

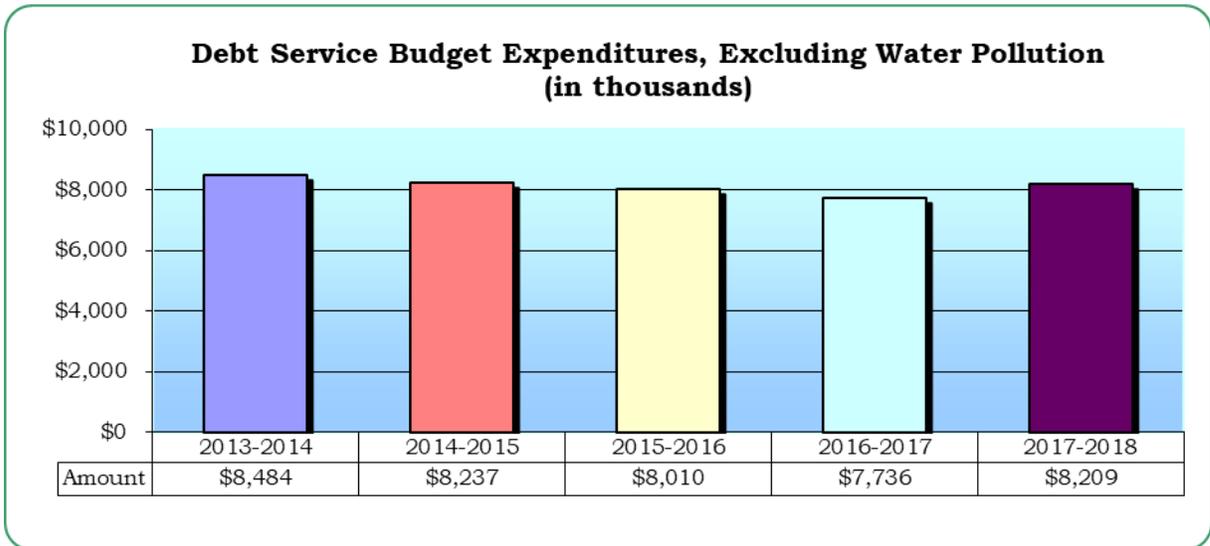
DEBT MANAGEMENT

ORGCODE	DESCRIPTION	2016 ACTUAL EXPENDITURE	2017 ORIGINAL BUDGET	2017 REVISED BUDGET	2018 BUDGET REQUEST	2018 JOINT BOARD
DEBT1019	LONG TERM DEBT PRINCIPAL PAYMENT	\$6,177,000	\$6,164,000	\$6,164,000	\$6,119,000	\$6,119,000
DEBT1019	LONG TERM DEBT INTEREST PAYMENT	2,130,755	1,897,978	1,897,978	2,381,283	2,381,283
DEBT1019	SHORT TERM DEBT PRINCIPAL PAYMENT	500,000	0	0	0	0
DEBT1019	SHORT TERM DEBT INTEREST PAYMENT	71,933	100,000	100,000	125,000	125,000
TOTAL DEBT SERVICE		\$8,879,688	\$8,161,978	\$8,161,978	\$8,625,283	\$8,625,283

Program Summary

This series of line items reflects those expenditures made by the City for principal and interest payments for short and long-term debt. A debt service fund was created for the payments made to service this type of debt. The debt service fund is not a budgetary fund. Deposits to the debt service fund are in the form of operating transfers out from the general fund.

Shown below are the expenditures in the debt service fund during the past five fiscal years excluding Water Pollution payments.



Debt Management (continued)

Program Commentary

Capital infrastructure is essential to all municipalities large and small. The amounts budgeted and expended for debt service have a direct relationship to the City's strategies for financing capital improvements. It is important to prepare a short-term and a long-term plan for the replacement and/or addition of City fixed assets and to estimate the available funding sources. To implement both plans (short and long-term), the City prepares a Capital Improvement Program (CIP). The CIP is a multi-year plan that identifies capital projects to be funded during the planning period. This represents the City's long-term infrastructure plan. The City also approves a Capital Budget, which represents the first year of the CIP. The Capital Budget, described beginning on page 343, is the City's annual appropriation for capital spending and is legally adopted by the City.

The City uses a policy of providing a mix of current revenues, state and federal grants, intergovernmental contributions, and bond proceeds to fund its capital projects. However, given the advantageously low long-term debt rate environment during the past few years, the City has consciously chosen to issue long-term general obligation debt for its larger capital projects.

Bond Rating

The Government Finance Officers Association (GFOA) Elected Official's Guide to Rating Agency Presentations describes a **bond rating** as an independent assessment of the relative credit risk associated with purchasing and holding a particular bond, and the likelihood that the obligation will be repaid. The rating focuses on the City's ability and willingness to make full and timely payments. The City of Bristol uses the services of three rating agencies.

There are three primary agencies that rate debt issuances of private and for-profit entities. They are: Moody's Investors Service, Standard & Poor's Ratings Service, and Fitch Inc.

Bond ratings are public information, and the rating agencies use a number of means to distribute their ratings to a wide audience. Investors are the most common users of bond ratings. But because ratings are so accessible and easy to understand, the media, policy makers, and taxpayers also use them and often consider the rating an indication of a municipality's, like Bristol's, overall fiscal health.

A credit rating does affect the cost of borrowing. A high bond rating indicates low credit risk to the investor; low credit risk results in a higher sale price and lower coupon interest rates for the bond's issuer (the City). When all other factors are held constant, borrowing will be more costly for an issuer with a lower bond rating.

In assigning a credit rating, the rating agency's primary concern is the issuer's willingness and ability to repay the debt on time and in full. Different factors are then analyzed. The credit analyst will focus on four primary factors:

- ✓ **Debt management** – An assessment of the community's ability to support existing and planned debt obligations, using key financial ratios as indicators such as debt per capita and overall debt burden.
- ✓ **Administrative issues** – A review of the organization and authority of the government's administration and services for which it is directly

Debt Management (continued)

responsible. Also included in this category is an assessment of the goals and philosophies of management and the type of budgeting used.

- ✓ **Financial performance** – An analysis of revenue and expenditure trends and the adequacy, dependability, and scope of revenues, including the issuer’s ability to tap into additional revenue sources for debt service. This category also includes financial position and the size and composition of fund balance.
- ✓ **Economic base** – An evaluation of the jurisdiction’s economic outlook focusing on the tax base, income, population, employment, diversity and composition of employers, building permits, vacancy rates, and real estate values.

Of all the factors, the economic base tends to carry the most weight in rating, but it is also the category over which issuers have the least amount of control. Also of prime importance is financial performance. The other two factors – administrative factors and debt management – considered “lesser” factors in the past, have been brought to the forefront by the rating agencies. In fact, all three agencies have cited that “Bristol’s experienced and capable fiscal management has contributed to its consistent financial performance.”

