROJECTED REVENUES AND EXPENDITURES**

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
<u>REVENUES</u>						
Property Tax	16,204,000	17,073,290	17,957,401	18,457,224	18,972,455	19,491,633
State Aid	1,587,721	1,600,387	1,613,179	1,626,099	1,639,148	1,652,328
Local Receipts	1,658,152	1,773,552	1,788,370	1,803,336	1,818,452	1,833,719
Enterprise Funds	1,449,147	1,143,286	1,167,794	1,193,229	1,219,643	1,247,087
Other Available Funds	910,827	672,459	672,459	672,459	672,459	672,459
Total Revenues	21,809,847	22,262,974	23,199,202	23,752,348	24,322,158	24,897,227

EXPENDITURES

Municipal Services	6,394,642	6,518,227	6,644,579	6,773,764	6,905,850	7,040,906
Education Services	10,935,285	11,655,737	12,566,366	12,935,933	13,297,210	13,694,765
Employee Benefits	1,822,351	1,974,991	2,129,513	2,283,894	2,415,161	2,539,798
Debt Service- GF Non-Exempt	129,702	143,004	178,663	175,466	160,008	154,114
Debt Service- GF Prop 2 1/2 Exempt	382,396	359,661	205,970	200,192	195,787	182,718
Water Enterprise Fund	782,742	668,329	678,652	689,198	699,971	710,979
Misc Expenses	1,160,288	362,820	371,533	380,463	389,616	398,999
State Assessments	71,493	73,068	74,683	76,338	78,035	79,773
Reserves	130,947	761,699	777,580	793,558	809,636	824,823
Total Expenditures	21,809,847	22,517,536	23,627,538	24,308,806	24,951,274	25,626,874

Surplus / (Deficit)	0	(254,562)	(428,336)	(556,458)	(629,116)	(729,647)
----------------------------	----------	------------------	------------------	------------------	------------------	------------------

TOWN OF TOWNSEND FIVE YEAR REVENUE PROJECTION

REVENUE PROJECTIONS	FY 2015 Actual	FY 2016 Actual	FY2017 Final Recap	Projection Percent	FY2018 Projected	FY2019 Projected	FY2020 Projected	FY2021 Projected	FY2022 Projected	Notes
PROPERTY TAX LEVY										
Prior Year Tax Levy Limit			15,019,394		15,554,981	16,059,855	16,577,352	17,107,786	17,651,480	
2.5% Increase			375,408	2.50%	388,875	401,496	414,434	427,695	441,287	
Prop 2 1/2 Override										
Certified New Growth	108,042	139,851	160,179	0.00%	116,000	116,000	116,000	116,000	116,000	Used 10 Yr Avg.
Levy Limit Total			15,554,981		16,059,855	16,577,352	17,107,786	17,651,480	18,208,767	
Debt Exclusions			382,396		359,661	205,970	200,192	195,787	182,718	See Debt
NMRHSD Portion of Debt Exclusion			211,668		588,000	1,110,144	1,087,878	1,065,613	1,043,347	
NVTHSD Debt Exclusion			67,575		65,774	63,935	61,368	59,575	56,802	
Maximum Allowable Levy			16,216,620		17,073,290	17,957,401	18,457,224	18,972,455	19,491,633	
Unused Taxing Capacity			(12,620)		0	0	0	0	0	
TOTAL			16,204,000		17,073,290	17,957,401	18,457,224	18,972,455	19,491,633	
STATE AID CHERRY SHEET										
Unrestricted General Govt Aid	1,169,456	1,211,556	1,266,556	1.00%	1,279,222	1,292,014	1,304,934	1,317,983	1,331,163	
Chapter 70 Education Aid										
Charter Tuition Reimbursement										
Veteran's Benefits	39,534	46,642	69,285	0.00%	69,285	69,285	69,285	69,285	69,285	
Exempts - Vets, Blind & Surviving Spouse	45,966	52,832	52,971	0.00%	52,971	52,971	52,971	52,971	52,971	
Public Libraries Offset	13,567	14,261	14,320	0.00%	14,320	14,320	14,320	14,320	14,320	
State Owned Land	165,283	165,283	184,589	0.00%	184,589	184,589	184,589	184,589	184,589	
TOTAL	1,433,806	1,490,574	1,587,721		1,600,387	1,613,179	1,626,099	1,639,148	1,652,328	
ESTIMATED LOCAL RECEIPTS										
Motor Vehicle	1,208,372	1,171,028	1,126,400	1.00%	1,200,000	1,212,000	1,224,120	1,236,361	1,248,725	
Meals Tax	85,301	97,330	90,000	1.00%	100,000	101,000	102,010	103,030	104,060	
Licenses & Permits	179,059	188,245	180,000	1.00%	181,800	183,618	185,454	187,309	189,182	
Penalties & Interest on Taxes	111,377	165,445	110,000	0.00%	140,000	140,000	140,000	140,000	140,000	
Payments in Lieu of Taxes (PILOTs)	10,000	10,000	10,000	0.00%	10,000	10,000	10,000	10,000	10,000	
Fees	26,157	20,408	20,057	0.00%	20,057	20,057	20,057	20,057	20,057	
Rentals	32,332	33,302	32,332	0.00%	32,332	32,332	32,332	32,332	32,332	
Other Departmental Revenue	73,334	61,791	62,000	0.00%	62,000	62,000	62,000	62,000	62,000	
Fines & Forfeits	18,990	20,704	15,000	0.00%	15,000	15,000	15,000	15,000	15,000	
Investment Income	11,737	12,716	10,000	0.00%	10,000	10,000	10,000	10,000	10,000	
Misc-Recurring	5,216	3,784	2,363	0.00%	2,363	2,363	2,363	2,363	2,363	
TOTAL			1,658,152		1,773,552	1,788,370	1,803,336	1,818,452	1,833,719	
ENTERPRISE FUNDS										
Water Enterprise			971,814	Various	861,411	878,872	897,085	916,095	935,950	See Enterprise funds
Ambulance Reciepts			275,000	2.50%	281,875	288,922	296,145	303,549	311,137	
Ambulance Warrant Articles			72,333	0.00%		0	0	0	0	
PEGG Access			130,000	0.00%		0	0	0	0	
TOTAL			1,449,147		1,143,286	1,167,794	1,193,229	1,219,643	1,247,087	

