

TOWN OF BOW, NEW HAMPSHIRE

Capital Improvements Plan FY2016-17 through FY2021-22 CIP Committee

2015



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Conclusion and Recommendations

The Program of Capital Expenditures herein provides a guide for budgeting and development of Bow's public facilities. The CIP Committee will review and update the CIP each year prior to budget deliberations. The CIP may be modified each year based on changes in needs and priorities. As noted in the Plan, there are projects proposed where the CIP Committee has determined that there is not enough information to make a recommendation concerning a proposed capital project. These are topics in the opinion of the Committee that should be studied in further detail before funding decisions should be made.

The Capital Improvements Committee has worked hard over the past few months to improve the effectiveness of capital facilities programming in Bow. It is hoped that the improvements made during this time can continue to be refined and evaluated for their effectiveness in future years. The CIP Committee believes that Bow has made great strides in process and format of the Capital Improvements Plan and is hopeful that the improvements have made a difference to the Planning Board, Board of Selectmen, School Board, Library Trustees and Budget Committee as they prepare budgets each year.

The committee suggests the following:

- Use the funds in the Bridge Fund Capital Reserve (\$272,544) established in 2009 towards the repair of the closed White Brook (Birchdale Road) Bridge Replacement.
- Change the name and purpose of the Highway Construction Capital Reserve Fund (\$449,335) established in 2003 and the Road Construction- I2 zone and Business Development District Capital Reserve (\$845,100) established in 1999 to the Bridge/Road Construction Capital Reserve Fund for the purpose of constructing, replacing and rehabilitating bridges, culverts and roads. The Town Meeting would be the agents to expend.
- School Board should consider revisiting and restructuring the current capital reserve accounts: Bow School District Middle and Elementary- \$235,900; Bow School District Paving-\$8,588; Bow School District HVAC-\$512,372; Bow High School Capital Improvements-\$142,439 and restructure them. Each of the schools should have their own capital reserve account with listed capital projects i.e. roofing, windows, HVAC, paving etc. with projected dates of replacement. Funds currently in reserves could be distributed to the new reserves. The CIP committee recommends a contribution on a regular basis to these accounts.
- Replace the current Parks and Recreation vehicle (sedan) with the Police Department's detective's vehicle due for replacement in FY16/17.

The Committee after much review has made the following changes to the contributions to the Capital Reserve Accounts and these changes are depicted in the individual capital reserve spreadsheets in this report:

- Reduced the contribution to the Police Department Vehicles and Equipment Capital Reserve Account from \$50,000 to \$35,000 for FY16/17 through FY21/22.

- The contribution to the Fire Department Trucks and Ambulances Capital Reserve remained the same at \$45,000 for FY16/17 through FY21/22.
- Reduced the contribution to the Fire Department Equipment Capital Reserve from \$50,000 to \$42,000 for FY16/17 through FY21/22.
- The contribution to the Public Works Highway Equipment Capital Reserve remained the same at \$120,000 for FY16/17 through FY21/22.
- Increased the contribution to the Municipal Buildings and Grounds Capital Reserve from \$115,000 to \$170,000 for FY16/17, from \$115,000 to \$125,000 for FY17/18 and from \$50,000 to \$125,000 FY18/19 through FY21/22.
- Reduced the contribution to the Parks and Recreation Department Equipment Capital Reserve from \$10,000 to \$8,000 for FY16/17 through FY21/22.
- Reduced the contribution to the Parks and Recreation Department Improvements Capital Reserve from \$30,000 to \$20,000 for FY16/17 to FY21/22.

The Committee wishes to note the following information:

- There was a request from Fire Department that the 1800 gallon Tanker Truck currently due for replacement in FY16/17 be replaced with a 3,000 gallon Tanker Truck. The estimated cost increase is approximately \$40,000. Supporting material can be found on page 69 of this document.
- There was a change in the size and price of the 2002 Pumper Truck due for replacement in FY17/18 originally listed in the 2013 CIP document at an estimated cost of \$475,000. The current vehicle listed is priced at \$650,000 and will have the capability to hold six fire fighters.
- The radio equipment due for replacement in the Fire Department Capital Reserve for FY16/17 was reduced from \$100,000 to \$40,000 at the request of the Fire Department as they will just be replacing the 18 portable radios.
- The Parks and Recreation Department has removed from the Parks and Recreation Improvements Capital Reserve, the Field Backstops and Infields (Gordon/Goodwin/Gergler/Sargents Fields) project of \$80,000 in FY17/18 and instead have received updated information on repairs and they will use their budget as a way of funding the updated project.
- The final payment on the 1995 Sewer Bond was made in July, 2015 in the amount of \$46,265.63.

The Bow School District receives Building Aid from the State, therefore the amount of the Bow School District bond on the Bow High School due for final payment on 8/15/16 is as follows:

Principal Amount	\$805,000.00	
Interest Amount	\$ 23,143.75	
Total	\$828,143.75	
Less Building Aid	- \$241,500.00	
Net Savings	\$586,643.75	in FY17/18

The Bow School District also receives Building Aid Revenue on the principal payment equal to 30% of the cost on the Middle School Renovation bond which amounts to \$60,000 annually. This bonds final payment will be made in FY26/27.

Respectfully Submitted,

Michael Wayne, Chair (Citizen Representative)
 William Hickey Vice-Chair (Citizen Representative)
 Colleen Hunter, (Select Board Representative)
 William Oldenburg (Planning Board Representative)
 Dik Dagavarian (Citizen Representative)
 June Branscom (School Board Representative)
 Jeffrey Knight (Budget Committee Representative)

The Committee would like to thank the following for their assistance and valuable insight:

David Stack, Town Manager
 Robert Blanchette, Finance Director
 Erin Commerford, Police Chief
 Dana Abbott, Fire Chief
 Timothy Sweeney, Director of Public Works
 Cindy Rose, Parks and Recreation
 Todd Drew, DPW Fleet and Facilities Foreman
 Duane Ford, Assistant Superintendent
 Library Trustees

Summary of Capital Improvement Projects (Gross)

Project	Source	CIP RATING	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Public Works								
Bow Center/Knox/Logging Hill/White Rock Hill Intersection Improvement Project	FB, GA	1	\$766,000					
Bow Junction Water Main Extension	PPP,GR,BD,T IF	2			\$1,314,000			
Annual Road Reconstruction and Paving	GF	1	\$435,839	\$443,585	\$443,531	\$439,760	\$422,560	\$450,000
Bridges	CRF		\$600,000		\$884,300			
Highway Equipment Purchases	CRF		\$110,000	\$158,000	\$244,320	\$225,640	\$446,960	\$208,280
Public Works Subtotal			\$1,911,839	\$601,585	\$2,886,151	\$665,400	\$869,520	\$658,280
Buildings and Facilities								
Public Safety Facility	CRF,PPP,GR, BD	1	\$5,000,000					
Community Building*	TBD	1						
Building Maintenance Projects	CRF		\$360,000	\$140,000	\$80,000	\$90,000		\$110,000
Buildings and Facilities Subtotal			\$5,360,000	\$140,000	\$80,000	\$90,000	\$0	\$110,000
Police Department								
Vehicle and Equipment Purchases	CRF		\$25,000	\$92,000	\$25,000	\$15,000	\$40,000	\$89,000
Police Department Subtotal			\$25,000	\$92,000	\$25,000	\$15,000	\$40,000	\$89,000
Fire Department								
Fire Truck and Ambulance Purchases	CRF		\$355,000	\$650,000	\$250,000	\$240,000		\$45,000
Fire Department Equipment Purchases	CRF		\$40,000		\$172,000		\$30,000	\$210,000
Fire Department Subtotal			\$395,000	\$650,000	\$422,000	\$240,000	\$30,000	\$255,000
Parks & Recreation								
Equipment Purchases	CRF		\$41,207		\$25,000	\$30,000		
Improvements	CRF				\$30,000	\$70,000		
Parks & Recreation Subtotal			\$41,207	\$0	\$55,000	\$100,000	\$0	\$0
Community Development								
Vehicle Purchase Operating Budget	GF		\$25,000					
Community Development - Sub Total			\$25,000					
Grand Total - Town Projects			\$7,758,046	\$1,483,585	\$3,468,151	\$1,110,400	\$939,520	\$1,112,280

Summary of Capital Improvement Projects (Gross)

Project	Source	CIP RATING	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Library								
Lower Level	CRF	3	\$600,000					
<i>Library Sub-total</i>			<i>\$600,000</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
School District								
Buses	GF		\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Elementary School Renovation	TBD	2						
<i>School District Subtotal</i>			<i>\$100,000</i>	<i>\$100,000</i>	<i>\$100,000</i>	<i>\$100,000</i>	<i>\$100,000</i>	<i>\$100,000</i>
SUMMARY - ALL CAPITAL PROJECTS								
Town Projects			\$7,758,046	\$1,483,585	\$3,468,151	\$1,110,400	\$939,520	\$1,112,280
Library Projects			\$600,000	\$0	\$0	\$0	\$0	\$0
School Projects			\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
TOTAL - ALL CAPITAL PROJECTS			\$8,458,046	\$1,583,585	\$3,568,151	\$1,210,400	\$1,039,520	\$1,212,280

GF = General Fund CRF = Capital Reserve Fund
 FB = Fund Balance BD = Bond/Notes
 SA = State Aid TIF = Tax Increment Financing
 GR = Grant BA = Betterment Assessment
 TBD = To Be Determined

Net Expense

Current & Proposed Debt Expense	Source	CIP RATING	Net Expense					
			2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Outstanding Bonds (School & Town Bonds)	GF		\$1,973,543	\$1,344,552	\$1,304,300	\$1,260,737	\$1,220,962	\$1,186,662
Public Safety Building	GF	1	\$86,679	\$417,018	\$408,338	\$399,658	\$390,978	\$382,298
Community Building*	TBD	1						
Bow Junction Water Main Extension	TBD	3						
Elementary School Renovation	TBD	2						
Total			\$2,060,222	\$1,761,570	\$1,712,638	\$1,660,395	\$1,611,940	\$1,568,960
Net Tax Impact Per Thousand			\$1.95	\$1.67	\$1.62	\$1.57	\$1.53	\$1.49