Standard and Poor’s upgraded the City’s bond rating from AA to AA+, the Moody’s Investors Service rating remained at Aa3 and the Fitch ratings remained at AA.

Standard and Poor’s and Fitch assigned ratings of “SP-1+” and “F1+”, respectively to the taxable notes.

Bonds are issued to permanently finance various general purpose and school projects. Notes are issued to provide temporary financing for general purpose projects (such as the former mall site purchase and demolition and related expenses).

**Program Summaries-
Debt Management**

Debt Management (continued)

The following is a Ratings Guide to the three public rating agencies.

Rating	Description
Fitch IBCA	
AAA	Highest credit quality
AA (+ or -)*	Very high credit quality
A (+ or -)	High credit quality
BBB (+ or -)	Good credit quality
BB (+ or -)	Speculative
B (+ or -)	Highly speculative
CCC,CC,C (+ or -)	High default risk
D	In default
Moody's	
Aaa	Best quality
Aa1, Aa2, Aa3	High quality by all standards
A1, A2, A3	Upper medium grade
Baa1, Baa2, Baa3	Medium grade
Ba1, Ba2, Ba3	Has speculative elements
B1, B2, B3	Generally lacks characteristics of a desirable investment
Caa	Poor standing; may be in default
Ca	Speculative in a high degree; often in default
C	Lowest rated class of bonds; extremely poor prospects
Standard & Poor's	
AAA	Highest quality; extremely strong capacity to pay
AA (+ or -)	High quality; very strong capacity to pay
A (+ or -)	Strong capacity to pay principal and interest
BBB (+ or -)	Adequate capacity to pay principal and interest
BB (+ or -)	Low speculative
B (+ or -)	Speculative
CCC,CC (+ or -)	High speculation
C	Income bonds on which no interest is being paid
D	In default
* "+" or "-" may be added to Fitch IBCA and Standard & Poor's ratings to indicate the relative positions of a credit within a rating category. The digits 1-3 appended to Moody's ratings perform the same function.	

The Past (Debt Issuances)

The City's most recent long term debt issuances were May 30, 2017, with a total of \$21,130,000 issued, November 17, 2015, with a total of \$7,310,000 issued and June 15, 2011, with a total of \$40,400,000 issued.

Also issued on May 30, 2017, were \$3,400,000 in tax exempt General Obligation Notes due May 29, 2018.

On January 20, 2017, taxable notes of \$4,500,000 were rolled over for \$4,000,000, and will mature October 19, 2017. The projects covered by the taxable notes are the Mall Purchase/Legal, \$3,385,000 and Mall Demolition/Abatement, \$615,000.

**Program Summaries-
Debt Management**

Debt Management (continued)

Current Budget (Debt Service)

The City has budgeted \$8,417,385 for existing debt service obligations in the 2017-2018 general fund budget. This amount fully funds the City of Bristol's debt service principal and interest payments on outstanding obligations. The Water Pollution Control budget found in the Special Revenue tab of this document contains the remaining funds of \$207,898 for its portion of debt service from the June 2011 issue. A listing of projects and outstanding bonds as of July 1, 2017 can be found on page 365.

Capital Project Loan Obligations

The City entered into Project Loan and Project Grant Agreements from 2002 through 2006 and 2016 with the State of Connecticut at an annual rate of 2%. The purpose of the loans was for Water Pollution Control upgrades to existing sewer lines to reduce flow volume into the wastewater treatment plant.

These obligations are being repaid monthly through sewer user fees within the Water Pollution Control Capital Non-Recurring Fund.

Shown below are the Clean Water Loans that were received by the City of Bristol. A schedule of the remaining balances can be found on page 368.

Contract #	Date of Issuance	Amount Issued
415 D/C	6/30/2002	\$ 1,409,533
498 D/C	6/30/2002	\$ 1,483,380
504 C	12/31/2003	\$ 1,488,101
562 C	11/30/2004	\$ 693,527
464 C	5/31/2006	\$ 470,225
622 CSL	1/20/2016	\$ 631,833
Total Cleanwater		\$ 6,176,599

Capital Projects

A detailed explanation of approved Capital Projects for the upcoming year to be funded, in part, by debt issuance may be found behind the Capital Budget Summary tab of this document. The City issued \$21,130,000 in long-term bonds in May 2017. The proceeds were used primarily to renovate Fire Station #4, to construct two synthetic athletic fields, for improvements at Muzzy Field, for various public works projects and \$3,391,000 for schools. The City issued \$40,400,000 in long-term bonds in June 2011; the majority of which was used for the construction of two new K-8 schools, with the remainder for various citywide infrastructure improvements. On page 369 of this document is a listing of bonding appropriations the City has made within the Capital Projects Funds.

Debt Management (continued)

The Future (Debt Policy)

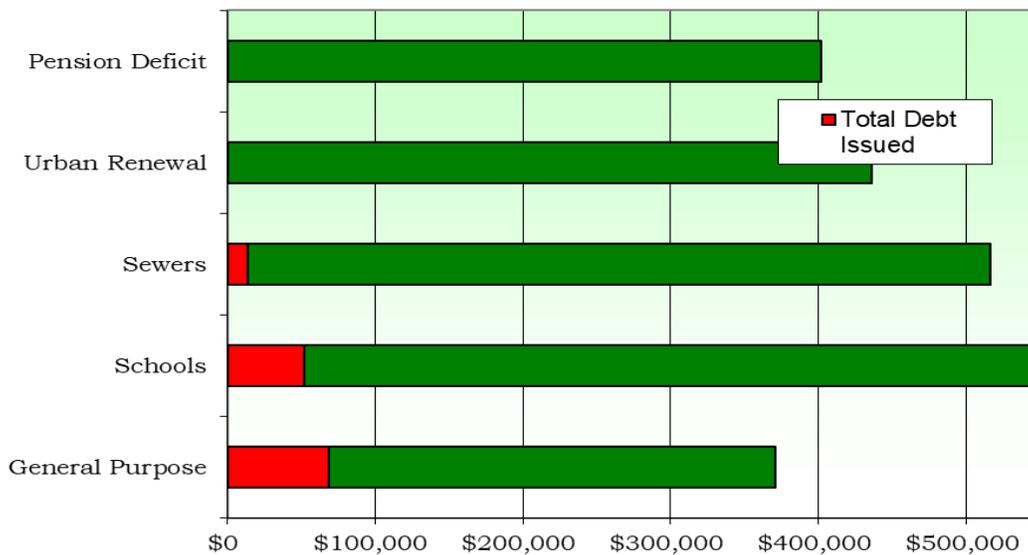
In keeping with its debt policy and long-term goals, the City will strive not to issue bonds more than once every two-three fiscal years. The City adopted a debt policy on May 22, 2001 that can be found behind the Policy Initiatives tab of this document.