TOWN OF TOWNSEND FIVE YEAR REVENUE PROJECTION

REVENUE PROJECTIONS	FY 2015 Actual	FY 2016 Actual	FY2017 Final Recap	Projection Percent	FY2018 Projected	FY2019 Projected	FY2020 Projected	FY2021 Projected	FY2022 Projected	Notes
OTHER AVAILABLE FUNDS										
Free Cash	1,002,967		680,468	0.00%	600,000	600,000	600,000	600,000	600,000	
Other			12,619	0.00%		0	0	0	0	
Stabilization Fund			132,780	0.00%		0	0	0	0	
Wetlands Protection Fund			5,721	0.00%	5,721	5,721	5,721	5,721	5,721	
WTRR receipts reserved			2,900	0.00%	2,900	2,900	2,900	2,900	2,900	
Receipts Reserved			12,500	0.00%		0	0	0	0	
Cemetery sale of lots rec'ts			6,300	0.00%	6,300	6,300	6,300	6,300	6,300	
Comcast gov't access receipts			30,000	0.00%	30,000	30,000	30,000	30,000	30,000	
Septic Title 5 Loan			27,538	0.00%	27,538	27,538	27,538	27,538	27,538	
TOTAL			910,827		672,459	672,459	672,459	672,459	672,459	

TOTAL ESTIMATED REVENUES

21,809,847

22,262,974

23,199,202

23,752,348

24,322,158

24,897,227

TOWNSEND
NEW GROWTH by Property Class

FY	Residential	Open Space	Commercial	Industrial	Personal Property	TOTAL
2007	186,029	0	8,539	0	25,335	219,903
2008	170,298	0	11,151	1,368	12,078	194,895
2009	105,241	0	4,476	0	53,686	163,403
2010	62,428	0	2,905	396	11,135	76,864
2011	64,141	0	906	0	36,833	101,880
2012	22,673	0	1,070	0	33,281	57,024
2013	45,059	0	1,041	527	23,100	69,727
2014	49,987	0	0	0	50,981	100,968
2015	84,936	0	6,323	0	16,783	108,042
2016	120,808	0	5,169	0	13,874	139,851
5 year AVG	64,693	0	2,721	105	27,604	95,122
10 year AVG	91,160	0	4,158	229	27,709	123,256

LOCAL RECEIPTS HISTORY: TOWNSEND

	FY2013	FY 2014	FY 2015	FY 2016
	Actual	Actual	Actual	Actual
Motor Vehicle	1,024,026	1,066,086	1,208,372	1,171,028
Meals Tax	81,273	80,869	85,301	97,330
Room Tax	1,880			
Other Departmental Revenue	1,208			
Penalties & Interest on Taxes	129,405	129,774	111,377	165,445
PILOT	10,000	20,000	10,000	10,000
Fees	24,720	25,597	26,157	20,408
Rentals	27,922	36,350	32,332	33,302
Other Departmental Revenue	90,886	60,007	73,334	61,791
Licenses & Permits	132,085	157,646	179,059	188,245
Fines & Forfeits	9,852	28,703	18,990	20,704
Investment Income	-	17,495	11,737	12,716
Medicare Reimbursement	-			
Misc-Recurring	8,015	26,666	5,216	3,784
Misc Non-Recurring	7,067		56,397	11,678
TOTAL	1,548,339	1,649,193	1,818,272	1,796,431