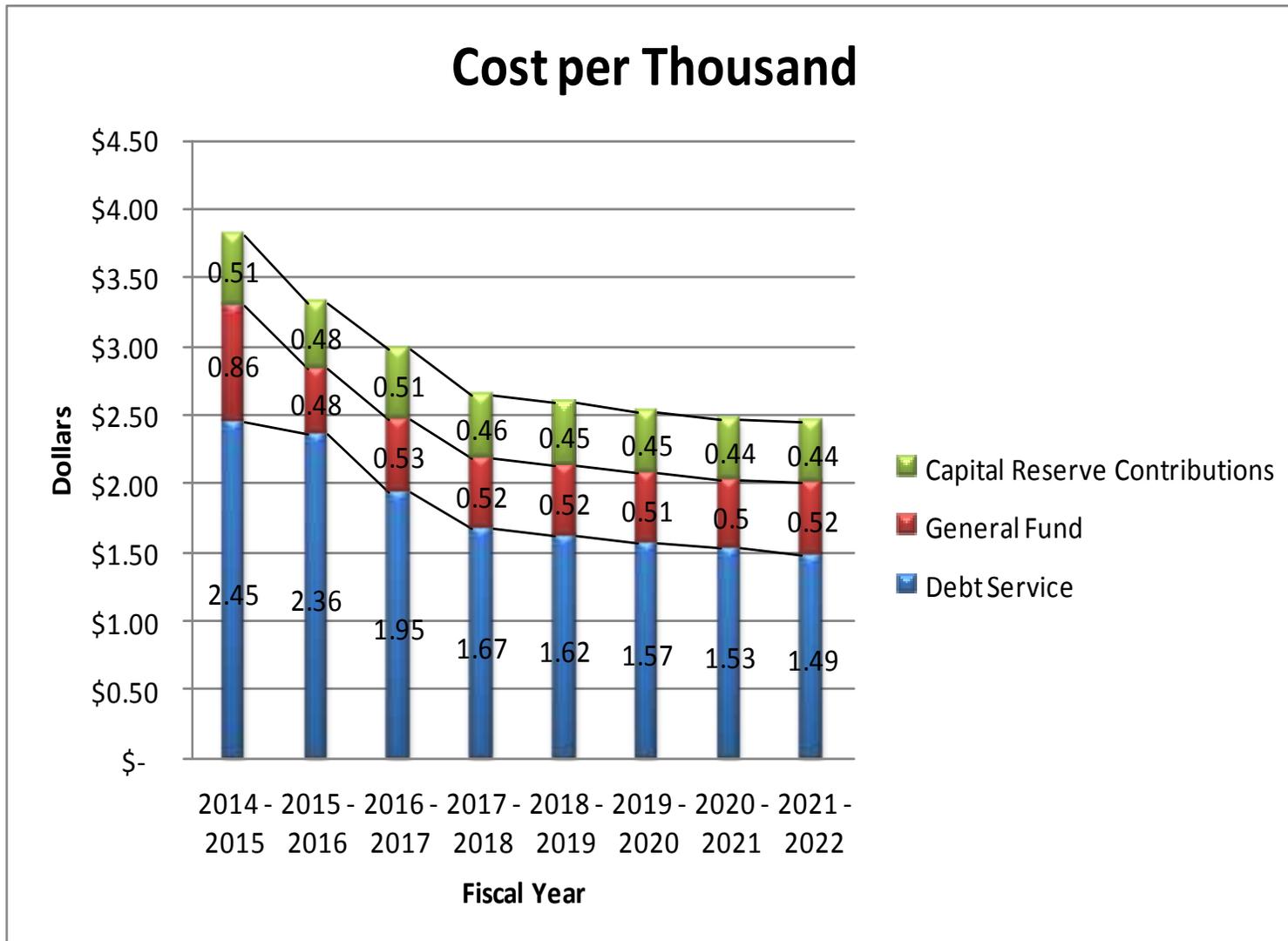
*Cost of Project and or source of funding not included due to information not being available.

General Fund Expense	Source	CIP RATING	Net Expense					
			2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Annual Road Reconstruction and Paving	GF	1	\$435,839	\$443,585	\$443,531	\$439,760	\$422,560	\$450,000
Building Inspector Vehicle	GF		\$25,000					
School Buses	GF		\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Total			\$560,839	\$543,585	\$543,531	\$539,760	\$522,560	\$550,000
Net Tax Impact Per Thousand			\$0.53	\$0.52	\$0.52	\$0.51	\$0.50	\$0.52

Capital Reserve Funds - Contributions	Source	Net Expense						
		2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	
Public Works Equipment	GF	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	
Buildings & Facilities	GF	\$196,000	\$195,000	\$180,000	\$180,000	\$180,000	\$180,000	
Municipal Facilities Emergency Repair	GF	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	
Police Department Equipment	GF	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	
Fire Department Equipment	GF	\$42,000	\$42,000	\$42,000	\$42,000	\$42,000	\$42,000	
Fire Department Trucks and Ambulances	GF	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	
Parks & Recreation Equipment	GF	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	
Parks & Recreation Improvements	GF	\$20,000	\$20,000	\$20,000	\$20,000	\$5,000	\$5,000	
Library Lower Level	GF	\$50,000	\$0	\$0	\$0	\$0	\$0	
School	GF							
Total		\$541,000	\$490,000	\$475,000	\$475,000	\$460,000	\$460,000	
Net Tax Impact Per Thousand		\$0.51	\$0.46	\$0.45	\$0.45	\$0.44	\$0.44	

Combined Tax Impact Per Thousand			\$3.00	\$2.65	\$2.59	\$2.54	\$2.46	\$2.45
Total CIP Tax Impact \$ 200,000.00 Home			\$599.83	\$530.23	\$518.09	\$507.47	\$492.17	\$489.22
Total CIP Tax Impact \$ 300,000.00 Home			\$899.75	\$795.34	\$777.14	\$761.20	\$738.25	\$733.83
Total CIP Tax Impact \$ 400,000.00 Home			\$1,199.66	\$1,060.46	\$1,036.18	\$1,014.93	\$984.33	\$978.44
Tax Base			\$1,054,318	\$1,054,318	\$1,054,318	\$1,054,318	\$1,054,318	\$1,054,318

Estimated Cost, per thousand, of the Capital Improvements Plan on Mil-Rate For Fiscal Years 2014 - 2015 thru 2016 - 2022.



Introduction

The preparation and adoption of a Capital Improvements Plan (CIP) is an important part of Bow's planning process. A CIP aims to recognize and resolve deficiencies in existing public facilities and anticipate and meet future demand for capital facilities. A CIP is a multi-year schedule that lays out a series of municipal projects and their associated costs. Over the six-year period considered by the CIP, it shows how the Town should plan to expand or renovate facilities and services to meet the demands of existing or new population and businesses.

A CIP is an advisory document that can serve a number of purposes, among them to:

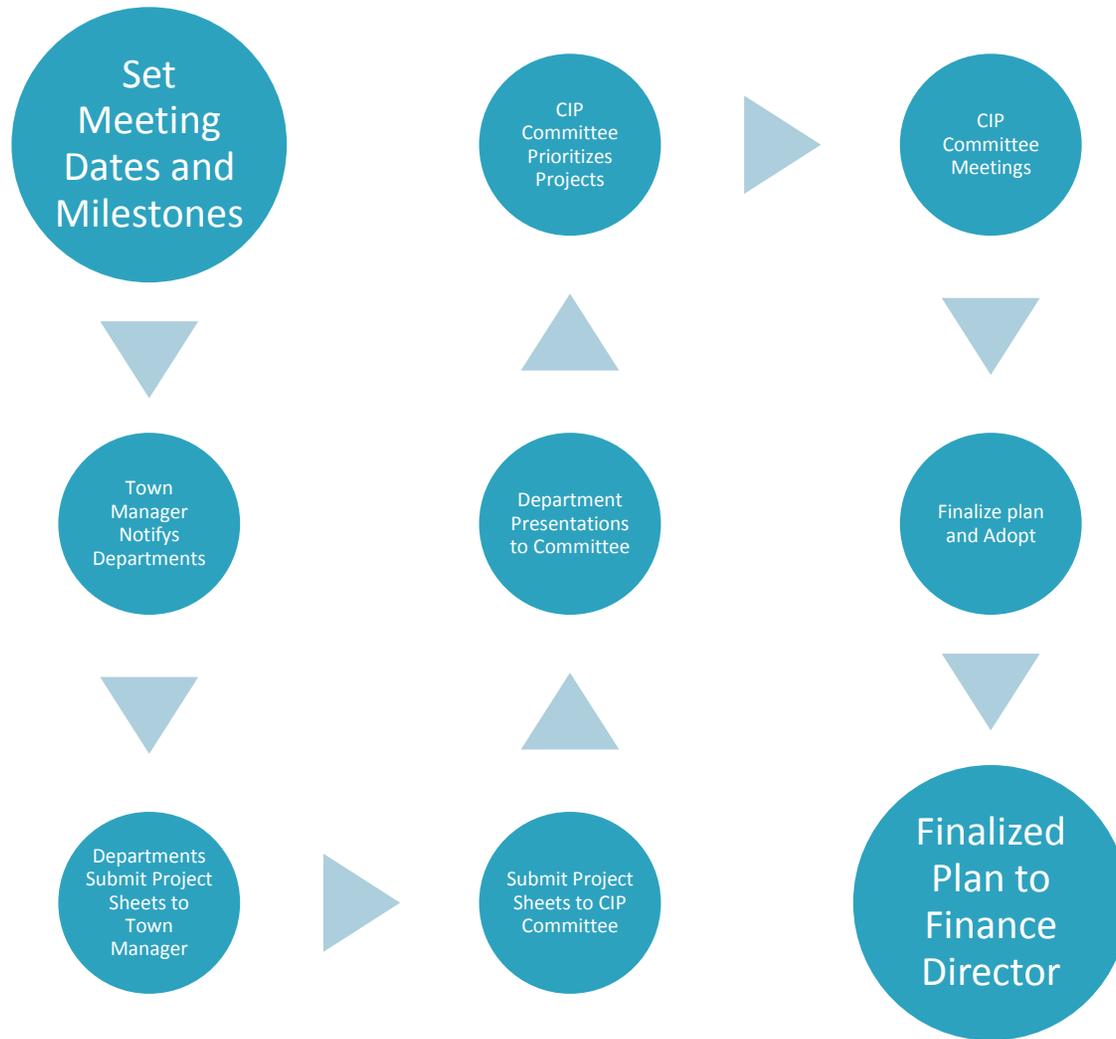
- Guide the Board of Selectmen, School Board, Library Trustees and the Budget Committee in the annual budgeting processes;
- Contribute to stabilizing the Town's real property tax rate;
- Aid the prioritization, coordination, and sequencing of various municipal improvements;
- Inform residents, business owners, and developers of planned improvements;
- Provide the necessary legal basis, continued administration and periodic updates of the Bow Impact Fee Ordinance.

It must be emphasized that the CIP is purely advisory in nature. Ultimate funding decisions are subject to the budgeting process and the annual Town Meeting. The CIP Committee is bringing Department project requests to the attention of the Town, along with recommended priorities, in the hope of facilitating decision making by the Town.

From the *2004 Bow Master Plan*:

“As the Master Plan was being written, it became evident that Bow is at a crossroads. With incremental growth creeping from southern portions of the State and the City of Concord continuing to evolve and expand as a regional source of employment, Bow will continue to grow and face new challenges and issues. Those who contributed to this plan did their best to plan for such changes and to suggest appropriate strategies that will accommodate reasonable growth while maintaining the rural atmosphere. It is the resolve of the Planning Board to faithfully and aggressively pursue the recommendations included in this document. The Master Plan is a document that outlines the kind of town Bow is now and the kind of town it would like to be, keeping in mind its importance as a community in central New Hampshire. It describes us today, forecasts where we are heading, and defines what we need to do over the next several years. Most importantly, we can see what we can achieve and, by committing it to paper for all to see, what our plan is for the future. It is to be a living document helping us to focus on the important issues of our times. We need each and every community member's efforts to bring fruition to the recommendations in this document.”

CIP Processes



Financing Methods

In the project summaries below, there are several different financing methods used. Four methods require appropriations; either as part of the Town's annual operating budget or as independent warrant articles at Town Meeting.