The City issues debt only for projects included in the Capital Improvement Program and approved in the capital improvement budget. Before doing so, the City reviews the status of previously approved projects, develops information for new projects, and examines capital project alternatives. Debt levels are carefully analyzed to assess how much borrowing capacity to allow. Taken into consideration are environmental factors such as community needs and resources, external economic conditions, financial factors, such as expected year-end operating position, financial condition, proposed debt structure, market conditions, fund balance levels, as well as statistical benchmarks known to be considered by rating agencies. Used in combination, these factors help aid the current debt service decision-making process and also keep debt within manageable bounds for future debt issuance considerations.

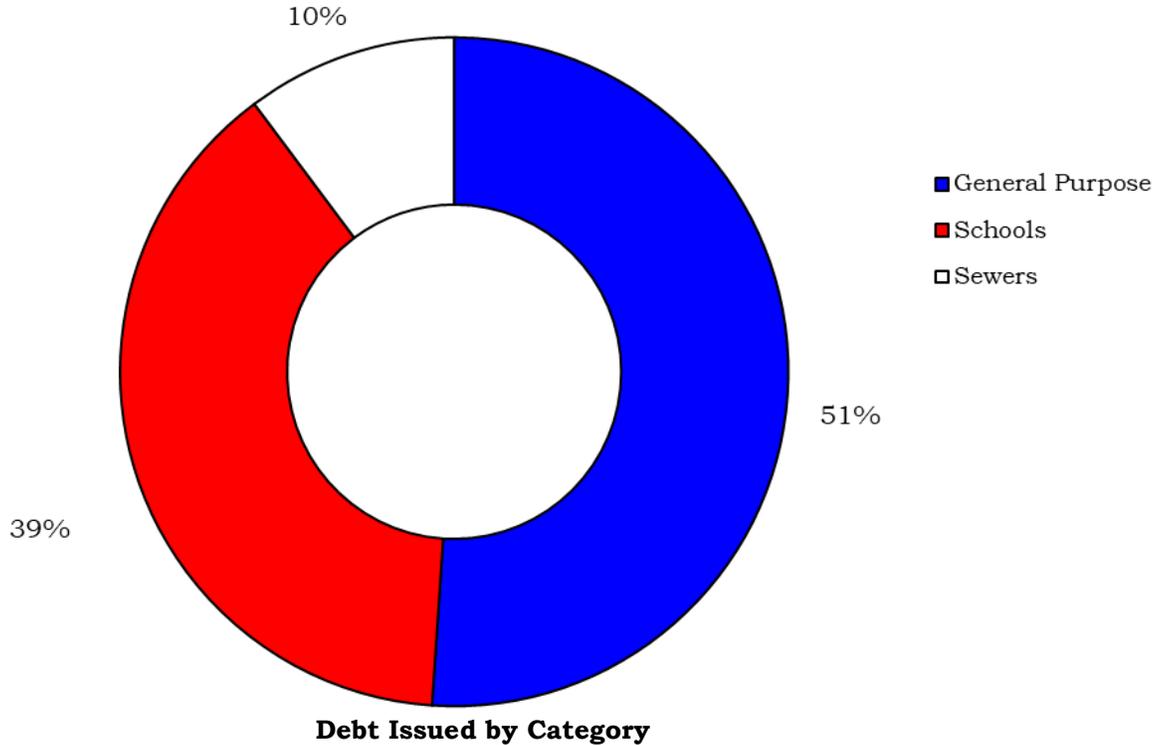
The City prefers its debt structure to be level and to have a relatively rapid payback period which keeps the bond year short. Again, this strategy is viewed positively by rating agencies and allows the community to take advantage of the year-to-year reduction of debt service for other purposes.

Finally, Connecticut municipalities fall under state laws to keep debt issuances within statute-provided limits. While these authorized versus issued limits are set reasonably high, the City of Bristol is conscious of these limits and the City's total debt outstanding is well below these limits. Shown below is a graphical representation of the debt limitation imposed by the State of Connecticut and the actual debt authorized by the City of Bristol.

**Debt Limitation vs. Actual Debt Issued
(in thousands)**



Debt Management (continued)



The chart above and on the preceding page are from the Schedule of Debt Limitation as of June 30, 2016 found on the next page.

SCHEDULE OF LEGAL DEBT LIMITATION

State of Connecticut general statutes indicate that ***in no case shall total indebtedness exceed seven times annual receipts from taxation.***

The table on the following page shows the City of Bristol Debt Limitation and actual debt authorized in the five major categories: General Purpose, Schools, Sewers, Urban Renewal and Pension Deficit. The table clearly indicates that Bristol is well below the statutory requirements for debt issuance.

**Program Summaries-
Debt Management**

Debt Management (continued)

**Schedule of Debt Limitation
June 30, 2016**

CITY OF BRISTOL, CONNECTICUT

**SCHEDULE OF DEBT LIMITATION
JUNE 30, 2016**

Total tax collections, including interest and lien fees	\$ 134,060,000
Reimbursement for loss of revenues:	
Tax relief for elderly - freeze	<u>4,000</u>
Base	<u>\$ 134,064,000</u>

	<u>General Purpose</u>	<u>Schools</u>	<u>Sewers</u>	<u>Urban Renewal</u>	<u>Pension Funding</u>
Debt limitation:					
2-1/4 times base	\$ 301,644,000	\$	\$	\$	\$
4-1/2 times base		603,288,000			
3-3/4 times base			502,740,000		
3-1/4 times base				435,708,000	
3 times base					402,192,000
Total	<u>301,644,000</u>	<u>603,288,000</u>	<u>502,740,000</u>	<u>435,708,000</u>	<u>402,192,000</u>
Indebtedness:					
Bonds and notes payable	23,312,000	28,042,000	4,260,000		
Bond anticipation notes	4,500,000				
Bonds authorized and unissued	41,305,106	83,169,965	17,000,000		
State grant commitments		(58,786,244)	(7,440,019)		
Total	<u>69,117,106</u>	<u>52,425,721</u>	<u>13,819,981</u>	<u>0</u>	<u>0</u>
Debt Limitation in Excess of Outstanding and Authorized Debt	<u>\$ 232,526,894</u>	<u>\$ 550,862,279</u>	<u>\$ 488,920,019</u>	<u>\$ 435,708,000</u>	<u>\$ 402,192,000</u>

NOTE: In no event shall total debt exceed seven times annual receipts from taxation. The maximum permitted under this formula would be \$938,448,000.