TOWN OF TOWNSEND FIVE YEAR EXPENDITURE PROJECTION

REVENUE PROJECTIONS	FY2017 Final Recap	Projection Percent	FY2018 Projected	FY2019 Projected	FY2020 Projected	FY2021 Projected	FY2022 Projected	Notes
MUNICIPAL SERVICES (SALARIES)								
General Government	712,742		730,632	748,971	767,770	787,041	806,796	See Salary Calcs
Public Safety	2,061,757		2,113,507	2,166,556	2,220,937	2,276,682	2,333,827	See Salary Calcs
Public Works	505,162		517,842	530,840	544,164	557,822	571,824	See Salary Calcs
Human Services	120,853		123,886	126,996	130,184	133,451	136,801	See Salary Calcs
Culture & Recreation	220,879		226,423	232,106	237,932	243,904	250,026	See Salary Calcs
Other (Comm. Center, Bldg Inspec)	418,916		429,431	440,210	451,259	462,585	474,196	See Salary Calcs
Longevity, Stipends, Etc	137,045		137,045	137,045	137,045	137,045	137,045	
Total Salaries	4,177,354		4,278,766	4,382,723	4,489,290	4,598,531	4,710,514	
MUNICIPAL SERVICES (NON-PERSONNEL)								
General Government	249,503	1.00%	251,998	254,518	257,063	259,634	262,230	
Public Safety	498,116	1.00%	503,097	508,128	513,209	518,342	523,525	
Public Works	958,789	1.00%	968,377	978,061	987,841	997,720	1,007,697	
Human Services	57,990	1.00%	58,570	59,156	59,747	60,345	60,948	
Culture & Recreation	175,408	1.00%	177,162	178,934	180,723	182,530	184,356	
Other (Comm. Center, Bldg Inspec)	277,482	1.00%	280,257	283,059	285,890	288,749	291,636	
Total Expenses	2,217,288		2,239,461	2,261,855	2,284,474	2,307,319	2,330,392	
TOTAL	6,394,642		6,518,227	6,644,579	6,773,764	6,905,850	7,040,906	
EDUCATION								
NMRSD General & Transportation Assessment	9,573,154	3.50%	9,908,214	10,255,002	10,613,927	10,985,414	11,369,904	
NMRSD Debt	258,717		588,000	1,110,144	1,087,878	1,065,613	1,043,347	
NMRSD Septic Debt	27,611		51,721	59,588	58,146	56,705	55,263	
Total NMRSD	9,859,482		10,547,935	11,424,734	11,759,951	12,107,732	12,468,514	
NVTHS Assessment	984,645	3.50%	1,019,108	1,054,776	1,091,694	1,129,903	1,169,449	
NVTHS Debt	91,158		65,774	63,935	61,368	59,575	56,802	
NVTHS BAN			22,920	22,920	22,920			
Total NVTHS	1,075,803		1,107,802	1,141,632	1,175,982	1,189,477	1,226,251	
TOTAL	10,935,285		11,655,737	12,566,366	12,935,933	13,297,210	13,694,765	
EMPLOYEE BENEFITS								
Retirement	690,007	4%-6.5%	734,857	782,623	833,494	866,833	901,507	See Benefits
Unemployment	15,000	0.00%	15,000	15,000	15,000	15,000	15,000	
Health Insurance	1,064,894		1,171,383	1,276,808	1,378,952	1,475,479	1,564,008	See Benefits
Life insurance	450	0.00%	450	450	450	450	450	
Medicare (1.45%)	52,000	2.50%	53,300	54,633	55,998	57,398	58,833	
Deferred Compensation								
Admin Fees								
TOTAL	1,822,351		1,974,991	2,129,513	2,283,894	2,415,161	2,539,798	
DEBT SERVICE- GF Non-Exempt								
Gen Fund Non-Exempt Principle	122,906		111,806	135,806	137,184	126,401	125,192	See Debt
Gen Fund Non-Exempt Interest	6,796		25,198	42,857	38,282	33,607	28,922	See Debt
BAN Interest - Non-Exempt	-							
TOTAL	129,702	-	137,004	178,663	175,466	160,008	154,114	
DEBT SERVICE- GF Prop 2 1/2 exempt								
Debt Exclusion Principle	322,269		309,839	161,732	160,354	160,354	151,732	See Debt
Debt Exclusion Interest	60,128		49,822	44,238	39,838	35,433	30,986	See Debt
Sub-Station BAN Interest	-		6,000	-	-	-	-	See Debt
Authorized/Unissued- Prop 2 1/2 Exempt								
TOTAL	382,396		365,661	205,970	200,192	195,787	182,718	
WATER ENTERPRISE FUND								
Water Debt & Operating Expenses	782,742		668,329	678,652	689,198	699,971	710,979	See Enterprise Funds

TOWN OF TOWNSEND FIVE YEAR EXPENDITURE PROJECTION

REVENUE PROJECTIONS	FY2017 Final Recap	Projection Percent	FY2018 Projected	FY2019 Projected	FY2020 Projected	FY2021 Projected	FY2022 Projected	Notes
STATE and COUNTY ASSESSMENTS								
Air Pollution	2,380	2.50%	2,440	2,500	2,563	2,627	2,693	
MBTA	17,961	2.50%	18,410	18,870	19,342	19,826	20,321	
Regional School Transportation	42,672	2.50%	43,739	44,832	45,953	47,102	48,279	
RMV Non-Renewal Surcharge	8,480	0.00%	8,480	8,480	8,480	8,480	8,480	
TOTAL	71,493		73,068	74,683	76,338	78,035	79,773	
MISCELLANEOUS EXPENSES								
Liability Insurance	167,590	2.50%	189,205	193,935	198,783	203,753	208,847	
Workers Compensation	42,410	2.50%	43,470	44,557	45,671	46,813	47,983	
Raise & Appropriate Articles	113,000	2.50%	115,825	118,721	121,689	124,731	127,849	
Special Town Meeting	309,849							
Free Cash Articles	383,119							
Other Funding Source Article	130,000							
Cherry Sheet Offsets	14,320	0.00%	14,320	14,320	14,320	14,320	14,320	
TOTAL	1,160,288		362,820	371,533	380,463	389,616	398,999	
RESERVES/OTHER								
Allowance for Abatements (Overlay)	101,697	0.75%	120,449	124,330	128,308	132,386	136,566	0.75% of Net Annual Levy
General Stabilization Fund			200,000	200,000	200,000	200,000	200,000	
Snow & Ice Deficit			200,000	200,000	200,000	200,000	200,000	
Capital Stabilization Fund			200,000	200,000	200,000	200,000	200,000	
General Reserve Fund	29,250	0.50%	41,250	53,250	65,250	77,250	88,257	Phase to 0.5% over 5 Yrs
TOTAL	130,947		761,699	777,580	793,558	809,636	824,823	