- The ***1-Year Appropriation (GF)*** is the most common method, and refers to those projects proposed to be funded by real property tax revenues within a single fiscal year.
- The ***Capital Reserve (CRF)*** method requires appropriations over more than one year, with the actual project being accomplished only when the total appropriations meet the project cost.
- ***Lease/Purchase (LP)*** method has been used by the School District and other departments for the purchase of major vehicles.
- ***Bonds (BD)*** are generally limited to the most expensive capital projects, such as major renovations, additions, or new construction of school or municipal buildings or facilities, and allow capital facilities needs to be met immediately while spreading out the cost over many years in the future.
- ***Fund Balance (FB)*** may be used to finance capital projects as approved by Town Meeting.
- ***Impact fees (IF)*** are collected from new development to pay for new facility capacity and placed in a fund until they are either expended within six years as part of the project finance or they are returned to the party they were collected from.
- ***Grants (GR)*** are also utilized to fund capital projects in Bow. Typically, grants will cover a portion of the overall project cost, and the Town is responsible for the remaining percentage of the project cost.
- ***Tax Increment Financing (TIF)***. TIF Districts allow the Town to use increases in valuation of property to directly pay off bonds for infrastructure improvements and capital projects in the district. TIF Districts are set up and administered according to NH RSA's, Chapter 162-K.
- ***Public/Private Partnerships (PPP)*** Lastly, the Town can take advantage of ***Public/Private Partnerships***, where a private organization shares the costs of funding a capital project.
- ***To Be Determined (TBD)*** Uncertain of cost, funding or project timeline.

Identification and Evaluation of Town's Capital Needs

The Bow CIP Committee uses worksheet forms that are filled out annually and submitted by the Town Manager and Select Board, Library Trustees, and School Board to identify potential capital needs and explain these project requests. Forms are tailored by the CIP Committee and the Finance Department to generate information that defines the relative need and urgency for projects, and which also enables long-term monitoring of the useful life and returns from projects. The CIP submittal form is included in Appendix B. After written descriptions of potential capital projects are submitted, requestors are asked to come before the CIP Committee, as needed, to explain their capital needs and priorities and to explore with the CIP Committee the alternative approaches available to achieve the optimum level of capital needs and improvements.

The CIP Committee evaluates the submitted requests and assigns them to the six-year schedule according to the priority of all capital requests. The following pages describe each of the requests that have been placed in the six year CIP program for projects exceeding \$ 25,000, and include: spreadsheets of the schedule, funding sources, tax impacts, and other required information. There are several projects included in this plan that fall below the \$25,000 threshold due to them being included and contributions being made to the Capital Reserve Funds prior to establishment of the CIP Committee. Projects not meeting either CIP criteria or projected six year window are identified as possible future projects.

Priority System

The Committee has established a system to assess the relative priority of projects requested by the various departments, boards, and committees. Each proposed project is individually considered by the Committee and assessed a priority rank based on the descriptions below:

- **Priority 1 – Urgent:** Cannot Be Delayed: Needed immediately for health & safety
- **Priority 2 - Necessary:** Needed within 3 years to maintain basic level & quality of community services.
- **Priority 3 - Desirable:** Needed within 4-6 years to improve quality or level of services.
- **Priority 4 - Deferrable:** Can be placed on hold until after 6 year scope of current CIP, but supports community development goals.
- **Priority 5 - Premature:** Needs more research, planning & coordination
- **Priority 6 - Inconsistent:** Contrary to land-use planning or community development goals.

CAPITAL RESERVE FUNDS

<u>Fund</u>	<u>Town Meeting/Article No</u>	<u>Purpose</u>	<u>Agents To Expend</u>
Cemetery Development	2001/18 and 2003/25	Purchasing land, conceptualizing, designing, and constructing cemeteries or additions to cemeteries.	Town Meeting
Fire Department Equipment	1957/7	Fire Department equipment.	Town Meeting
Fire Trucks	1996/16 and 2009/16	The purchase and replacement of Fire Dept vehicles with truck chassis including pumper trucks, ladder trucks, tanker trucks, forestry trucks, rescue trucks, and ambulances	Town Meeting
Highway Construction	2003/39	Future highway construction projects.	Town Meeting
Land Purchase	2005/26	Purchasing future land or "other interests in land".	Selectmen
Municipal Buildings and Grounds	2006/15	Municipal buildings and grounds capital maintenance and repair.	Town Meeting
Parks & Recreation Department Equipment	1996/27	Replacement of Parks & Recreation Department equipment.	Town Meeting
Parks & Recreation Improvements	2015/21	Parks & Recreation Improvements.	Town Meeting
Police Department Equipment	1971/10	Replacing Police Department equipment.	Town Meeting
Public Safety Building	2000/23 and 2006/19	Public Safety Building Capital Reserve Fund.	Town Meeting
Highway/Public Works Equipment	1977/9	Purchase of new or replacement of existing highway equipment.	Town Meeting
Road Construction - I-2 Zone & Business Development District	1999/16 and 2002/24	Road Construction I-2 Zone & Business Development District Capital Reserve Fund	Town Meeting
Municipal Facilities Emergency Repair Capital Reserve	2015/27	Providing funds to address unforeseen emergency or urgent repairs	Selectmen
Sewer System	Oct 9.2008 BOS RSA 35:7 & 149-I:10	Major capital additions, replacements, and improvements to wastewater system, including sewer lines and other infrastructure, pumping stations and other facilities, land and easements, and equipment	Selectmen
Bridge	2009/12	Constructing, replacing, and rehabilitating bridges and culverts which provide water crossings	Selectmen
Library Lower Level	2012/20	Renovating lower level of Baker free Library	Library Trustees
Public Safety Building	2006/19		Town Meeting
Bow School District (Elementary/Memorial Schools)	1992	Construction, reconstruction or renovations of Bow Schools	District Meeting
Bow School District (HVAC)	1996		District Meeting
Bow High School Capital Improvements	2000		District Meeting
Bow School District Paving	2006/15	Paving in the Bow School District	District Meeting
Bow School District AREA School Improvements	2015/3		District Meeting
<u>Trust Funds</u>			
Library Emergency Repairs			Library Trustees
Private Water Well Pollution Mitigation			Selectmen

Listing & Discussion of Projects by Priority

Priority 1 - Urgent: Cannot Be Delayed: Needed immediately for health & safety

- **Public Safety Building - \$ 5,000,000**

Project Description: This project is to build a new Public Safety Building to house the Fire Department, Police Department and Emergency Management Department. The current Fire Station/ Community Building was constructed in 1956 and the State Fire Marshal has ordered that the building be brought into full compliance with Life Safety and Fire Protection Codes by 2016. A third Public Safety Building Review Committee has been formed and has been charged with presenting an alternative for consideration by the Board of Selectmen. The Bow Public Safety Supporters has raised, as of August 31, 2015, a total of \$6,000 to go toward the cost of this project and continue with their fundraising efforts. Communications and information technology equipment, generator and fumes exhaust systems will be relocated. All grant options will be explored.

A proposal to construct a new public safety facility for \$7,700,000 was presented at the 2013 Town Meeting and it fell short of the required 2/3 vote for approval. The design and scope of that proposal were reduced and a proposal to construct a new facility for \$6,796,000 was not approved at the 2014 Town Meeting.

Funding Source: BD - \$ 4,953,100
 GA - \$ 35,000
 PPP - \$ 6,000
 CRF - \$5,900
 Proposed Funding Year: FY 2016-17

- **White Brook (Birchdale Road) Bridge Replacement - \$600,000**

Project Description: In July, 2015, the NH Department of Transportation informed the Town that there is “no remaining safe live load capacity for this bridge, resulting in a required posting of ‘BRIDGE CLOSED’”. The Department based this decision upon an underwater bridge inspection that noted the following deficiencies: The corrugated steel culvert exhibits heavy rusting, deep pitting and widespread holes along a band one-foot above and below the typical water level for the full length of the pipe. The holes are allowing backfill materials to spill into the pipe, undermining the roadway. Additionally, there is a six-inch sag in the roofline of the pipe. The Town’s Engineer, Dubois & King, is currently performing an engineering study of the bridge in order to develop bridge design options. The preferred option will be presented to NH DOT for approval and the new bridge will be designed and submitted to the Department for approval. The bridge replacement will then be done in the summer/fall of 2016. State Bridge Aid funding for the replacement is not available until 2025. The Board of Selectmen will be considering funding options for inclusion in the FY2016-17 budget.

Funding Source: GR - (State Aid Available 2025)
 CRF - \$600,000
 Proposed Funding Year: FY 2016-17 (No Tax Impact)

- **Logging Hill/Knox Rd/Bow Center Road Intersection - \$ 766,000**

Project Description: The Town has received a State Municipal Highway Aid grant to design and construct improvements at this intersection. The Town contracted with Dubois & King to conduct a study of the intersection and develop design options and the Board of Selectmen has chosen a single lane roundabout design. Additional funding for this design option was not approved at the 2014 Town Meeting. The Board of Selectmen, engineering firm and NH DOT continues to look at all design options. Full Roundabout: \$770,000, Traffic Signal: \$630,215, Mini Roundabout: \$449,999

Funding Source: GR - \$510,666 (State)

FB - \$255,334

Proposed Funding Year: FY 2016-17 (**No Tax Impact**)

- **Annual Road Construction and Paving - \$435,839**

Project Description:

Street Name	Length in Miles	Year Constructed	Year Last Paved	Length in Feet	Total Tons @ 2 inches	Total Cost @ \$ 80 / ton
Robinson Road Knox to 3A	2.127	1975		4,484.00	1,233.10	\$125,000.00
Hollow Road	0.2	1972	1997	1,056.00	290.4	\$23,232.00
Edgewood Drive	0.2	1975	2000	1,056.00	290.4	\$23,232.00
Essex Drive	0.539	1989	1989	2,845.92	782.63	\$62,610.24
Falcon Way	0.508	1995	1995	2,682.24	737.62	\$59,009.28
Rocky Point Drive	0.98	1970		5,174.40	1,422.96	\$113,836.80
Oak Ridge Drive	0.094	1974	1998	496.32	136.49	\$10,919.04
Robinson Rd ext				818		\$18,000.00
						\$435,839.36

Funding Source: GF: \$ 435,839

Proposed Funding Year: FY 2016-17

- **Community Building - \$ TBD**

Project Description: On July 24, 2013, the New Hampshire State Fire Marshal's Office issued an order to the Town requiring that the Town take the following actions to correct life safety code violations in the current Fire Station/Community Building:

1. Engage the services of a New Hampshire Licensed Fire Protection Engineer to develop a proposed building and life safety compliance plan of action, including engineered drawings, for the facility.
2. Perform work to ensure that the on-site residential occupancy shall be complete, operational, and in compliant status with all building and life safety requirements.
3. On or before September 16, 2016, the proposed compliance plan of action shall achieve total compliance for the whole building.