**Program Summaries-
Debt Management**

Debt Management (continued)

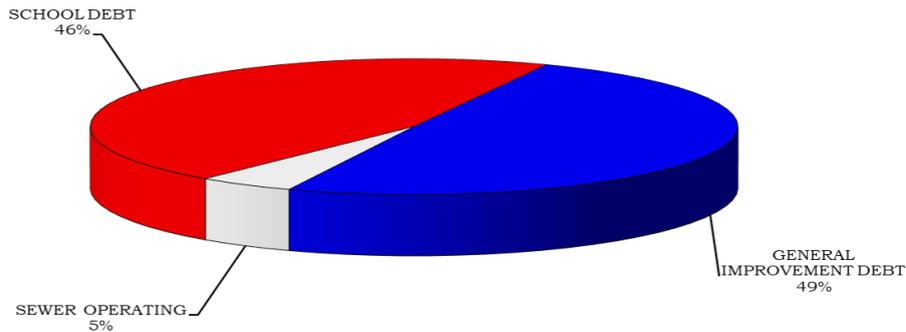
Budget Highlights

DEBT LONG TERM DEBT- PRINCIPAL			2016	2017	2017	2018	2018
OBJECT	PROJECT	DESCRIPTION	ACTUAL EXPENDITURE	ORIGINAL BUDGET	REVISED BUDGET	BUDGET REQUEST	JOINT BOARD
LONG TERM DEBT- PRINCIPAL							
588111		SCHOOL DEBT	\$3,028,000	\$3,023,000	\$3,023,000	\$2,988,000	\$2,988,000
588112		GENERAL IMPROVEMENT	2,864,000	2,856,000	2,856,000	2,848,000	2,848,000
588115		SEWER OPERATING DEBT	285,000	285,000	285,000	283,000	283,000
TOTAL LONG TERM DEBT PRINCIPAL			\$6,177,000	\$6,164,000	\$6,164,000	\$6,119,000	\$6,119,000
TOTAL LONG TERM DEBT PRINCIPAL			\$6,177,000	\$6,164,000	\$6,164,000	\$6,119,000	\$6,119,000

DEBT LONG TERM DEBT- INTEREST			2016	2017	2017	2018	2018
OBJECT	PROJECT	DESCRIPTION	ACTUAL EXPENDITURE	ORIGINAL BUDGET	REVISED BUDGET	BUDGET REQUEST	JOINT BOARD
LONG TERM DEBT INTEREST							
588121		SCHOOL DEBT	\$1,050,423	\$930,445	\$930,445	\$945,640	\$945,640
588122		GENERAL IMPROVEMENT	927,604	826,205	826,205	1,302,845	1,302,845
588125		SEWER OPERATING DEBT	152,728	141,328	141,328	132,798	132,798
TOTAL LONG TERM DEBT INTEREST			\$2,130,755	\$1,897,978	\$1,897,978	\$2,381,283	\$2,381,283
TOTAL LONG TERM DEBT INTEREST			\$2,130,755	\$1,897,978	\$1,897,978	\$2,381,283	\$2,381,283

DEBT SHORT TERM DEBT INTEREST			2016	2017	2017	2018	2018
OBJECT	PROJECT	DESCRIPTION	ACTUAL EXPENDITURE	ORIGINAL BUDGET	REVISED BUDGET	BUDGET REQUEST	JOINT BOARD
DEBT SERVICE TRANSFER OUT							
588122		GENERAL IMPROVEMENT DEBT- INTEREST	\$71,933	\$100,000	\$100,000	\$125,000	\$125,000
TOTAL DEBT SERVICE TRANSFER OUT			\$71,933	\$100,000	\$100,000	\$125,000	\$125,000
TOTAL DEBT SERVICE TRANSFER OUT			\$71,933	\$100,000	\$100,000	\$125,000	\$125,000

DEBT SUMMARY (PRINCIPAL AND INTEREST) 2017-2018



The graph illustrates three categories for long-term debt service for FY 2017-2018. As shown in accompanying graph, long-term debt service payments for schools will account for 46% or \$3,933,640 of the long-term debt service payments; general improvement debt is 49% or \$4,275,845 and sewer operating debt is 5% or \$415,798.

**Program Summaries-
Debt Management**

Debt Management (continued)

Shown below and on the following page are debt service schedules which indicate each principal and interest payment by bond issuance year.

DEBT CITY OF BRISTOL, CONNECTICUT FISCAL YEAR 2017-18 BUDGET EXPENDITURE ESTIMATE DETAIL -- GENERAL FUND								FUNCTION: DEBT SERVICE	
								LONG TERM DEBT PRINCIPAL PAYMENTS	
1 INT. RATE	2 PRINCIPAL PAYMENTS: DESCRIPTION	3 PMT/ #TTL 2017-18	4 PRIOR YEAR EXPENDED 2015-16	5 ADOPTED BUDGET 2016-17	6 REVISED ESTIMATE 2016-17	7 BUDGET REQUEST 2017-18	8 APPROVED BUDGET 2017-18		
3.74	SCHOOL BONDS - '05	20/27	\$ 975,000	\$ -	\$ -	\$ -	\$ -	\$ -	
3.12	SCHOOL BONDS - '09	11/24	20,000	-	-	-	-	-	
3.45	SCHOOL BONDS - '11	7/19	1,345,000	1,345,000	1,345,000	1,345,000	1,345,000	1,345,000	
3.00	SCHOOL REFUNDING '11	4/9	688,000	691,000	691,000	693,000	693,000	693,000	
2.50	SCHOOL REFUNDING (09) '15	2/2	-	25,000	25,000	-	-	-	
3.06	SCHOOL REFUNDING '15	2/9	-	962,000	962,000	950,000	950,000	950,000	
2.55	SCHOOL BONDS - '17	0/17	-	-	-	-	-	-	
588111	TOTAL SCHOOL BONDS		3,028,000	3,023,000	3,023,000	2,988,000	2,988,000	\$ 2,988,000	
3.12	IMPROVEMENT - '09	13/24	\$ 535,000	\$ -	\$ -	\$ -	\$ -	\$ -	
3.45	IMPROVEMENT - '11	6/20	455,000	455,000	455,000	455,000	455,000	455,000	
3.00	IMPROVEMENT REFUNDING '11	3/9	1,874,000	1,871,000	1,871,000	1,873,000	1,873,000	1,873,000	
2.25	IMPROVEMENT REFUNDING '15	2/15	-	530,000	530,000	-	-	0	
3.36	IMPROVEMENT REFUNDING '15	1/8	-	-	-	520,000	520,000	520,000	
2.55	IMPROVEMENT - '17	0/17	-	-	-	-	-	-	
588112	TOTAL GEN'L IMPROVEMENT		\$ 2,864,000	\$ 2,856,000	\$ 2,856,000	\$ 2,848,000	\$ 2,848,000	\$ 2,848,000	
3.45	SEWER BONDS - '11	5/19	\$ 285,000	\$ 285,000	\$ 285,000	\$ 283,000	\$ 283,000	\$ 283,000	
588115	SEWER-OPERATING		\$ 285,000	\$ 285,000	\$ 285,000	\$ 283,000	\$ 283,000	\$ 283,000	
SUBTOTAL LONGTERM DEBT PRINCIPAL			\$ 6,177,000	\$ 6,164,000	\$ 6,164,000	\$ 6,119,000	\$ 6,119,000	\$ 6,119,000	
588310	LEASE PURCHASE PRINCIPAL		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
LONG TERM DEBT PRINCIPAL TOTAL			\$ 6,177,000	\$ 6,164,000	\$ 6,164,000	\$ 6,119,000	\$ 6,119,000	\$ 6,119,000	