TOTAL EXPENDITURES

21,809,847 22,517,536 23,627,538 24,308,806 24,951,274 25,626,874

TOWN OF TOWNSEND FIVE YEAR LABOR COSTS PROJECTION

LABOR COSTS	FY2017 Final Recap	FY2018 Projected	FY2019 Projected	FY2020 Projected	FY2021 Projected	FY2022 Projected
Step Increases		0.50%	0.50%	0.50%	0.50%	0.50%
Cost of Living (COLA)		2.00%	2.00%	2.00%	2.00%	2.00%
Total		2.50%	2.50%	2.50%	2.50%	2.50%

General Government	712,742	730,632	748,971	767,770	787,041	806,796
Public Safety	2,061,757	2,113,507	2,166,556	2,220,937	2,276,682	2,333,827
Public Works	505,162	517,842	530,840	544,164	557,822	571,824
Human Services	120,853	123,886	126,996	130,184	133,451	136,801
Culture & Recreation	220,879	226,423	232,106	237,932	243,904	250,026
Other (Comm. Center, Bldg Inspec)	418,916	429,431	440,210	451,259	462,585	474,196
Longevity, Stipends, Etc.	137,045	137,045	137,045	137,045	137,045	137,045
TOTAL	4,177,354	4,278,766	4,382,723	4,489,290	4,598,531	4,710,514

Total Financial Impact by Dollar	101,412	103,957	106,567	109,241	111,983
Total Financial Impact by Percent	2.43%	2.43%	2.43%	2.43%	2.44%

TOWN OF TOWNSEND FIVE YEAR EMPLOYEE BENEFITS PROJECTION

Personnel Benefits	FY2017 Final Recap	FY2018 Projected	FY2019 Projected	FY2020 Projected	FY2021 Projected	FY2022 Projected
% growth		6.50%	6.50%	6.50%	4.00%	4.00%
Country Retirement	690,007	734,857	782,623	833,494	866,833	901,507
% growth		10.00%	9.00%	8.00%	7.00%	6.00%
Health Insurance	1,064,894	1,171,383	1,276,808	1,378,952	1,475,479	1,564,008
% growth		2.5%	2.5%	2.5%	2.5%	2.5%
Medicare Matching	52,000	53,300	54,633	55,998	57,398	58,833
Unemployment Compensation	15,000	15,000	15,000	15,000	15,000	15,000
Life Insurance	450	450	450	450	450	450
Deferred Compensation						
Total Employee Benefits	1,822,351	1,974,991	2,129,513	2,283,894	2,415,161	2,539,798

County Retirement Inflated at 6.5% thru FY 2020 and 4% thereafter

Health increase increases by 10% in FY 18; 9% in FY 19; 8% in FY 20; 7% in FY 21; and 6% in FY 22

Town is currently in discussions with labor regarding employees assuming a greater share of Health Insurance, beginning in FY 18

Plan Design changes being considered for FY 19

TOWN OF TOWNSEND FIVE YEAR WATER ENTERPRISE FUND REVENUE AND EXPENDITURE

Water Enterprise Fund	FY2017 Final Recap	Projection Percent	FY2018 Projected	FY2019 Projected	FY2020 Projected	FY2021 Projected	FY2022 Projected
WATER REVENUE	971,813		861,411	878,872	897,085	916,095	935,950
WATER EXPENDITURES							
Personnel	317,052	2.50%	318,637	326,603	334,768	343,137	351,716
Contractual	152,200	1.00%	153,722	155,259	156,812	158,380	159,964
Supplies	75,500	1.00%	76,255	77,018	77,788	78,566	79,351
Other	5,700	1.00%	5,757	5,815	5,873	5,931	5,991
Raise & Appropriate Articles	115,000						
Capital	10,000		10,000	10,000	10,000	10,000	10,000
Debt	107,290		103,958	103,957	103,957	103,957	103,957
Water-Only Expenses	782,742		668,329	678,652	689,198	699,971	710,979
Transfer to Town (benefits & overhead)	189,071		193,082	200,220	207,887	216,123	224,971
TOTAL	971,813		861,411	878,872	897,085	916,095	935,950