Funding Source: CRF - \$TBD
GF - \$TBD
PPP - \$TBD
GA - \$TBD

Proposed Funding Year: 2016 -2017

BOND PAYMENT SCHEDULE (Safety Complex)								
Principal \$ 4,953,100								
Term - 20 Years								
Interest Rate - 3.5%								
Year Ending June 30	Principal July	Interest July	Interest January	Total	Balance	Tax Rate Impact	200,000.00 House	300,000.00 House
2016	-	-	86,679	86,679	4,953,100	0.09	17.08	25.62
2017	248,000	86,679	82,339	417,018	4,705,100	0.41	82.19	123.28
2018	248,000	82,339	77,999	408,338	4,457,100	0.40	80.48	120.71
2019	248,000	77,999	73,659	399,658	4,209,100	0.39	78.76	118.15
2020	248,000	73,659	69,319	390,978	3,961,100	0.39	77.05	115.58
2021	248,000	69,319	64,979	382,298	3,713,100	0.38	75.34	113.01
2022	248,000	64,979	60,639	373,618	3,465,100	0.37	73.63	110.45
2023	248,000	60,639	56,299	364,938	3,217,100	0.36	71.92	107.88
2024	248,000	56,299	51,959	356,258	2,969,100	0.35	70.21	105.32
2025	248,000	51,959	47,619	347,578	2,721,100	0.34	68.50	102.75
2026	248,000	47,619	43,279	338,898	2,473,100	0.33	66.79	100.18
2027	248,000	43,279	38,939	330,218	2,225,100	0.33	65.08	97.62
2028	248,000	38,939	34,599	321,538	1,977,100	0.32	63.37	95.05
2029	248,000	34,599	30,259	312,858	1,729,100	0.31	61.66	92.49
2030	248,000	30,259	25,919	304,178	1,481,100	0.30	59.95	89.92
2031	248,000	25,919	21,579	295,498	1,233,100	0.29	58.24	87.35
2032	248,000	21,579	17,239	286,818	985,100	0.28	56.53	84.79
2033	248,000	17,239	12,899	278,138	737,100	0.27	54.82	82.22
2034	248,000	12,899	8,559	269,458	489,100	0.27	53.10	79.66
2035	248,000	8,559	4,219	260,778	241,100	0.26	51.39	77.09
2036	241,100	4,219	-	245,319	-	0.24	48.35	72.52
	4,953,100	908,980	908,980	6,771,060			1,334.44	2,001.66

		PROJECT 322368 - BOW CENTER ROUNDABOUT			
□ Randolph, VT 05080 (802) 728-3376 □ Bedford, NH 03110 (603) 837-1043 □ S. Burlington, VT 05403 (802) 878-7661 □ Laconia, NH 03246 (603) 524-1188		SHEET NO. <u>1</u> OF <u>1</u>			
Engineering • Planning • Development • Management		CALCULATED BY: <u>GMC</u> DATE: <u>07-May-15</u>			
		CHECKED BY: <u>MTO</u> DATE: <u>07-May-15</u>			
		SCALE: _____			
BOW CENTER ROUNDABOUT					
ITEM NO.	DESCRIPTION	UNIT	QUANT.	UNIT PRICE	AMOUNT
NHDOT PARTICIPATING ITEMS					
201.1	CLEARING AND GRUBBING	LS	1	\$5,000.00	\$5,000.00
202.6	CURB REMOVAL FOR STORAGE	LF	292	\$3.50	\$912.00
203.1	COMMON EXCAVATION	CY	141	\$7.99	\$1,126.59
203.3	UNCLASSIFIED EXCAVATION	CY	50	\$40.00	\$2,000.00
304.4	CRUSHED STONE (FINE GRADATION)	CY	115	\$26.59	\$3,058.70
403.1109	HOT BITUMINOUS PAVEMENT, MACHINE METHOD, HIGH STRENGTH	TON	200	\$99.50	\$19,900.00
403.12	HOT BITUMINOUS PAVEMENT, HAND METHOD	TON	12	\$131.71	\$1,580.52
417	COLD PLANING BITUMINOUS SURFACES	SY	1886	\$2.84	\$4,978.04
603.62115	15" PE PIPE (TYPE C)	LF	8	\$43.25	\$346.00
604.22	DROP INLETS TYPE B	U	1	\$1,400.00	\$1,400.00
604.51	RECONSTRUCTING/ADJUSTING SEWER MANHOLES	EA	3	\$450.00	\$1,350.00
606.12	2" BITUMINOUS SIDEWALK	SY	252	\$65.00	\$16,380.00
606.38	8" REINFORCED CONCRETE SIDEWALK	SY	173	\$42.11	\$7,285.03
	JUMBO COBBLES	SY	198	\$125.00	\$24,750.00
608.54	DETECTABLE WARNING DEVICES, CAST IRON	SY	5	\$750.00	\$3,750.00
609.01	STRAIGHT GRANITE CURB	LF	1043	\$20.45	\$21,328.35
609.01123	GRANITE CURB MOUNTABLE BEVELED EDGE	LF	680	\$31.89	\$21,295.84
611.90001	ADJUSTING WATER GATES AND SHUTOFFS SET BY OTHERS	EA	3	\$188.78	\$500.28
615.003	REMOVING TRAFFIC SIGNS	U	9	\$10.39	\$93.42
615.03	TRAFFIC SIGN TYPE C	SF	43	\$47.44	\$2,039.92
615.034	RELOCATING TRAFFIC SIGN, TYPE C	U	3	\$123.94	\$371.82
615.06	TRAFFIC SIGN TYPE CC	SF	8	\$10.59	\$84.72
615.074	RELOCATING MISCELLANEOUS SIGNS	U	1	\$200.00	\$200.00
618.7	FLAGGERS	HR	2100	\$21.17	\$44,457.00
619.1	MAINTENANCE OF TRAFFIC	U	1	\$10,000.00	\$10,000.00
628.2	SAWED BITUMINOUS PAVEMENT	LF	1143	\$1.31	\$1,487.33
632.0104	RETROREFLECTIVE PAINT PAVE. MARKING, 4" LINE	LF	5143	\$0.19	\$977.17
632.1104	PREFORMED RETROREFLECTIVE TAPE, TYPE I (REMOVABLE) 4" LINE	LF	5400	\$1.45	\$9,280.00
632.3104	RETROREFLECTIVE THERMOPLAS. PAVE. MARKING, 4" LINE	LF	747	\$0.62	\$463.14
632.3109	RETROREFLECTIVE THERMOPLAS. PAVE. MARKING, 8" LINE	LF	359	\$1.48	\$531.32
632.32	RETROREFLECTIVE THERMOPLAS. PAVE. MARKINGS, SYMBOL OR WORD	SF	48	\$5.93	\$284.64
632.911	OBLITERATE PAVE. MARKING LINE, 12" WIDE & UNDER	LF	870	\$0.98	\$899.80
645.52	RYEGRASS FOR TEMPORARY EROSION CONTROL	LB	287	\$2.50	\$717.50
646.51	TURF ESTABLISHMENT WITH MULCH, TACKIFIERS AND LOAM	SY	1000	\$4.00	\$4,000.00
692	MOBILIZATION	U	1	\$40,000.00	\$40,000.00
NHDOT PARTICIPATING SUBTOTAL					\$252,428.93
NHDOT NON-PARTICIPATING SUBTOTAL					

 <ul style="list-style-type: none"> <input type="checkbox"/> Randolph, VT 05080 (802) 728-3378 <input checked="" type="checkbox"/> Bedford, NH 03110 (603) 837-1043 <input type="checkbox"/> S. Burlington, VT 05403 (802) 878-7861 <input type="checkbox"/> Laconia, NH 03246 (603) 524-1188 <p>Engineering • Planning • Development • Management</p>	PROJECT 322368 - BOW CENTER ROUNDABOUT	
	SHEET NO. <u>1</u> OF <u>1</u>	
	CALCULATED BY: <u>GMC</u>	DATE: <u>07-May-15</u>
	CHECKED BY: <u>MTO</u>	DATE: <u>07-May-15</u>
SCALE: _____		
Construction:		
Construction Item Total		\$252,428.93
<u>Construction Admin. (10% CONSTRUCTION COST)</u>		<u>\$25,243.00</u>
Total Construction		\$277,671.93
Preliminary Engineering:		
<u>Design Engineering</u>		<u>\$113,632.00</u>
Total Prelim. Engineering		\$113,632.00
Subtotal:		
		\$391,303.93
	15% Contingency	\$58,696.00
ESTIMATE TOTAL:		\$449,999.93
<small>Note:</small> In providing opinions of probable construction cost, the Client understands that D&K has no control over the cost or availability of labor, equipment or materials, or over market conditions or the Contractor's method of pricing, and that our Opinion of Probable Construction Costs are made on the basis of our professional judgment and experience. D&K makes no warranty, expressed or implied, that the bids or the negotiated cost of the Work will not vary from the Opinion of Probable Construction Cost provided herein.		



Randolph, VT 05060 (802) 728-3376
 Bedford, NH 03110 (603) 637-1043
 S. Burlington, VT 05403 (802) 878-7661
 Laconia, NH 03248 (603) 524-1166

Engineering • Planning • Development • Management

PROJECT **322368 - BOW CENTER INTERSECTION WITH TRAFFIC SIGNAL**

SHEET NO. 1 OF 1

CALCULATED BY: DUP DATE 31-Aug-15

CHECKED BY: MTO DATE 01-Sep-15

SCALE: _____

BOW CENTER TRAFFIC SIGNAL

ITEM NO.	DESCRIPTION	UNIT	QUANT.	UNIT PRICE	AMOUNT
NHDOT PARTICIPATING ITEMS					
201.1	CLEARING AND GRUBBING	LS	1	\$5,000.00	\$5,000.00
202.6	CURB REMOVAL FOR STORAGE (TO BE RESET)	LF	320	\$3.50	\$1,120.00
203.1	COMMON EXCAVATION	CY	245	\$7.99	\$1,957.55
203.3	UNCLASSIFIED EXCAVATION	CY	60	\$40.00	\$2,400.00
304.4	CRUSHED STONE (FINE GRADATION)	CY	105	\$26.58	\$2,790.90
403.1109	HOT BITUMINOUS PAVEMENT, MACHINE METHOD, HIGH STRENGTH	TON	520	\$89.50	\$51,740.00
411.3	PLANT MIX SURFACE TREATMENT (ASPHALT CEMENT), PAYER SHIM	TON	140	\$86.00	\$12,040.00
403.12	HOT BITUMINOUS PAVEMENT, HAND METHOD	TON	20	\$131.71	\$2,634.20
417	COLD PLANING BITUMINOUS SURFACES	SY	685	\$3.67	\$2,513.95
604.51	RECONSTRUCTING/ADJUSTING SEWER MANHOLES	EA	3	\$450.00	\$1,350.00
606.12	2" BITUMINOUS SIDEWALK	SY	360	\$65.00	\$23,400.00
606.38	8" REINFORCED CONCRETE SIDEWALK	SY	220	\$42.11	\$9,264.20
606.54	DETECTABLE WARNING DEVICES, CAST IRON	SY	12	\$750.00	\$9,000.00
609.01	STRAIGHT GRANITE CURB	LF	225	\$20.45	\$4,601.25
609.01123	GRANITE CURB MOUNTABLE BEVELED EDGE	LF	215	\$31.99	\$6,854.20
609.02	CURVED GRANITE CURB	LF	30	\$64.00	\$1,920.00
609.50	RESET GRANITE CURB	LF	320	\$8.50	\$2,720.00
611.90001	ADJUSTING WATER GATES AND SHUTOFFS SET BY OTHERS	EA	3	\$166.76	\$500.28
614.522	MOLDED PULL BOX 15"X24"	U	12	\$367.50	\$4,410.00
614.73114	3" PVC CONDUIT, SCHEDULE 40	LF	380	\$6.78	\$2,576.40
614.73118	3" PVC CONDUIT, SCHEDULE 80	LF	270	\$14.61	\$3,944.70
615.003	REMOVING TRAFFIC SIGNS	U	11	\$50.00	\$550.00
615.03	TRAFFIC SIGN TYPE C	U	5	\$300.00	\$1,500.00
615.074	RELOCATING MISCELLANEOUS SIGNS	U	1	\$200.00	\$200.00
616.10	TRAFFIC SIGNALS	U	1	\$130,000.00	\$130,000.00
618.7	FLAGGERS	HR	2100	\$21.17	\$44,457.00
619.1	MAINTENANCE OF TRAFFIC	U	1	\$10,000.00	\$10,000.00
626.2	SAWED BITUMINOUS PAVEMENT	LF	2130	\$1.31	\$2,790.30
632.0104	RETROREFLECTIVE PAINT PAVE. MARKING, 4" LINE	LF	6693	\$0.19	\$1,271.67
632.3106	RETROREFLECTIVE THERMOPLAS. PAVE. MARKING, 6" LINE	LF	580	\$2.33	\$1,304.90
632.3118	RETROREFLECTIVE THERMOPLAS. PAVE. MARKING, 18" LINE	LF	60	\$3.45	\$172.50
632.911	OBLITERATE PAVE. MARKING LINE, 12" WIDE & UNDER	LF	870	\$0.88	\$589.80
645.52	RYEGRASS FOR TEMPORARY EROSION CONTROL	LB	287	\$2.50	\$717.50
646.51	TURF ESTABLISHMENT WITH MULCH, TACKIFIERS AND LOAM	SY	1000	\$4.00	\$4,000.00
650.20	LANDSCAPING	LS	1	\$5,000.00	\$5,000.00
662	MOBILIZATION	U	1	\$40,000.00	\$40,000.00
NHDOT PARTICIPATING SUBTOTAL					\$394,891.00
NHDOT NON-PARTICIPATING SUBTOTAL					