DEBT CITY OF BRISTOL, CONNECTICUT FISCAL YEAR 2017-18 BUDGET EXPENDITURE ESTIMATE DETAIL -- GENERAL FUND								FUNCTION: DEBT SERVICE	
								LONG TERM DEBT INTEREST PAYMENTS	
1 INT. RATE	2 INTEREST PAYMENTS: DESCRIPTION	3 PRIOR YEAR EXPENDED 2015-16	4 ADOPTED BUDGET 2016-17	5 REVISED ESTIMATE 2016-17	6 BUDGET REQUEST 2017-18	7 APPROVED BUDGET 2017-18			
3.74	SCHOOL BONDS - '05	\$ 73,066	\$ -	\$ -	\$ -	\$ -	\$ -		
3.12	SCHOOL BONDS - '09	4,075	625	625	-	-	-		
3.45	SCHOOL BONDS - '11	722,740	668,940	668,940	628,590	628,590	628,590		
3.00	SCHOOL REFUNDING '11	212,660	185,080	185,080	157,400	157,400	157,400		
2.50	SCHOOL REFUNDING (09) '15	788	-	-	-	-	-		
3.06	SCHOOL REFUNDING '15	37,095	75,800	75,800	47,120	47,120	47,120		
2.55	SCHOOL BONDS - '17	-	-	-	112,530	112,530	112,530		
588121	TOTAL SCHOOL BONDS	\$ 1,050,423	\$ 930,445	\$ 930,445	\$ 945,640	\$ 945,640	\$ 945,640		
3.12	IMPROVEMENT - '09	\$ 12,741	\$ 13,250	\$ 13,250	\$ -	\$ -	\$ -		
3.45	IMPROVEMENT - '11	87,708	226,065	226,065	212,415	212,415	212,415		
3.00	IMPROVEMENT REFUNDING '11	772,075	452,910	452,910	378,030	378,030	378,030		
2.25	IMPROVEMENT REFUNDING '15	55,081	133,980	133,980	-	-	-		
3.36	IMPROVEMENT REFUNDING '15	-	-	-	126,180	126,180	126,180		
2.55	IMPROVEMENT - '17	-	-	-	586,220	586,220	586,220		
588122	TOTAL GEN'L IMPROVEMENT	\$ 927,604	\$ 826,205	\$ 826,205	\$ 1,302,845	\$ 1,302,845	\$ 1,302,845		
3.45	SEWER BONDS - '11	\$ 152,728	\$ 141,328	\$ 141,328	\$ 132,798	\$ 132,798	\$ 132,798		
588125	SEWER-OPERATING	\$ 152,728	\$ 141,328	\$ 141,328	\$ 132,798	\$ 132,798	\$ 132,798		
SUBTOTAL LONG TERM DEBT INTEREST			\$ 2,130,755	\$ 1,897,978	\$ 1,897,978	\$ 2,381,283	\$ 2,381,283		
588320	LEASE PURCHASE INT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
LONG TERM DEBT INTEREST			\$ 2,130,755	\$ 1,897,978	\$ 1,897,978	\$ 2,381,283	\$ 2,381,283		

**Program Summaries-
Debt Management**

Debt Management (continued)

Shown below is a chart summarizing the long-term obligations of the City of Bristol, including the self-supporting water (enterprise fund) debt. Displayed on the chart is the original issue amount of the long-term obligation as well as the present balance and maturity year.

Debt Summary Long-Term Debt As of July 1, 2017 (Pro-Forma)					
Issue	Purpose	Rate	Original Issue	Balance Outstanding	Fiscal Year Maturity
9/1/1996 Water		5.34	4,260,000	210,000	2017
	(6/15/05 PARTIAL REFUND 9/1/1996-Water)		(2,325,000)	(210,000)	2017
10/15/1998 School		4.34	17,440,000	2,890,000	2019
	(6/15/05 PARTIAL REFUND 10/15/1998-School)		(10,625,000)	(2,890,000)	2019
6/30/2002 Cleanwater Loan 415 D/C		2.00	1,409,533	325,615	2021
6/30/2002 Cleanwater Loan 498 D/C		2.00	1,483,380	342,675	2021
12/31/2003 Cleanwater Loan 504 C		2.00	1,488,101	465,757	2023
8/24/2011 Refunding of 2004 General Improvement Bonds		3.00	15,589,000	9,968,000	2023
11/30/2004 Cleanwater Loan 562 C		2.00	693,527	250,979	2024
5/31/2006 Cleanwater 464 C		2.00	470,225	229,744	2026
8/24/2011 Refunding of 2006 School Bonds		3.00v	6,234,000	4,165,000	2023
8/24/2011 Refunding of 2006 Water Bonds		3.00v	2,112,000	1,402,000	2023
2/15/2009 Schools		2.50	385,000	0	2017
2/15/2009 General Improvement		2.25	8,515,000	0	2017
6/15/2011 Water		3.45	813,000	588,000	2031
6/15/2011 Schools		3.45	25,550,000	18,825,000	2031
6/15/2011 General Improvement		3.45	8,637,000	6,362,000	2031
6/15/2011 Sewer		3.45	5,400,000	3,975,000	2031
3/30/2016 Sewer DEEP loan - interim financing		2.00		6,245,272	2038
5/30/2017 General Improvement 2017		2.55	17,739,000	17,739,000	2035
5/30/2017 Schools 2017		2.55	3,391,000	3,391,000	2035
6/15/2011 Water 2014 - Old Wolcott Tank		2.00	501,000	423,156	2033
1/20/2016 Cleanwater 2015 - I/O Reduction 622-CSL		2.00	631,833	562,921	2035
9/30/2015 Water 2016 Note - Grove Street Tank		2.00	344,155	309,041	2035
11/17/2015 Refunding of 2005, 2009 School Bonds		3.06	2,991,000	2,029,000	2025
11/17/2015 Refunding of 2005, 2009 General Improvement Bonds		3.36	4,126,000	4,126,000	2025
11/17/2015 Water Bond 2015 Refunding		3.00	193,000	0	2017
			\$130,396,754	\$81,725,159	

Below is a chart showing the City of Bristol's bond ratings for bonds issued since 1988.

CITY OF BRISTOL BOND ISSUE RATINGS				
Issue Date	Amount	Moody's Rating	Standard & Poor's Rating	Fitch
November 17, 2015	\$7,310,000		AA+	
June 15, 2011	\$40,400,000	Aa2	AA+	AA+
February 4, 2009	\$8,900,000	Aa3	AA+	AA
December 1, 2006	\$25,000,000	Aa3	AA	AA
June 15, 2005	\$13,055,000	Aa3	AA	AA
October 15, 2004	\$22,965,000	Aa3	AA	AA
September 1, 2000	\$6,440,000	Aa3	AA-	
October 15, 1998	\$17,765,000	A1	AA-	
September 1, 1996	\$4,260,000	A1	AA-	
May 15, 1995	\$2,790,000	A1	AA-	
December 15, 1993	\$6,775,000	A1	AA-	
March 1, 1992	\$23,435,000	A1	AA-	
March 1, 1991	\$9,295,000	A1	AA	
December 15, 1988	\$17,970,000	A1	AA	
February 15, 1988	\$8,765,000	A1	AA	

**Program Summaries-
Debt Management**

Debt Management (continued)

Below is a chart illustrating the City of Bristol's outstanding debt. The chart shows the beginning principal balance, principal payments, interest payments and the ending debt balance as well as the cumulative principal percent of debt retired. All debt types (general improvement, school, sewer and water (enterprise fund) and Cleanwater Loans) are shown independently on the next few pages with the same information.