WATER ENTERPRISE INDIRECT COSTS							
Amount due for Legal Fees	actual						

WATER DEPARTMENT BENEFITS							
Workers Compensation	4,127		4,127	4,127	4,127	4,127	4,127
Medicare Town Share	4,597		4,620	4,736	4,854	4,975	5,100
County Retirement	53,167		57,155	57,155	57,155	57,155	57,155
General Liability Insurance	4,521		4,521	4,521	4,521	4,521	4,521
Prof Liab/Public officials/crime Ins	2,211		2,211	2,211	2,211	2,211	2,211
Property & Machinery Insurance	11,533		11,533	11,533	11,533	11,533	11,533
Excess Liability Insurance	1,268		1,268	1,268	1,268	1,268	1,268
Auto Liability Insurance	1,625		1,625	1,625	1,625	1,625	1,625
Debt Serv Landfill Trans WBWC	12,369		12,369	12,369	12,369	12,369	12,369
Health Insurance (4 employees)	93,628	7-8%	93,628	100,650	108,199	116,314	125,037
Life Insurance	24		24	24	24	24	24
Total Water Dept Benefits	189,071		193,082	200,220	207,887	216,123	224,971
Less Interest Earned	0.00						
TOTAL NET DUE TO TOWN	189,071		193,082	200,220	207,887	216,123	224,971

Total Share of Town costs	7.7053%
----------------------------------	----------------

TOWN OF TOWNSEND DEBT SERVICE SUMMARY

DEBT SERVICE	FY2017 Final Recap	FY2018 Projected	FY2019 Projected	FY2020 Projected	FY2021 Projected	FY2022 Projected	FY2023 Projected	FY2024 Projected	FY2025 Projected	FY2026 Projected	FY2027 Projected	FY2028 Projected	FY2029 Projected	FY2030 Projected
Gen Fund Non-Exempt Principal	122,906	111,806	135,806	137,184	126,401	125,192	126,570	119,206	109,525	109,525	109,525	109,524	-	-
Gen Fund Non-Exempt Interest	6,796	25,198	42,857	38,282	33,607	28,922	24,303	19,595	14,875	10,625	6,375	2,125	-	-
Total Non-Exempt Debt Service	129,702	137,004	178,663	175,466	160,008	154,114	150,873	138,801	124,400	120,150	115,900	111,649		
Gen Fun Exempt Principal	322,269	309,839	161,732	160,354	160,354	151,732	90,354	90,319						
Gen Fund Exempt Interest	60,128	49,822	44,238	39,838	35,433	30,986	26,890	25,668						
Total Exempt Debt Service	382,396	359,661	205,970	200,192	195,787	182,718	117,244	115,987	-	-	-	-		
Water Enterprise Principle	84,964	86,680	88,431	90,217	92,040	93,900	95,796	97,732	99,706	101,720	60,974			
Water Enterprise Interest	18,994	17,277	15,526	13,740	11,917	10,058	8,161	6,225	4,251	2,237	610			
otal Water Enterprise Debt Service	103,958	103,957	103,957	103,957	103,957	103,957	103,957	103,957	103,957	103,957	61,584			
Sewer Enterprise Principle														
Sewer Enterprise Interest														
otal Sewer Enterprise Debt Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Station BAN Interest		6,000												
Total Debt Service	616,056	606,623	488,590	479,615	459,752	440,789	372,073	358,745	228,357	224,107	177,484	111,649	-	-

NOTE: Water Debt in Enterprise Fund
School (Both NMRSD and NVTHS) debt is part of School Assessment. Portion of both school debt are excluded from tax levy limits
Portion of Memorial Hall/Land and Fire Truck are excluded
Sub-Station borrowed in July 2017. \$1 million for 10 yrs at 4.25%. First interest in FY 18. First Principle in FY 19
BAN Interest at 3%

Town of Townsend, Massachusetts
Actual/Authorized/Proposed Debt Service
Actual Debt Service as of June 30, 2016 (Payments Net of MWPAT/MCWT Subsidies)