 <input type="checkbox"/> Randolph, VT 05060 (802) 728-3376 <input checked="" type="checkbox"/> Bedford, NH 03110 (603) 837-1043 <input type="checkbox"/> S. Burlington, VT 05403 (802) 878-7661 <input type="checkbox"/> Laconia, NH 03248 (603) 524-1188 Engineering • Planning • Development • Management	PROJECT 322368 - BOW CENTER INTERSECTION WITH TRAFFIC SIGNAL	
	SHEET NO: <u>1</u> OF <u>1</u>	
	CALCULATED BY: <u>DUP</u> DATE: <u>31-Aug-15</u>	
	CHECKED BY: <u>MTO</u> DATE: <u>01-Sep-15</u>	
SCALE: _____		
Construction:		
Construction Item Total		\$394,891.00
<u>Construction Admin. (10% CONSTRUCTION COST)</u>		<u>\$39,490.00</u>
Total Construction		\$434,381.00
Preliminary Engineering:		
<u>Design Engineering</u>		<u>\$113,632.00</u>
Total Prelim. Engineering		\$113,632.00
Subtotal:		
		\$548,013.00
	15% Contingency	\$82,202.00
ESTIMATE TOTAL:		\$630,215.00
<small>Note: In providing opinions of probable construction cost, the Client understands that D&K has no control over the cost or availability of labor, equipment or materials, or over market conditions or the Contractor's method of pricing, and that our Opinion of Probable Construction Costs are made on the basis of our professional judgment and experience. D&K makes no warranty, expressed or implied, that the bids or the negotiated cost of the Work will not vary from the Opinion of Probable Construction Cost provided herein.</small>		

		<input type="checkbox"/> Randolph, VT 05060 (802) 728-3376 <input type="checkbox"/> Bedford, NH 03083 (603) 637-1043 <input type="checkbox"/> Williston, VT 05495 (802) 878-7661	JOB <u>621775L - Bow Center</u>			
Engineering • Planning • Development • Management			SHEET NO. _____ OF _____			
			CALCULATED BY: <u>SPG</u> DATE: _____			
			CHECKED BY: <u>MTO</u> DATE: <u>02-Sep-15</u>			
			SCALE: _____			
OPINION OF PROBABLE CONSTRUCTION COST ROUNDABOUT OPTION (INCLUDING RESURFACING)						
ITEM NO.	DESCRIPTION	UNIT	QUANT.	UNIT PRICE	AMOUNT	
201.1	CLEARING AND GRUBBING (F)	A	0.05	\$20,000.00	\$1,000.00	
203.1	COMMON EXCAVATION	CY	370	\$9.00	\$3,329.33	
304.3	CRUSHED GRAVEL (F)	CY	370	\$30.00	\$11,097.78	
403.11	HOT BITUMINOUS PAVEMENT, MACHINE METHOD	T	184	\$30.00	\$5,508.00	
608.28	8" CONCRETE SIDEWALK	SY	938	\$60.00	\$56,303.40	
609.01	STRAIGHT GRANITE CURB (6")	LF	2067	\$20.00	\$41,340.00	
609.01	STRAIGHT GRANITE CURB (2" Mountable)	LF	616	\$20.00	\$12,320.00	
619.1	MAINTENANCE OF TRAFFIC	UNIT	1	\$15,000.00	\$15,000	
609.02	CURVED GRANITE CURB	LF	158	\$30.00	\$4,740.00	
632.0104	RETROREFLECTIVE PAINT PAVE. MARKING, SINGLE SOLID LINE, 4 IN.	LF	4000	\$1.00	\$4,000.00	
N/A	RELOCATE UTILITIES (POLE AND STORMWATER)	EA	2	\$15,000.00	\$30,000.00	
N/A	Mountable Texturized Concrete (Truck Apron, turn areas and crosswalks)	SF	10140	\$14.00	\$141,960.00	
N/A	Landscaping	LS	1	\$40,000.00	\$40,000.00	
CONSTRUCTION SUBTOTAL					\$366,599	
DESIGN ENGINEERING					\$113,632	
CONSTRUCTION/INSPECTION ENGINEERING (10% CONSTRUCTION COST)					\$36,660	
SIGNAGE (2% CONSTRUCTION COST)					\$7,332	
DRAINAGE (20% CONSTRUCTION COST)					\$73,320	
EROSION CONTROL (5% CONSTRUCTION COST)					\$18,330	
SUBTOTAL					\$615,872	
25% CONTINGENCY					\$153,968	
Estimate TOTAL				\$770,000		

Note:

In providing opinions of probable construction cost, the Client understands that D&K has no control over the cost or availability of labor, equipment or materials, or over market conditions or the Contractor's method of pricing, and that our Opinion of Probable Construction Costs are made on the basis of our professional judgment and experience. D&K makes no warranty, expressed or implied, that the bids or the negotiated cost of the Work will not vary from the Opinion of Probable Construction Cost provided herein.

Paving - 2016 - \$435,850						
Street Name	Length in Miles	Year Constructed	Year Last Paved	Length in Feet	Total Tons @ 2 inches	Total Cost @ \$ 80 / ton
Robinson Road Knox to 3A	2.127	1975		4,484.00	1,233.10	\$125,000.00
Hollow Road	0.2	1972	1997	1,056.00	290.4	\$23,232.00
Edgewood Drive	0.2	1975	2000	1,056.00	290.4	\$23,232.00
Essex Drive	0.539	1989	1989	2,845.92	782.63	\$62,610.24
Falcon Way	0.508	1995	1995	2,682.24	737.62	\$59,009.28
Rocky Point Drive	0.98	1970		5,174.40	1,422.96	\$113,836.80
Oak Ridge Drive	0.094	1974	1998	496.32	136.49	\$10,919.04
Robinson Rd ext				818		\$18,000.00
						\$435,839.36

Priority 2 – Necessary: Within 3 Years to Maintain Basic Level & Quality of Community Services.

- **Bela Brook (Page Road) Bridge Replacement** - \$884,300

Project Description: This project will replace the Bela Brook Bridge on Page Road. The current bridge has been red-listed by the State of NH Department of Transportation indicating that immediate reconstruction is necessary.

Funding Source: GR: (State Aid Available 2024)

CRF - \$884,300

Proposed Funding Year: FY 2016-17

- **Elementary School Renovation** - \$ 3,551,250

Project Description: Comprehensive Facility Assessment and Capital Improvement Study was undertaken and completed in January 2012. Back end components at Bow Elementary School are in some cases 30 plus years old based on the original building having been constructed in 1979. Renovation would be similar to the 2005 renovation of BMS and will include HVAC upgrades, new roof, fire suppression system, new security and alarm system, lighting upgrades and plumbing upgrades. School Board is currently evaluating project.

Funding Source: CRF - \$ TBD

BD - \$ TBD

GF - \$ TBD

(School Board to discuss timing and funding breakdown)

Proposed Funding Year: Not Prior To FY 2017-18

- **Bow Junction Water Main Extension** - \$1,314,000

Project Description: One of the ongoing goals of the Board of Selectmen has been to seek alternatives for providing water service to the Bow Junction area. Businesses in this area currently provide over \$795,980 in tax revenue based on an assessed value of \$ 27,381,500 and are plagued by horrific water conditions. Providing water will increase assessments and spur additional growth providing additional tax revenue.

Funding Source: BD - \$1,314,000 (Estimated)

TIF - \$ TBD

PPP - \$ TBD

GR - \$ TBD

Proposed Funding Year: FY 2018 -19

Town of Bow, New Hampshire
Engineering Investigation and Recommendation Study
Page Road Bridge Over Bela Brook
(NHDOT Bridge No. 065/140)
NHDOT Project No. 24223

Executive Summary

The existing Page Road Bridge over Bela Brook spans approximately 12'-0" and is comprised of a metal plate pipe arch. The pipe is supported directly on the brook bed. Records indicate that the original bridge was built in 1950. The bridge is currently in poor condition with moderate rusting at each springline and connection bolts, significant settlement, and movement to the outlet stone headwall and wingwalls. The bridge is currently on the NHDOT Municipal "Redlist" due to its deficiencies and condition, and is currently posted for "E-2".

DuBois & King, Inc. (D&K) has evaluated several viable alternatives for replacing the existing Page Road Bridge. The alternatives include specific bridge types while maintaining the existing roadway alignment. The bridge alternatives include a precast concrete rigid frame (3 sided box) superstructure and wingwalls on precast concrete footings (alternative #1); a precast concrete arch superstructure and wingwalls on precast concrete footings (alternative #2); a precast concrete box culvert (4 sided box) and precast concrete wingwalls on precast concrete footings (alternative #3).

The recommended replacement alternative (alternative #2) was additionally sized for conformance to the NHDES Stream Crossing Rules (alternative #4). Our engineering study evaluation considered key components associated with bridge design and construction and the specific impacts that would affect the municipality and general public. In preparation of a recommendation, thought and analysis was given towards: natural and cultural resources, subsurface soil conditions, hydraulic requirements, impacts to right-of-way and utilities, property owner concerns, construction schedule, maintenance of traffic and an estimate of probable construction costs. Following is a summary of the evaluation.

The subsurface investigations revealed deposits of sand, sand with gravel and silty sand with gravel. The investigation determined that the abutments and wingwalls should be supported on concrete spread footings bearing within the sand with gravel layer. The footings will bear 6-feet below the stream bed to provide adequate frost and scour protection.

The completion of a hydrologic study and hydraulic analysis (H&H study) resulted in determination that the existing bridge waterway opening (12'-0" wide by 7'-8" high) is not adequate to pass the 50-year design flood event flows. The existing bridge would back up 6.5-feet of headwater above the top of the pipe and as such doesn't satisfy the minimum 1.0-foot of freeboard during the 50-year storm event required by NHDOT. The final recommendation is to increase the existing waterway opening to a 32-foot clear hydraulic span with a 12'-6" vertical clearance.

D&K is recommending the 32-foot clear hydraulic opening for three major reasons as listed below:

1. The 32-foot clear hydraulic opening is adequate to pass the 50-year design flood event flows (5.9-feet of freeboard). This satisfies the NHDOT design requirement of a minimum 1.0-foot of freeboard during a 50-year storm event. It must be noted that this opening was actually sized for 1.0-feet of freeboard yet the low chord was moved up to reduce the amount of fill over the arch.