All City Long-term Debt (including Water & Cleanwater Loans) As of July 1, 2017 (Pro-Forma)						
Fiscal Year Ended June 30	Principal Beginning Balance	Principal Payments	Interest Payments	Total Payments	Principal Ending Balance	Cumulative % Principal Retired
2016					\$ 75,479,888	33.7
2018	\$ 75,479,888	\$ 6,767,760	\$ 2,511,558	\$ 9,279,318	\$ 68,712,128	39.7
2019	\$ 68,712,128	\$ 8,000,183	\$ 2,325,509	\$ 10,325,692	\$ 60,711,945	46.7
2020	\$ 60,711,945	\$ 7,097,756	\$ 2,039,287	\$ 9,137,043	\$ 53,614,189	52.9
2021	\$ 53,614,189	\$ 7,115,482	\$ 1,752,337	\$ 8,867,819	\$ 46,498,707	59.2
2022	\$ 46,498,707	\$ 6,952,776	\$ 1,477,133	\$ 8,429,909	\$ 39,545,931	65.3
2023	\$ 39,545,931	\$ 5,582,339	\$ 1,246,871	\$ 6,829,210	\$ 33,963,592	70.2
2024	\$ 33,963,592	\$ 4,024,691	\$ 1,067,763	\$ 5,092,454	\$ 29,938,901	73.7
2025	\$ 29,938,901	\$ 4,005,953	\$ 912,933	\$ 4,918,886	\$ 25,932,948	77.2
2026	\$ 25,932,948	\$ 3,462,828	\$ 804,937	\$ 4,267,765	\$ 22,470,120	80.3
2027	\$ 22,470,120	\$ 3,446,019	\$ 701,322	\$ 4,147,341	\$ 19,024,101	83.3
2028	\$ 19,024,101	\$ 3,447,552	\$ 590,988	\$ 4,038,540	\$ 15,576,549	86.3
2029	\$ 15,576,549	\$ 3,444,118	\$ 476,410	\$ 3,920,528	\$ 12,132,431	89.3
2030	\$ 12,132,431	\$ 3,445,716	\$ 358,812	\$ 3,804,528	\$ 8,686,715	92.4
2031	\$ 8,686,715	\$ 3,447,344	\$ 234,984	\$ 3,682,328	\$ 5,239,371	95.4
2032	\$ 5,239,371	\$ 1,324,006	\$ 153,622	\$ 1,477,628	\$ 3,915,365	96.6
2033	\$ 3,915,365	\$ 1,325,705	\$ 114,723	\$ 1,440,428	\$ 2,589,660	97.73
2034	\$ 2,589,660	\$ 1,312,304	\$ 75,856	\$ 1,388,160	\$ 1,277,356	98.88
2034	\$ 1,277,356	\$ 1,277,356	\$ 37,474	\$ 1,314,830	\$ -	100.0
		\$ -	\$ -	\$ -		
Totals:		\$ 75,479,888	\$ 16,882,518	\$ 92,362,406		

General Improvement Long-term Debt As of July 1, 2017 (Pro-Forma)						
Fiscal Year Ended June 30	Principal Beginning Balance	Principal Payments	Interest Payments	Total Payments	Principal Ending Balance	Cumulative % Principal Retired
2017					\$ 38,195,000	0.0
2018	\$ 38,195,000	\$ 2,848,000	\$ 1,305,562	\$ 4,153,562	\$ 35,347,000	7.5
2019	\$ 35,347,000	\$ 3,897,000	\$ 1,229,274	\$ 5,126,274	\$ 31,450,000	17.7
2020	\$ 31,450,000	\$ 3,888,000	\$ 1,070,479	\$ 4,958,479	\$ 27,562,000	27.8
2021	\$ 27,562,000	\$ 3,895,000	\$ 902,469	\$ 4,797,469	\$ 23,667,000	38.0
2022	\$ 23,667,000	\$ 3,898,000	\$ 736,514	\$ 4,634,514	\$ 19,769,000	48.2
2023	\$ 19,769,000	\$ 2,607,000	\$ 606,634	\$ 3,213,634	\$ 17,162,000	55.1
2024	\$ 17,162,000	\$ 2,009,000	\$ 509,115	\$ 2,518,115	\$ 15,153,000	60.3
2025	\$ 15,153,000	\$ 2,009,000	\$ 421,710	\$ 2,430,710	\$ 13,144,000	65.6
2026	\$ 13,144,000	\$ 1,499,000	\$ 377,554	\$ 1,876,554	\$ 11,645,000	69.5
2027	\$ 11,645,000	\$ 1,499,000	\$ 340,196	\$ 1,839,196	\$ 10,146,000	73.4
2028	\$ 10,146,000	\$ 1,499,000	\$ 300,397	\$ 1,799,397	\$ 8,647,000	77.4
2029	\$ 8,647,000	\$ 1,499,000	\$ 258,725	\$ 1,757,725	\$ 7,148,000	81.3
2030	\$ 7,148,000	\$ 1,494,000	\$ 214,440	\$ 1,708,440	\$ 5,654,000	85.2
2031	\$ 5,654,000	\$ 1,494,000	\$ 165,080	\$ 1,659,080	\$ 4,160,000	89.1
2032	\$ 4,160,000	\$ 1,040,000	\$ 124,800	\$ 1,164,800	\$ 3,120,000	91.8
2033	\$ 3,120,000	\$ 1,040,000	\$ 93,600	\$ 1,133,600	\$ 2,080,000	94.6
2034	\$ 2,080,000	\$ 1,040,000	\$ 62,400	\$ 1,102,400	\$ 1,040,000	97.3
2035	\$ 1,040,000	\$ 1,040,000	\$ 31,200	\$ 1,071,200	\$ -	100.0
Totals:		\$ 38,195,000	\$ 8,750,149	\$ 46,945,149		

**Program Summaries-
Debt Management**

Debt Management (continued)