Date of Issue	Purpose	Type of Payment	2017	2018	2019	2020	2021	2022	2023	2024	2025
<u>NON-EXEMPT PRINCIPLE</u>											
12/15/2010	Cur Ref of 99 - Water (O)	<i>Principal</i>	10,000.00	5,000.00	-	-	-	-	-	-	-
6/15/2004	Landfill Closure 1 (OE)	<i>Principal</i>	8,268.00	8,268.00	8,268.00	9,646.00	9,646.00	8,268.00	9,646.00	9,681.00	-
8/1/2001	MWPAT T5-97-1171 (OE)	<i>Principal</i>	10,783.00	10,783.00	10,783.00	10,783.00	-	-	-	-	-
7/1/2004	MWPAT 97-1171-1 (OE)	<i>Principal</i>	7,230.00	7,230.00	7,230.00	7,230.00	7,230.00	7,399.00	7,399.00	-	-
12/18/2007	MWPAT T5-97-1171-2B (OE)	<i>Principal</i>	9,525.00	9,525.00	9,525.00	9,525.00	9,525.00	9,525.00	9,525.00	9,525.00	9,525.00
12/15/2010	Cur Ref of 99 - Land Acq (I)	<i>Principal</i>	10,000.00	10,000.00	-	-	-	-	-	-	-
12/15/2010	New Money - Fire Truck (I)	<i>Principal</i>	45,750.00	42,700.00	-	-	-	-	-	-	-
12/15/2010	New Money - Fire Truck (IE)	<i>Principal</i>	21,350.00	18,300.00	-	-	-	-	-	-	-
7/1/2017	Sub-Station	<i>Principal</i>	-	-	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00
Non-Exempt Principle			122,906.00	111,806.00	135,806.00	137,184.00	126,401.00	125,192.00	126,570.00	119,206.00	109,525.00
<u>NON-EXEMPT INTEREST</u>											
12/15/2010	Cur Ref of 99 - Water (O)	<i>Interest</i>	281.25	75.00	-	-	-	-	-	-	-
	Landfill Closure 1 (OE)	<i>Interest</i>	3,584.52	2,854.02	2,481.96	2,156.78	1,731.68	1,296.94	927.68	469.50	-
12/15/2010	Cur Ref of 99 - Land Acq (I)	<i>Interest</i>	431.25	150.00	-	-	-	-	-	-	-
12/15/2010	New Money - Fire Truck (IE)	<i>Interest</i>	2,499.10	869.25	-	-	-	-	-	-	-
7/1/2017	Sub-Station		-	21,250.00	40,375.00	36,125.00	31,875.00	27,625.00	23,375.00	19,125.00	14,875.00
Non-Exempt Interest			6,796.12	25,198.27	42,856.96	38,281.78	33,606.68	28,921.94	24,302.68	19,594.50	14,875.00
<u>EXEMPT PRINCIPLE</u>											
6/15/2004	Public Building (IE)	<i>Principal</i>	45,000.00	45,000.00	45,000.00	45,000.00	45,000.00	40,000.00	-	-	-
	Wate Extension	<i>Principal</i>	10,000.00	-	-	-	-	-	-	-	-
6/15/2004	Land Acquisition 1 (IE)	<i>Principal</i>	25,000.00	25,000.00	25,000.00	25,000.00	25,000.00	25,000.00	-	-	-
6/15/2004	Land Acquisition 2 (IE)	<i>Principal</i>	10,000.00	10,000.00	5,000.00	-	-	-	-	-	-
6/15/2004	Landfill Closure 1 (OE)	<i>Principal</i>	56,732.00	56,732.00	56,732.00	55,354.00	55,354.00	56,732.00	55,354.00	55,319.00	-
6/15/2004	Landfill Closure 2 (OE)	<i>Principal</i>	30,000.00	30,000.00	30,000.00	35,000.00	35,000.00	30,000.00	35,000.00	35,000.00	-
12/15/2010	New Money - Fire Truck (IE)	<i>Principal</i>	13,650.00	11,700.00	-	-	-	-	-	-	-
12/15/2010	New Money - Fire Truck (I)	<i>Principal</i>	26,886.52	26,407.44	-	-	-	-	-	-	-
12/15/2010	Cur Ref of 99 - Memorial Hall (IE)	<i>Principal</i>	105,000.00	105,000.00	-	-	-	-	-	-	-
Exempt Principle			322,268.52	309,839.44	161,732.00	160,354.00	160,354.00	151,732.00	90,354.00	90,319.00	-
<u>EXEMPT INTEREST</u>											
8/1/2001	MWPAT T5-97-1171 (OE)	<i>Interest</i>	2,143.20	1,523.15	903.10	296.54	-	-	-	-	-
		<i>Subsidy</i>	(2,143.20)	(1,523.15)	(903.10)	(296.54)	-	-	-	-	-
	<i>Net Interest (Net of Subsidy)</i>		-	-	-	-	-	-	-	-	-
	Public Building (IE)	<i>Interest</i>	12,342.50	10,092.50	8,067.50	6,042.50	3,972.50	1,880.00	-	-	-
	Wate Extension		281.25	-	-	-	-	-	-	-	-
	Land Acquisition 1 (IE)	<i>Interest</i>	6,987.50	5,737.50	4,612.50	3,487.50	2,337.50	1,175.00	-	-	-
	Land Acquisition 2 (IE)	<i>Interest</i>	1,175.00	675.00	225.00	-	-	-	-	-	-
	Landfill Closure 1 (OE)	<i>Interest</i>	20,855.48	21,585.98	21,958.04	22,283.22	22,708.32	23,143.06	23,512.32	23,970.50	-
	Landfill Closure 2 (OE)	<i>Interest</i>	12,225.00	10,725.00	9,375.00	8,025.00	6,415.00	4,787.50	3,377.50	1,697.50	-
	MWPAT 97-1171-1 (OE)	<i>Interest</i>	2,367.00	2,005.00	1,643.00	1,282.00	921.00	555.00	185.00	-	-
		<i>Subsidy</i>	(2,367.00)	(2,005.00)	(1,643.00)	(1,282.00)	(921.00)	(555.00)	(185.00)	-	-
	<i>Net Interest (Net of Subsidy)</i>		-	-	-	-	-	-	-	-	-
	MWPAT T5-97-1171-2B (OE)	<i>Interest</i>	-	-	-	-	-	-	-	-	-
	New Money - Fire Truck (IE)	<i>Interest</i>	1,733.07	555.75	-	-	-	-	-	-	-
	Cur Ref of 99 - Memorial Hall (IE)	<i>Interest</i>	4,528.13	450.00	-	-	-	-	-	-	-
Exempt Interest			60,127.93	49,821.73	44,238.04	39,838.22	35,433.32	30,985.56	26,889.82	25,668.00	-

Town of Townsend, Massachusetts
Actual/Authorized/Proposed Debt Service
Actual Debt Service as of June 30, 2016 (Payments Net of MWPAT/MCWT Subsidies)