2. The 32-foot clear hydraulic opening reduces river velocities from that of the existing 12'-0" clear hydraulic opening. Reducing river velocities is essential to reducing the possibility of scour. Also, lowering river velocities permits much improved passage of aquatic organisms under the bridge.
3. The 32-foot clear hydraulic opening would satisfy, or improve that from existing conditions, all of the NHDES stream crossing rules except for the 1.2 x bankfull width plus 2-foot guideline. Satisfying or improving the majority of the guidelines will allow the project to be permitted under an alternative design criteria (Env-Wt 904.09) rules for stream crossings. Refer to the complete hydrologic and hydraulic analysis report in Appendix C to see a list of which NHDES rules the 32-foot clear hydraulic opening satisfies.

The Town has a 50-foot right-of-way along Page Road in the vicinity of the bridge. It is anticipated that the permanent replacement work will all occur within the Town's right-of-way except for a portion of each wingwall. Also, temporary easements (construction easements) will be necessary to construct each new bridge wingwall (4 wingwalls total).

Page Road is currently a paved road. The existing horizontal and vertical alignment at and near the bridge is adequate, and meets the current design criteria. D&K is proposing to maintain the approximate horizontal and vertical alignment.

Page Road is a local road. The Page Road Bridge site can be easily accessed from each approach direction. It is proposed that the bridge site will be **closed** during construction with the Page Road Bridge being constructed in one (1) stage during the summer months. This road and bridge closure will require motorists to use Hooksett Turnpike as a detour around the bridge construction site. The proposed detour is relatively minor and is being recommended by D&K. The Selectboard / Town will need to make residents aware that the bridge and road will be closed during construction. The detour will continue to allow full access to all properties during construction and is 2.5 miles long.

Construction would be anticipated to last approximately 3 to 4 months in total, with the traffic detour being in place for 10 to 12-weeks during that time. Estimated project durations and costs have been included in this report and summarized below, for the purposes of establishing an appropriate schedule and budget.

D&K presented this project at a NHDOT Natural Resource Agencies monthly coordination meeting on April 16, 2014. Based on the feedback from this meeting, D&K received initial approval from the Agencies for a replacement bridge design that increases the current 12'-0" clear span to a 32'-0" clear span. A design exception will be pursued under the NHDES Stream Crossing Rules (Env Wt 904.09) for this hydraulic span length during the permit phase. The meeting minutes for this presentation are included in Appendix J Correspondence.

D&K has submitted a Request for Project Review to the NH Division of Historical Resources (DHR) for this project. Based on this submittal, the DHR Committee had a few comments with cultural resources yet the DHR Committee has issued a Memorandum of Effect that is included in Appendix J Correspondence.

Project Durations:

Final Engineering Design and Environmental Permitting	5 months
Advertising and Bidding	1 month
Project Approval / Mobilization	1 month
Construction	<u>4 months</u>
Duration for Remainder of Project	11 months

Project Costs:

PE

Study Phase	\$ 38,800
Est. Prelim. and Final Engineering Design and Permitting	\$ 55,000
Est. Bid Phase	<u>\$ 6,500</u>
Total <u>PE</u>	\$ 100,300
Est. Bridge Construction	\$ 719,000
Est. Construction Administration	<u>\$ 65,000</u>
Total Project Budget / Cost	\$ 884,300*

* 2014 estimated costs.

The project has been scheduled into the NHDOT Municipal Bridge Aid Program (MBAP), with funding available in FY 2024 (July 1, 2023 to June 30, 2024). Through the MBAP the Town will seek reimbursement of 80% of the replacement cost.

The existing bridge is on the NHDOT Red List for structural deficiencies. It is expected that repairs will be required or a reduction in the live load posting will occur, before FY 2014.

At a meeting with Town officials on August 19, 2014 (David Stack, Town Manager; Tim Sweeney, Director of Public Works; Bob Durfee, DuBois & King), the Town approved the options of maintaining the existing roadway alignment, installing a two lane thirty two foot clear precast concrete arch superstructure and precast wingwalls on precast concrete spread footings (2nd alternative), installing galvanized bridge rail and galvanized steel approach guardrail, and to maintain traffic during construction by a detour onto Hooksett Turnpike and Route 13 Clinton Street.

The desired schedule by the Town is to advertise (bid) the project in the spring of 2023, and complete construction by fall 2023. The Town would seek to accelerate this schedule should the existing bridge require repairs before 2023.

Recommendation

The recommended bridge alternative is to replace the existing structure with a 32-foot clear hydraulic opening, 2-lane precast concrete arch superstructure and wingwalls on precast concrete footings (alternative #2), on the current alignment. A bridge width of 30'-0" rail-to-rail is recommended. This bridge type was selected because it is economical, requires little maintenance, has a long service life, matches well with the site geometry, is practical to construct, and can be constructed quickly. Traffic during construction will be maintained on a temporary traffic detour.

D&K is proposing to maintain the paved roadway with approximately 100-feet of approach roadway reconstruction work on each end of the bridge. Galvanized steel bridge rail and approach guardrail will be installed.



TOWN OF BOW CAPITAL IMPROVEMENT PROJECT SHEET

PROJECT TITLE: Elementary School Renovation

DEPARTMENT: School District NEW UPDATE

EXPENDITURE YEAR: 2017 - 2018

CAPITAL RESERVE ACCOUNT: N/A

PROJECT COST: \$ 3,551,250

SOURCE AND AMOUNT OF FUNDS:	BD	
	GF	\$ -
	CRF	\$ -
		\$ -
		\$ -
		\$ -
		\$ -
		\$ -
		\$ -
		\$ -
		\$ -
		\$ -
		\$ -
		\$ -
		\$ -

PROJECT DESCRIPTION AND JUSTIFICATION:
 Comprehensive Facility Assessment and Capital Improvement Study was undertaken and completed in January 2012. Back end components at BES are in some cases 30+ years old based on the original building having been constructed in 1979. Renovation would be similar to the 2005 renovation of BMS and will include HVAC upgrades, new roof, fire suppression system, new security and alarm system, lighting upgrades and plumbing upgrades.

Priority 3- Desirable: Needed within 4-6 years to improve quality or level of services.

- **Lower Level Library Project** - \$600,000

Project Description: Lower Level space will feature informal and formal meeting spaces, as well as publicly accessible storage for town historical documents and artifacts. The unfinished existing lower level space of 7,200 square feet is construction-ready for immediate build-out to address current community needs for larger, 75 person meeting space.

Funding Source: CRF - \$300,000

PPP - \$300,000

TOWN OF BOW CAPITAL IMPROVEMENT PROJECT SHEET

PROJECT TITLE: Library Lower Level Renovation

DEPARTMENT: Library NEW UPDATE

EXPENDITURE YEAR: 2016 - 2017

CAPITAL RESERVE ACCOUNT: Library Lower Level

PROJECT COST: \$ 332,000

SOURCE AND AMOUNT OF FUNDS:	CRF	\$
FY 2012 - \$32,000	PPP	\$ 332,000
FY 2013 - \$50,000		\$ 300,000
FY 2014 - \$150,000		\$ -
FY 2015 - \$50,000		\$ -
FY 2016 request - \$50,000		\$ -
Total: \$332,000		\$ -
		\$ 632,000

PROJECT DESCRIPTION AND JUSTIFICATION:

Through public surveys and focus groups (2008-present) the residents of Bow have expressed interest in finishing the library basement space (created by the 1999/2000 renovation/expansion) for use as community space. This space will not be used for additional library books or other materials. Instead, the space will feature informal and formal meeting spaces, as well as publicly accessible storage for town historical documents and artifacts. The unfinished existing lower level space of 7,200 square feet is construction-ready for immediate build-out to address current community needs for larger, 75 person meeting space. The estimated cost of the project is \$600,000. The library trustees have committed to privately raise half of the project cost. Projected start date is July 2015, with completion around October 29, 2015, the 101st anniversary date of the library's dedication. The 2015/16 request would finish the town taxpayer's contributions towards the project. Phase 1 of construction was completed in May 2015, and included replacing the elevator to meet code, widening the interior stairway to meet code, completing the two group tutoring rooms, the small meeting room, and the Baker Heritage Room (except for climate control). As of May 2015, \$180,000 has been raised privately, with efforts being made to finish the private fundraising by March 2016. Phase 2 would begin in July 2016, and be completed in early fall 2016.

JUSTIFICATION

- Provides capacity needed to serve existing population or future growth
- Results in long-term cost savings (preservation of historical materials)
- Furthers the goals of the 2004 Master Plan

The need for historical document and artifact storage is critical -- we're losing our town's history by storing historical documents and artifacts in resident homes and in overcrowded and inaccessible areas of town buildings. The need for additional meeting space was documented in the 2004 Town of Bow Master Plan, which states that a priority goal for the library was "...developing the downstairs space for programs and meeting space." Currently the library serves 50 different non-profit groups annually through their Meeting Room (capacity 32 people) and Baker Room (capacity 30 people). These meeting spaces differ from other spaces in town due to the fact that any Bow resident can use the meeting rooms free of charge for non-profit, charitable meeting purposes between 7 a.m. and 11 p.m., seven days per week. No other space in town offers such broad, free use to residents. It makes fiscal sense to finish an already-existing space within a building that currently serves as an important community gathering place.

LIBRARY LOWER LEVEL CAPITAL RESERVE FUND**Established at the 2012 Town Meeting**

7/1/2012	\$32,000		Initial monies allocated by residents
12/13/12		-\$2,352.00	H.L. Turner invoice #20760
1/18/2013		-\$3,528.00	H.L. Turner invoice #20811
2/20/2013		-\$5,880.00	H.L. Turner invoice #20860
5/8/2013		-\$5,880.00	H.L. Turner invoice #20953
6/12/2013		-\$5,880.00	H.L. Turner invoice #21084
<i>Subtotal:</i>		<i>-\$23,520.00</i>	
7/1/2013	\$50,000		2013 Town Meeting allocation
7/17/2013		-930.00	RPF Environmental (haz mat insp)
7/1/2014	\$150,000		2014 Town Meeting allocation
3/12/2015		-\$24,587.29	Cobb Hill – Phase 1(elevator)
4/8/2015		-\$30,405.71	Cobb Hill – Phase 1
5/13/2015		-\$82,060.39	Cobb Hill – Phase 1
6/10/2015		-\$33,219.21	Cobb Hill – Phase 1
7/1/2015	\$50,000		2015 Town Meeting allocation
7/30/2015		-\$8,996.77	Cobb Hill – Phase 1 (retainage)
8/17/2015		-\$666.10	Cobb Hill – Phase 1 (last payment)
<i>Subtotal:</i>		<i>-\$179,935.47</i>	
TOTALS:	\$282,000	-\$204,385.47	

Left in capital reserve fund as of 9/10/2015: \$77,614.53 (does not include interest)

Priority 4- Deferrable: Can be placed on hold until after 6 year scope of current CIP, but supports community development goals.

All funding sources and amounts are included for planning purposes only

- **Bow Bog Brook (River Road) Bridge Replacement - \$909,300**

Project Description: This project will replace the Bow Brook Bridge on River Road.

Funding Source: GR - (State Aid Available 2026)

CRF - \$

GF - \$

Proposed Funding Year: TBD

4. **River Road Culvert Replacement (at boat ramp) - \$100,000**

Project Description: This project will replace the culvert on River Road at the Boat Ramp.