School Long-term Debt As of July 1, 2017 (Pro-Forma)							
Fiscal Year Ended June 30	Principal Beginning Balance	Principal Payments	Interest Payments	Total Payments	Principal Ending Balance	Cumulative % Principal Retired	
2017					\$ 28,410,000	0.0	
2018	\$ 28,410,000	\$ 2,988,000	\$ 945,642	\$ 3,933,642	\$ 25,422,000	10.5	
2019	\$ 25,422,000	\$ 3,164,000	\$ 860,990	\$ 4,024,990	\$ 22,258,000	21.7	
2020	\$ 22,258,000	\$ 2,263,000	\$ 762,070	\$ 3,025,070	\$ 19,995,000	29.6	
2021	\$ 19,995,000	\$ 2,265,000	\$ 673,010	\$ 2,938,010	\$ 17,730,000	37.6	
2022	\$ 17,730,000	\$ 2,267,000	\$ 590,590	\$ 2,857,590	\$ 15,463,000	45.6	
2023	\$ 15,463,000	\$ 2,263,000	\$ 512,830	\$ 2,775,830	\$ 13,200,000	53.5	
2024	\$ 13,200,000	\$ 1,570,000	\$ 447,924	\$ 2,017,924	\$ 11,630,000	59.1	
2025	\$ 11,630,000	\$ 1,570,000	\$ 393,212	\$ 1,963,212	\$ 10,060,000	64.6	
2026	\$ 10,060,000	\$ 1,545,000	\$ 342,603	\$ 1,887,603	\$ 8,515,000	70.0	
2027	\$ 8,515,000	\$ 1,544,000	\$ 289,865	\$ 1,833,865	\$ 6,971,000	75.5	
2028	\$ 6,971,000	\$ 1,544,000	\$ 233,535	\$ 1,777,535	\$ 5,427,000	80.9	
2029	\$ 5,427,000	\$ 1,539,000	\$ 175,275	\$ 1,714,275	\$ 3,888,000	86.3	
2030	\$ 3,888,000	\$ 1,544,000	\$ 116,640	\$ 1,660,640	\$ 2,344,000	91.7	
2031	\$ 2,344,000	\$ 1,544,000	\$ 56,880	\$ 1,600,880	\$ 800,000	97.2	
2032	\$ 800,000	\$ 200,000	\$ 24,000	\$ 224,000	\$ 600,000	97.9	
2033	\$ 600,000	\$ 200,000	\$ 18,000	\$ 218,000	\$ 400,000	98.6	
2034	\$ 400,000	\$ 200,000	\$ 12,000	\$ 212,000	\$ 200,000	99.3	
2035	\$ 200,000	\$ 200,000	\$ 6,000	\$ 206,000	\$ -	100.0	
Totals:		\$ 28,410,000	\$ 6,461,066	\$ 34,871,066			

Sewer Long-term Debt As of July 1, 2017 (Pro-Forma)							
Fiscal Year Ended June 30	Principal Beginning Balance	Principal Payments	Interest Payments	Total Payments	Principal Ending Balance	Cumulative % Principal Retired	
2017					\$ 3,975,000	26.4	
2018	\$ 3,975,000	\$ 283,000	\$ 132,798	\$ 415,798	\$ 3,692,000	31.6	
2019	\$ 3,692,000	\$ 283,000	\$ 125,723	\$ 408,723	\$ 3,409,000	36.9	
2020	\$ 3,409,000	\$ 283,000	\$ 115,818	\$ 398,818	\$ 3,126,000	42.1	
2021	\$ 3,126,000	\$ 283,000	\$ 105,913	\$ 388,913	\$ 2,843,000	47.4	
2022	\$ 2,843,000	\$ 283,000	\$ 97,423	\$ 380,423	\$ 2,560,000	52.6	
2023	\$ 2,560,000	\$ 283,000	\$ 88,933	\$ 371,933	\$ 2,277,000	57.8	
2024	\$ 2,277,000	\$ 284,000	\$ 80,250	\$ 364,250	\$ 1,993,000	63.1	
2025	\$ 1,993,000	\$ 284,000	\$ 71,020	\$ 355,020	\$ 1,709,000	68.4	
2026	\$ 1,709,000	\$ 284,000	\$ 61,258	\$ 345,258	\$ 1,425,000	73.6	
2027	\$ 1,425,000	\$ 285,000	\$ 50,944	\$ 335,944	\$ 1,140,000	78.9	
2028	\$ 1,140,000	\$ 285,000	\$ 39,900	\$ 324,900	\$ 855,000	84.2	
2029	\$ 855,000	\$ 285,000	\$ 28,500	\$ 313,500	\$ 570,000	89.4	
2030	\$ 570,000	\$ 285,000	\$ 17,100	\$ 302,100	\$ 285,000	94.7	
2031	\$ 285,000	\$ 285,000	\$ 5,700	\$ 290,700	\$ -	100.0	
Totals:		\$ 3,975,000	\$1,021,280	\$4,996,280			

**Program Summaries-
Debt Management**

Debt Management (continued)

Self-Supporting Water Debt As of July 1, 2017 (Pro-Forma)							
Fiscal Year Ended June 30	Principal Beginning Balance	Principal Payments	Interest Payments	Total Payments	Principal Ending Balance	Cumulative % Principal Retired	
2017					\$ 2,722,197	56.6	
2018	\$ 2,722,197	\$ 317,518	\$ 86,966	\$ 404,484	\$ 2,404,679	61.7	
2019	\$ 2,404,679	\$ 318,255	\$ 75,619	\$ 393,874	\$ 2,086,424	66.8	
2020	\$ 2,086,424	\$ 319,007	\$ 63,837	\$ 382,844	\$ 1,767,417	71.8	
2021	\$ 1,767,417	\$ 320,774	\$ 50,820	\$ 371,594	\$ 1,446,643	77.0	
2022	\$ 1,446,643	\$ 321,557	\$ 37,977	\$ 359,534	\$ 1,125,086	82.1	
2023	\$ 1,125,086	\$ 287,357	\$ 27,357	\$ 314,714	\$ 837,729	86.7	
2024	\$ 837,729	\$ 83,171	\$ 21,497	\$ 104,668	\$ 754,558	88.0	
2025	\$ 754,558	\$ 84,001	\$ 19,302	\$ 103,303	\$ 670,557	89.3	
2026	\$ 670,557	\$ 84,849	\$ 17,010	\$ 101,859	\$ 585,708	90.7	
2027	\$ 585,708	\$ 85,714	\$ 14,623	\$ 100,337	\$ 499,994	92.0	
2028	\$ 499,994	\$ 86,595	\$ 12,114	\$ 98,709	\$ 413,399	93.4	
2029	\$ 413,399	\$ 87,496	\$ 9,533	\$ 97,029	\$ 325,903	94.8	
2030	\$ 325,903	\$ 88,415	\$ 6,934	\$ 95,349	\$ 237,488	96.2	
2031	\$ 237,488	\$ 89,351	\$ 4,318	\$ 93,669	\$ 148,137	97.6	
2032	\$ 148,137	\$ 48,307	\$ 2,522	\$ 50,829	\$ 99,830	98.4	
2033	\$ 99,830	\$ 49,285	\$ 1,544	\$ 50,829	\$ 50,545	99.2	
2034	\$ 50,545	\$ 35,149	\$ 612	\$ 35,761	\$ 15,396	99.8	
2034	\$ 15,396	\$ 15,396	\$ 127	\$ 15,523	\$ -	100.0	
2035	\$ -	\$ -	\$ -	\$ -	\$ -		
Totals:		\$ 2,722,197	\$ 452,711	\$ 3,174,908			