Date of Issue	Purpose	Type of Payment	2017	2018	2019	2020	2021	2022	2023	2024	2025
WATER ENTERPRISE PRINCIPLE											
11/16/2005	MWPAT DW-04-16 (O)	<i>Principal</i>	35,043.00	35,751.00	36,473.00	37,210.00	37,962.00	38,729.00	39,511.00	40,309.00	41,123.00
12/9/2008	MWPAT DW-04-16A (O)	<i>Principal</i>	49,921.07	50,929.26	51,958.01	53,007.31	54,078.14	55,170.51	56,285.39	57,422.79	58,582.70
Total Water Principle			84,964.07	86,680.26	88,431.01	90,217.31	92,040.14	93,899.51	95,796.39	97,731.79	99,705.70
WATER ENTERPRISE INTEREST											
11/16/2005	MWPAT DW-04-16 (O)	<i>Interest</i>	7,330.87	6,622.93	5,900.69	5,163.86	4,412.14	3,645.23	2,862.83	2,064.63	1,250.31
12/9/2008	MWPAT DW-04-16A (O)	<i>Interest</i>	11,662.69	10,654.19	9,625.32	8,575.67	7,504.81	6,412.32	5,297.77	4,160.69	3,000.63
Total Water Interest			18,993.56	17,277.12	15,526.01	13,739.53	11,916.95	10,057.55	8,160.60	6,225.32	4,250.94
DEBT SUMMARY			2017	2018	2019	2020	2021	2022	2023	2024	2025
Total Actual Principal			530,138.59	508,325.70	385,969.01	387,755.31	378,795.14	370,823.51	312,720.39	307,256.79	209,230.70
Total Actual Interest			85,917.60	92,297.12	102,621.01	91,859.53	80,956.95	69,965.05	59,353.10	51,487.82	19,125.94
Total Actual Debt Service			616,056.19	600,622.82	488,590.02	479,614.84	459,752.09	440,788.56	372,073.49	358,744.61	228,356.64
Self-Supporting Principal			84,964.07	86,680.26	88,431.01	90,217.31	92,040.14	93,899.51	95,796.39	97,731.79	99,705.70
Self-Supporting Interest			18,993.56	17,277.12	15,526.01	13,739.53	11,916.95	10,057.55	8,160.60	6,225.32	4,250.94
Total Self-Supporting Debt			103,957.63	103,957.38	103,957.02	103,956.84	103,957.09	103,957.06	103,956.99	103,957.11	103,956.64
Total Gen Fund Outstanding Principal			445,174.52	421,645.44	297,538.00	297,538.00	286,755.00	276,924.00	216,924.00	209,525.00	109,525.00
Total Gen Fund Outstanding Interest			66,924.04	75,020.00	87,095.00	78,120.00	69,040.00	59,907.50	51,192.50	45,262.50	14,875.00
Total Outstanding Long-Term Debt Servi			512,098.56	496,665.44	384,633.00	375,658.00	355,795.00	336,831.50	268,116.50	254,787.50	124,400.00
<i>MSBA Grant Payments</i>			-	-	-	-	-	-	-	-	-
Net Outstanding Long-Term Debt Servi			512,098.56	496,665.44	384,633.00	375,658.00	355,795.00	336,831.50	268,116.50	254,787.50	124,400.00
Exempt Principal			322,268.52	309,839.44	161,732.00	160,354.00	160,354.00	151,732.00	90,354.00	90,319.00	-
Exempt Interest			60,127.93	49,821.73	44,238.04	39,838.22	35,433.32	30,985.56	26,889.82	25,668.00	-
Actual Exempt Debt Service			382,396.45	359,661.17	205,970.04	200,192.22	195,787.32	182,717.56	117,243.82	115,987.00	-
Actual Non-Exempt Gen Fund Debt Servi			129,702.12	137,004.27	178,662.96	175,465.78	160,007.68	154,113.94	150,872.68	138,800.50	124,400.00

Town of Townsend, Massachusetts
Actual/Authorized/Proposed Debt Service
Actual Debt Service as of June 30, 2016 (Payments Net of MWI)