Funding Source: GF - \$100,000

Proposed Funding Year: TBD

5. **Bow Bog Road Culvert Replacement (at Bow Bog Brook) - \$150,000**

Project Description: This project will replace the Bow Brook Culvert Bow Bog Road.

Funding Source: GF - \$150,000

Proposed Funding Year: TBD

Town of Bow, New Hampshire
Engineering Investigation and Recommendation Study
River Road Bridge Over Bow Bog Brook
(NHDOT Bridge No. 184/127)
NHDOT Project No. 24224

Executive Summary

The existing River Road Bridge over Bow Bog Brook spans approximately 15'-8" and is comprised of a metal plate pipe arch. The pipe is supported directly on the brook bed. Records indicate that the original bridge was built in 1950. The bridge is currently in poor condition with moderate rusting at each springline and connection bolts, significant settlement, and movement to the inlet stone headwall and wingwalls and guardrail hit damage throughout. The bridge is currently posted for "E-2".

DuBois & King, Inc. (D&K) has evaluated several viable alternatives for replacing the existing River Road Bridge. The alternatives include specific bridge types while maintaining the existing roadway alignment. The bridge alternatives include a precast concrete rigid frame (3 sided box) superstructure and wingwalls on precast concrete footings (alternative #1); a precast concrete arch superstructure and wingwalls on precast concrete footings (alternative #2); a precast concrete box culvert (4 sided box) and precast concrete wingwalls on precast concrete footings (alternative #3).

The recommended replacement alternative (alternative #1) was additionally sized for conformance to the NHDES Stream Crossing Rules (alternative #4). Our engineering study evaluation considered key components associated with bridge design and construction and the specific impacts that would affect the municipality and general public. In preparation of a recommendation, thought and analysis was given towards: natural and cultural resources, subsurface soil conditions, hydraulic requirements, impacts to right-of-way and utilities, property owner concerns, construction schedule, maintenance of traffic and an estimate of probable construction costs. Following is a summary of the evaluation.

The subsurface investigations revealed deposits of sand and sand with gravel. The investigation determined that the abutments and wingwalls should be supported on concrete spread footings bearing within the sand and sand with gravel layer. The footings will bear 6-feet below the stream bed to provide adequate frost and scour protection.

The completion of a hydrologic study and hydraulic analysis (H&H study) resulted in determination that the existing bridge waterway opening (15'-8" wide by 9'-0" high) is not adequate to pass the 50-year design flood event flows. The existing bridge would back up 2.2-feet of headwater above the top of the pipe and as such doesn't satisfy the minimum 1.0-foot of freeboard during the 50-year storm event required by NHDOT. The final recommendation is to increase the existing waterway opening to a 28-foot clear hydraulic span with an 8'-4" vertical clearance.

D&K is recommending the 28-foot clear hydraulic opening for three major reasons as listed below:

1. The 28-foot clear hydraulic opening is adequate to pass the 50-year design flood event flows (1.3-feet of freeboard). This satisfies the NHDOT design requirement of a minimum 1.0-foot of freeboard during a 50-year storm event.

2. The 28-foot clear hydraulic opening reduces river velocities from that of the existing 15'-8" clear hydraulic opening. Reducing river velocities is essential to reducing the possibility of scour. Also, lowering river velocities permits much improved passage of aquatic organisms under the bridge.
3. The 28-foot clear hydraulic opening would satisfy, or improve that from existing conditions, all of the NHDES stream crossing rules except for the 1.2 x bankfull width plus 2-foot guideline. Satisfying or improving the majority of the guidelines will allow the project to be permitted under an alternative design criteria (Env-Wt 904.09) rules for stream crossings. Refer to the complete hydrologic and hydraulic analysis report in Appendix C to see a list of which NHDES rules the 28-foot clear hydraulic opening satisfies.

The Town has a 70-foot right-of-way along River Road in the vicinity of the bridge. It is anticipated that the permanent replacement work will all occur within the Town's right-of-way except for a portion of the wingwalls. Also, temporary easements (construction easements) will be necessary to construct each new bridge wingwall (4 wingwalls total).

River Road is currently a paved road. The existing horizontal and vertical alignment at and near the bridge is adequate, and meets the current design criteria. D&K is proposing to maintain the approximate horizontal and vertical alignment.

River Road is a local road. The River Road Bridge site can be easily accessed from each approach direction. It is proposed that the bridge site will be **closed** during construction with the River Road Bridge being constructed in one (1) stage during the summer months. This road and bridge closure will require motorists to use Vaughn Road and / or Dunklee Road as a detour around the bridge construction site. The proposed detour is relatively minor and is being recommended by D&K. A bridge on Dunklee Road is on the NHDOT Red List and may have to be rehabilitated before it can be used as a detour. The Selectboard / Town will need to make residents and businesses aware that the bridge and road will be closed during construction. The detour will continue to allow full access to all properties and businesses during construction and is 2.7 miles long.

Construction would be anticipated to last approximately 3 to 4 months in total, with the traffic detour being in place for 10 to 12-weeks during that time. Estimated project durations and costs have been included in this report and summarized below, for the purposes of establishing an appropriate schedule and budget.

D&K presented this project at a NHDOT Natural Resource Agencies monthly coordination meeting on April 16, 2014. Based on the feedback from this meeting, D&K has initial approval from the Agencies for a replacement bridge design that increases the current 15'-8" clear span to a 28'-0" clear span. A design exception will be pursued under the NHDES Stream Crossing Rules (Env Wt 904.09) for this hydraulic span length during the permit phase. The meeting minutes for this presentation are included in Appendix J Correspondence.

D&K has submitted a Request for Project Review to the NH Division of Historical Resources (DHR) for this project. Based on this submittal, the DHR Committee had a few minor comments yet no concerns with cultural resources. The DHR Committee has issued a Memorandum of Effect that is included in Appendix J Correspondence.

Project Durations:

Final Engineering Design and Environmental Permitting	5 months
Advertising and Bidding	1 month
Project Approval / Mobilization	1 month
Construction	<u>4 months</u>
Duration for Remainder of Project	11 months

Project Costs:

<u>PE</u>	
Study Phase	\$ 38,800
Est. Prelim. and Final Engineering Design and Permitting	\$ 55,000
Est. Bid Phase	<u>\$ 6,500</u>
Total <u>PE</u>	\$ 100,300
Est. Bridge Construction	\$ 744,000
Est. Construction Administration	<u>\$ 65,000</u>
Total Project Budget / Cost	\$ 909,300*

* 2014 estimated costs.

The project has been scheduled into the NHDOT Municipal Bridge Aid Program (MBAP), with funding available in FY 2026 (July 1, 2025 to June 30, 2026). Through the MBAP the Town will seek reimbursement of 80% of the replacement cost. The Town is proposing to NHDOT that this project be moved to FY 2024 (July 1, 2023 to June 30, 2024). This move would allow this bridge structure to be constructed as one project along with #24223 – Page Road over Bela Brook – Br. No. 065/140 in order to save costs.

At a meeting with Town officials on August 19, 2014 (David Stack, Town Manager; Tim Sweeney, Director of Public Works; Bob Durfee, DuBois & King), the Town approved the options of maintaining the existing roadway alignment, installing a two lane twenty-eight foot clear precast concrete rigid frame superstructure and precast wingwalls on precast concrete spread footings (2nd alternative), installing galvanized bridge rail and galvanized steel approach guardrail, and to maintain traffic during construction by a detour onto Vaughn Road or Dunklee Road.

The desired schedule by the Town is to advertise (bid) the project in the spring of 2023, and complete construction by fall 2023.

Recommendation

The recommended bridge alternative is to replace the existing structure with a 28-foot clear hydraulic opening, 2-lane precast concrete rigid frame (3 sided box) superstructure and wingwalls on precast concrete footings (alternative #1), on the current alignment. A bridge width of 30'-0" rail-to-rail is recommended. This bridge type was selected because it is economical, requires little maintenance, has a long service life, matches well with

the site geometry, is practical to construct, and can be constructed quickly. Traffic during construction will be maintained on a temporary traffic detour.

D&K is proposing to maintain the paved roadway with approximately 100-feet of approach roadway reconstruction work on each end of the bridge. Galvanized steel bridge rail and approach guardrail will be installed.



Priority 5 - Premature: Needs more research, planning & coordination

- **Commercial/Industrial Area Sewer System Activation - \$3,500,000**

Project Description: This project will complete the connection between the Route 3A Commercial/Industrial Area sewer mains and the recently constructed Hall Street sewer pump station, allowing sewer service to be activated in the commercial/industrial area. The work includes a sewer pump station, force main and gravity sewer.

Funding Source: BD - \$3,500,000

TIF - TBD

Proposed Funding Year: TBD

(Town considering TIF District to Finance Project)

- **Record Storage Old Police Department - \$25,000**

Project Description: Current record retention safe is at capacity. Attempts to deliver an additional safe were unsuccessful due to limitations associated with basement access. Possible solution is to build a safe in basement.

Funding Source: CRF: \$ 25,000

Proposed Funding Year:

Capital Reserve Project Summaries.

Department of Public Works

- Capital Reserve Program for Highway Trucks and Equipment replacement - See Spreadsheets for Proposed Expenditures

Project Description: Ongoing, Capital Reserve expenditures for replacement of trucks and equipment on a ten and seven year cycle.

Funding Source: CRF

Municipal Buildings and Grounds

- Capital Reserve Program for Municipal Buildings and Grounds - See Spreadsheets for Proposed Expenditures

Project Description: Ongoing, Capital Reserve expenditures to replace equipment and building maintenance.

Funding Source: CRF

Police Department

- Capital Reserve Program for Equipment and Vehicle replacement - See Spreadsheets for Proposed Expenditures

Project Description: Ongoing Capital Reserve expenditures to replace the fleet and equipment.

Funding Source: CRF

Fire Department

- Capital Reserve Program for Truck and Ambulance replacement - See Spreadsheets for Proposed Expenditures

Project Description: Ongoing Capital Reserve expenditures to replace the fleet.

Funding Source: CRF

Fire Department

- Capital Reserve Program for Fire Equipment replacement - See Spreadsheets for Proposed Expenditures

Project Description: Ongoing Capital Reserve expenditures to replace the equipment.

Funding Source: CRF

Parks and Recreation Department

- Capital Reserve Program for Equipment and Vehicle replacements - See Spreadsheets and Project Sheets for Proposed Expenditures

Project Description: Ongoing Capital Reserve expenditures to replace the fleet and equipment.

Funding Source: CRF

Parks and Recreation Department

- Capital Reserve Program for Parks and Recreation Improvements - See Spreadsheets and Project Sheets for Proposed Expenditures

Project Description: Ongoing Capital Reserve expenditures to replace the fencing.

Funding Source: CRF

Library

- Capital Reserve Program for Library Lower Level - See Spreadsheets and Project Sheets for Proposed Expenditures

Project Description: Eventual Capital Reserve withdrawal to offset project cost.

Funding Source: CRF

School District

- School Bus Replacement - See Spreadsheets and Project Sheets for Proposed Expenditures

Project Description: Ongoing general fund expenditures to replace School Bus fleet.