Cleanwater (SEWER) Loans As of July 1, 2017 (Pro-Forma)							
Fiscal Year Ended June 30	Principal Beginning Balance	Principal Payments	Interest Payments	Total Payments	Principal Ending Balance	Cumulative % Principal Retired	
2017					\$ 2,177,691	64.7	
2018	\$ 2,177,691	\$ 331,242	\$ 40,590	\$ 371,832	\$ 1,846,449	70.1	
2019	\$ 1,846,449	\$ 337,928	\$ 33,903	\$ 371,831	\$ 1,508,521	75.6	
2020	\$ 1,508,521	\$ 344,749	\$ 27,083	\$ 371,832	\$ 1,163,772	81.2	
2021	\$ 1,163,772	\$ 351,708	\$ 20,125	\$ 371,833	\$ 812,064	86.9	
2022	\$ 812,064	\$ 183,219	\$ 14,629	\$ 197,848	\$ 628,845	89.8	
2023	\$ 628,845	\$ 141,982	\$ 11,117	\$ 153,099	\$ 486,863	92.1	
2024	\$ 486,863	\$ 78,520	\$ 8,977	\$ 87,497	\$ 408,343	93.4	
2025	\$ 408,343	\$ 58,952	\$ 7,689	\$ 66,641	\$ 349,391	94.3	
2026	\$ 349,391	\$ 49,979	\$ 6,512	\$ 56,491	\$ 299,412	95.2	
2027	\$ 299,412	\$ 32,305	\$ 5,694	\$ 37,999	\$ 267,107	95.7	
2028	\$ 267,107	\$ 32,957	\$ 5,042	\$ 37,999	\$ 234,150	96.2	
2029	\$ 234,150	\$ 33,622	\$ 4,377	\$ 37,999	\$ 200,528	96.8	
2030	\$ 200,528	\$ 34,301	\$ 3,698	\$ 37,999	\$ 166,227	97.3	
2031	\$ 166,227	\$ 34,993	\$ 3,006	\$ 37,999	\$ 131,234	97.9	
2032	\$ 131,234	\$ 35,699	\$ 2,300	\$ 37,999	\$ 95,535	98.5	
2033	\$ 95,535	\$ 36,420	\$ 1,579	\$ 37,999	\$ 59,115	99.0	
2034	\$ 59,115	\$ 37,155	\$ 844	\$ 37,999	\$ 21,960	99.6	
2035	\$ 21,960	\$ 21,960	\$ 147	\$ 22,107	\$ -	100.0	
Totals:		\$ 2,177,691	\$ 197,312	\$ 2,375,003			

**Program Summaries-
Debt Management**

Debt Management (continued)

The chart below shows all the Capital Projects that have been approved by the City of Bristol that have not had long-term obligations issued at this time. It is anticipated that the next long-term bond issuance will be taking place in the 2017-2018 fiscal year.

CITY OF BRISTOL		
BONDING APPROPRIATIONS OUTSTANDING		
BONDING TYPE	PROJECT	7/1/2017 BONDING AMOUNT OUTSTANDING
GENERAL	Birch Sytreet-Roadway Reclamation (Redstone to Pine)	26,600
GENERAL	Casey Field Improvements	208,000
GENERAL	Coppermine Brook- Removal of private bridge	380,000
GENERAL	Curtiss, Zip, Twining Reconstruction	520,000
GENERAL	Divinity Street Culvert Replacement	350,000
GENERAL	Dorset Horn & Great Pyrenees Way Reconstruction	400,000
GENERAL	Down Street Bridge	229,000
GENERAL	Fern Hill Road Reclamation (Nelson Farm-Oakridge)	395,800
GENERAL	Fire Department- Engine 4	344,300
GENERAL	Fire Department- Engine 5	45,000
GENERAL	Frederick Street Bridge/ Channel Improvements	127,000
GENERAL	Heating , Hot Water DMAC	200,000
GENERAL	Hillside Place Intersection Improvements	67,000
GENERAL	HJ Mills Parking Lot Construction	880,000
GENERAL	HVAC at DMAC	146,000
GENERAL	Lexington Reconstruction	440,000
GENERAL	Mall Demolition/Abatement	2,365,000
GENERAL	Memorial Blvd Restoration	264,000
GENERAL	Mountain Road Rock Face Stabilization	289,000
GENERAL	Munchausen & Bartholomew Street Reconstruction	267,000
GENERAL	Muzzy Field Improvements	64,000
GENERAL	North Main Street Parking Improvements	200,000
GENERAL	Pequabuck River Stabilization Wall	349,812
GENERAL	Purchase Street Lights	20
GENERAL	PW Garage Architectural	248,000
GENERAL	Radio Communication System	8,214,000
GENERAL	Railroad Bridge Rehabilitation	220,000
GENERAL	Replace Engine 7	550,000
GENERAL	Roadway Reclamation- Elizabeth, UCONN	28
GENERAL	Senior Center Utility Upgrades	2,394,700
GENERAL	Sharon, Dover, Warren Reconstruction	380,000
GENERAL	Single Stream Recycling Program	664,500
GENERAL	South Street Widening	80,000
GENERAL	Stevens Street Bridge- Richard Court Berm	537,000
GENERAL	Streetlight Upgrade	1,820,000
GENERAL	Synthetic Fields	435,000
GENERAL	Waterbury Road Reconstruction	826,314
GENERAL	Willis Street Reconstruction- Phase 2	364,823
SCHOOL	Forestville K-8 School	1,167,100
SCHOOL	West Bristol K-8 School	656,400
SCHOOL	BCHS Tennis Courts	350,000
SCHOOL	BEHS Tennis Courts	405,000
SCHOOL	Bristol Central High School Running Track	78,000
SCHOOL	Chippens Hill Roof	2,909,560
SCHOOL	Hubbell School Roof	708,305
SCHOOL	Northeast Middle School Roof Replacement	24,650
SCHOOL	Roof Replacement- Administration Buildings	150,500
SEWER	Broad Street Pump Station	60,000
SEWER	Water Pollution Control Facility Upgrades	18,442,800
SEWER	Broad Street Pump Force Main	868,167
WATER	Clark, Terryville and Barlow Water Mains	\$ 250,000 (1)
WATER	DeWitt Drive Water Storage Tank	531,000 (1)
Total		\$ 51,893,379
(1)	Self-supporting Water Debt	
BONDING APPROPRIATIONS BY TYPE		
	GENERAL IMPROVEMENT	\$ 25,291,897
	SCHOOLS	6,449,515
	SEWER	19,370,967
	WATER (SELF-SUPPORTING)	781,000
	Total	\$ 51,893,379