Date of Issue	Purpose	2026	2027	2028	2029	2030	Total
<u>NON-EXEMPT PRINCIPLE</u>							
12/15/2010	Cur Ref of 99 - Water (O)	-	-	-			15,000.00
6/15/2004	Landfill Closure 1 (OE)						71,691.00
8/1/2001	MWPAT T5-97-1171 (OE)						43,132.00
7/1/2004	MWPAT 97-1171-1 (OE)						50,948.00
12/18/2007	MWPAT T5-97-1171-2B (OE)	9,525.00	9,525.00	9,524.00			114,299.00
12/15/2010	Cur Ref of 99 - Land Acq (I)	-	-	-			20,000.00
12/15/2010	New Money - Fire Truck (I)	-	-	-			88,450.00
12/15/2010	New Money - Fire Truck (IE)						39,650.00
7/1/2017	Sub-Station	100,000.00	100,000.00	100,000.00			1,000,000.00
Non-Exempt Principle		109,525.00	109,525.00	109,524.00	-	-	1,443,170.00
<u>NON-EXEMPT INTEREST</u>							
12/15/2010	Cur Ref of 99 - Water (O)	-	-				356.25
	Landfill Closure 1 (OE)						15,503.08
12/15/2010	Cur Ref of 99 - Land Acq (I)	-	-				581.25
12/15/2010	New Money - Fire Truck (IE)						3,368.35
7/1/2017	Sub-Station	10,625.00	6,375.00	2,125.00			233,750.00
Non-Exempt Interest		10,625.00	6,375.00	2,125.00	-	-	253,558.93
<u>EXEMPT PRINCIPLE</u>							
6/15/2004	Public Building (IE)	-	-	-			265,000.00
	Wate Extension						10,000.00
6/15/2004	Land Acquisition 1 (IE)	-	-	-			150,000.00
6/15/2004	Land Acquisition 2 (IE)	-	-	-			25,000.00
6/15/2004	Landfill Closure 1 (OE)	-	-	-			448,309.00
6/15/2004	Landfill Closure 2 (OE)	-	-	-			260,000.00
12/15/2010	New Money - Fire Truck (IE)	-	-	-			25,350.00
12/15/2010	New Money - Fire Truck (I)						53,293.96
12/15/2010	Cur Ref of 99 - Memorial Hall (IE)	-	-	-			210,000.00
Exempt Principle		-	-	-	-	-	1,446,952.96
<u>EXEMPT INTEREST</u>							
8/1/2001	MWPAT T5-97-1171 (OE)	-	-				4,865.99
							(4,865.99)
	<i>Net Interest (Net o</i>	-	-	-			-
	Public Building (IE)	-	-				42,397.50
	Wate Extension						281.25
	Land Acquisition 1 (IE)	-	-				24,337.50
	Land Acquisition 2 (IE)	-	-				2,075.00
	Landfill Closure 1 (OE)	-	-				180,016.92
	Landfill Closure 2 (OE)	-	-				56,627.50
	MWPAT 97-1171-1 (OE)	-	-	-			8,958.00
		-	-	-			(8,958.00)
	<i>Net Interest (Net o</i>	-	-	-			-
	MWPAT T5-97-1171-2B (OE)	-	-	-			-
	New Money - Fire Truck (IE)	-	-				2,288.82
	Cur Ref of 99 - Memorial Hall (IE)	-	-				4,978.13
Exempt Interest		-	-	-	-	-	313,002.62
							6,913,369.01

Town of Townsend, Massachusetts
Actual/Authorized/Proposed Debt Service
Actual Debt Service as of June 30, 2016 (Payments Net of MWI)

Date of Issue	Purpose	2026	2027	2028	2029	2030	Total
WATER ENTERPRISE PRINCIPLE							
11/16/2005	MWPAT DW-04-16 (O)	41,954.00	-	-			
12/9/2008	MWPAT DW-04-16A (O)	59,766.10	60,973.97	-			
Total Water Principle		101,720.10	60,973.97	-	-	-	
WATER ENTERPRISE INTEREST							
11/16/2005	MWPAT DW-04-16 (O)	419.54	-				
12/9/2008	MWPAT DW-04-16A (O)	1,817.14	609.74				
Total Water Interest		2,236.68	609.74	-	-	-	-
		2026	2027	2028	2029	2030	
DEBT SUMMARY	Total Actual Principal	211,245.10	170,498.97	109,524.00	-	-	3,882,283.21
	Total Actual Interest	12,861.68	6,984.74	2,125.00	-	-	675,555.54
	Total Actual Debt Service	224,106.78	177,483.71	111,649.00	-	-	4,557,838.75
	Self-Supporting Principal	101,720.10	60,973.97	-	-	-	-
	Self-Supporting Interest	2,236.68	609.74	-	-	-	-
	Total Self-Supporting Debt	103,956.78	61,583.71	-	-	-	1,101,154.25
	Total Gen Fund Outstanding P	109,525.00	109,525.00	109,524.00	-	-	2,890,122.96
	Total Gen Fund Outstanding Ir	10,625.00	6,375.00	2,125.00	-	-	566,561.54
	Total Outstanding Long-Term I	120,150.00	115,900.00	111,649.00	-	-	3,456,684.50
	MSBA Grant Payments	-	-	-	-	-	-
	Net Outstanding Long-Term D	120,150.00	115,900.00	111,649.00	-	-	3,456,684.50
	Exempt Principal	-	-	-	-	-	1,446,952.96
	Exempt Interest	-	-	-	-	-	313,002.62
	Actual Exempt Debt Service	-	-	-	-	-	1,759,955.58
	Actual Non-Exempt Gen Fund	120,150.00	115,900.00	111,649.00	-	-	2,797,883.18

THIS PAGE IS INTENTIONALLY BLANK

ABOUT THE CENTER

The Edward J. Collins, Jr. Center for Public Management in the McCormack Graduate School of Policy and Global Studies at the University of Massachusetts Boston was established in 2008 to improve the efficiency and effectiveness of all levels of government. The Center is funded by the Commonwealth and through fees charged for its services.



*Edward J. Collins, Jr. Center for Public Management
John W. McCormack Graduate School of Policy and Global Studies
University of Massachusetts Boston
100 Morrissey Blvd.
Boston, MA 02125
(617) 287-4824 (t)
(617) 287-5566 (f)
<http://www.umb.edu/cpm>*



EDWARD J. COLLINS, JR. CENTER FOR PUBLIC MANAGEMENT
JOHN W. McCORMACK GRADUATE SCHOOL OF POLICY AND GLOBAL STUDIES
UNIVERSITY OF MASSACHUSETTS BOSTON