Funding Source: GF

Appendix A: Relevant State Statutes

CHAPTER 674

LOCAL LAND USE PLANNING AND REGULATORY POWERS

Capital Improvements Program

674:5 Authorization. – In a municipality where the planning board has adopted a master plan, the local legislative body may authorize the planning board to prepare and amend a recommended program of municipal capital improvement projects projected over a period of at least 6 years. As an alternative, the legislative body may authorize the governing body of a municipality to appoint a capital improvement program committee, which shall include at least one member of the planning board and may include but not be limited to other members of the planning board, the budget committee, or the town or city governing body, to prepare and amend a recommended program of municipal capital improvement projects projected over a period of at least years. The capital improvements program may encompass major projects being currently undertaken or future projects to be undertaken with federal, state, county and other public funds. The sole purpose and effect of the capital improvements program shall be to aid the mayor or selectmen and the budget committee in their consideration of the annual budget.

Source. 1983, 447:1, eff. Jan. 1, 1984. 2002, 90:1, eff. July 2, 2002.

674:6 Purpose and Description. – The capital improvements program shall classify projects according to the urgency and need for realization and shall recommend a time sequence for their implementation. The program may also contain the estimated cost of each project and indicate probable operating and maintenance costs and probable revenues, if any, as well as existing sources of funds or the need for additional sources of funds for the implementation and operation of each project. The program shall be based on information submitted by the departments and agencies of the municipality and shall take into account public facility needs indicated by the prospective development shown in the master plan of the municipality or as permitted by other municipal land use controls.

Source. 1983, 447:1, eff. Jan. 1, 1984.

674:7 Preparation. –

I. In preparing the capital improvements program, the planning board or the capital improvement program committee shall confer, in a manner deemed appropriate by the board or the committee, with the mayor or the board of selectmen, or the chief fiscal officer, the budget committee, other municipal officials and agencies, the school board or boards, and shall review the recommendations of the master plan in relation to the proposed capital improvements program. II. Whenever the planning board or the capital improvement program committee is authorized and directed to prepare a capital improvements program, every municipal department, authority or agency, and every affected school district board, department or agency, shall, upon request of the planning board or the capital improvement program committee, transmit to the board or committee a statement of all capital projects it proposes to undertake during the term of the program. The planning board or the capital improvement program committee shall study each proposed capital project, and shall advise and make recommendations to the department, authority, agency, or school district board, department or agency, concerning the relation of its project to the capital improvements program being prepared.

Source. 1983, 447:1. 1995, 43:1, eff. July 2, 1995. 2002, 90:2, eff. July 2, 2002.

674:8 Consideration by Mayor and Budget Committee. – Whenever the planning board or the capital improvement program committee has prepared a capital improvements program under RSA 674:7, it shall submit its recommendations for the current year to the mayor or selectmen and the budget committee, if one exists, for consideration as part of the annual budget.

Source. 1983, 447:1, eff. Jan. 1, 1984. 2002, 90:3, eff. July 2, 2002.

**Appendix C:
Project
Submission
Materials and
Backup
Information**

Appendix C Index

Annual Debt Service on Outstanding Town Bonds
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Bow Population Growth (1960 - 2010)/Predicated
Population 2010 -2040).....147

Bow Property Tax Rates per Thousand 2008 – 2013.....148

CAPITAL RESERVE PROGRAM - HIGHWAY CONSTRUCTION

	Anticipated	Scheduled Purchase	Est.						
	<u>Cost</u>	<u>Year</u>	<u>Life</u>	<u>2016-17</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>
				-	-	-	-	-	-
Ending Capital Reserve Balance FY-14				449,335	449,335	449,335	449,335	449,335	449,335
Contribution FY-15									
Proposed Expenditures FY-15									
Proposed Contribution FY-16				-	-	-	-	-	-
Proposed Expenditure FY-16				-	-	-	-	-	-
Ending Estimated Capital Reserve Balance				449,335	449,335	449,335	449,335	449,335	449,335

CAPITAL RESERVE PROGRAM - ROAD CONSTRUCTION I-2 ZONE

	Anticipated	Scheduled Purchase	Est.						
	<u>Cost</u>	<u>Year</u>	<u>Life</u>	<u>2016-17</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>
							-	-	-
				-	-	-	-	-	-
Ending Capital Reserve Balance FY-14				1,245,100	845,100	845,100	845,100	845,100	845,100
Contribution FY-15									
Proposed Expenditures FY-15				(400,000)					
Proposed Contribution FY-16				-	-	-	-	-	-
Proposed Expenditure FY-16				-	-	-	-	-	-
Ending Estimated Capital Reserve Balance				845,100	845,100	845,100	845,100	845,100	845,100

CAPITAL RESERVE PROGRAM - BRIDGE CONSTRUCTION									
	Anticipated	Scheduled							
	Cost	Purchase	Est.						
	<u>Cost</u>	<u>Year</u>	<u>Life</u>	<u>2016-17</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>
White Brook Bridge (Birchdale Rd) Replacement	600,000	2016-2017		600,000	-		-	-	-
Bela Brook Bridge(Page Road) Replacement	884,300	2018-2019				884,300			
					-				
	1,484,300			-	-	-	-	-	-
				600,000	-	884,300	-	-	-
Ending Capital Reserve Balance FY-14				272,544	(327,456)	(327,456)	(1,211,756)	(1,211,756)	(1,211,756)
Contribution FY-15									
Proposed Expenditures FY-15				-					
Proposed Contribution FY-16				-	-	-	-	-	-
Proposed Expenditure FY-16				(600,000)	-	(884,300)	-	-	-
Ending Estimated Capital Reserve Balance				(327,456)	(327,456)	(1,211,756)	(1,211,756)	(1,211,756)	(1,211,756)

CAPITAL RESERVE PROGRAM - LIBRARY LOWER LEVEL									
	Anticipated	Scheduled	Est.						
	Cost	Purchase	Life	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
		Year							
Lower level	600,000	2016-2017		396,000	-	-	-	-	-
				396,000	-	-	-	-	-
Ending Capital Reserve Balance FY-14				38,636	(307,364)	(307,364)	(307,364)	(307,364)	(307,364)
Contribution FY-15									
Proposed Expenditures FY-15									
Proposed Contribution FY-16				50,000	-	-	-	-	-
Proposed Expenditure FY-16				(396,000)	-	-	-	-	-
Ending Estimated Capital Reserve Balance				(307,364)	(307,364)	(307,364)	(307,364)	(307,364)	(307,364)

CAPITAL RESERVE PROGRAM - LIBRARY EMERGENCY EQUIPMENT/BUILDING MAINTENANCE									
	Anticipated	Scheduled	Est.						
	Cost	Purchase	Life	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
		Year							
				-	-	-	-	-	-
				-	-	-	-	-	-
Ending Capital Reserve Balance FY-14				35,738	35,738	35,738	35,738	35,738	35,738
Contribution FY-15									
Proposed Expenditures FY-15									
Proposed Contribution FY-16				-	-	-	-	-	-
Proposed Expenditure FY-16				-	-	-	-	-	-
Ending Estimated Capital Reserve Balance				35,738	35,738	35,738	35,738	35,738	35,738

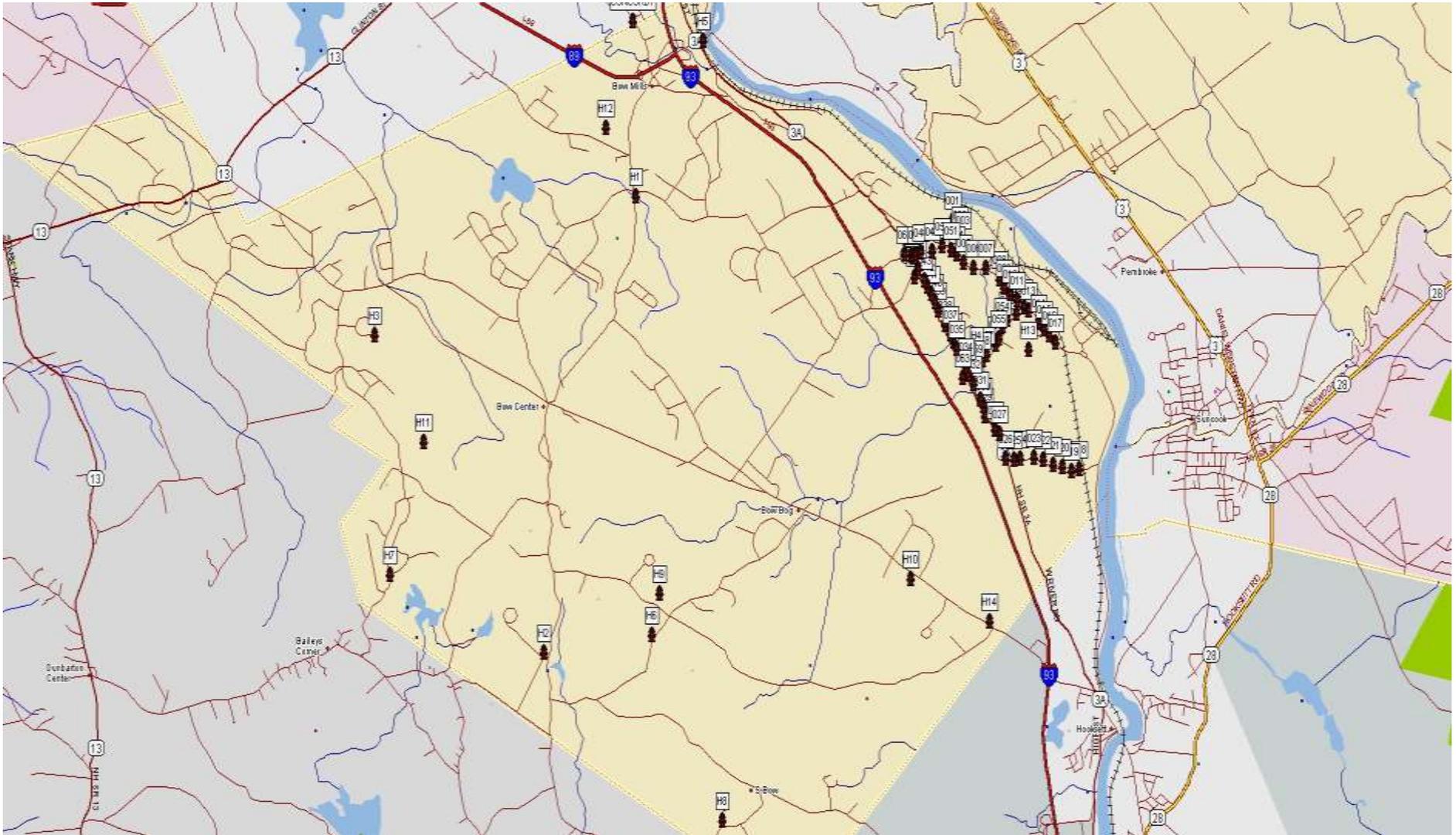
CAPITAL RESERVE PROGRAM - POLICE DEPARTMENT VEHICLES AND EQUIPMENT

	Anticipated	Scheduled							
	Cost	Purchase	Est.						
	<u>Cost</u>	<u>Year</u>	<u>Life</u>	<u>2016-17</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>
Police Vehicle Detective (Serial # 8211)	25,000	2016 - 2017	5	25,000	-	-	-	-	30,000
Mobile and Portable Radios	40,000	2017 - 2018	6	-	40,000	-	-	-	-
Cruiser Laptops-7	40,000	2017 - 2018	5	-	40,000	-	-	-	-
Intel File Server	12,000	2017 - 2018	5	-	12,000	-	-	-	-
Police Vehicle Replacements Chief (Serial # 4514)	25,000	2018 - 2019	8	-	-	25,000	-	-	-
Police Vehicle Replacements (ATVs)	15,000	2019 - 2020	10	-	-	-	15,000	-	-
Video Monitoring Equipment	40,000	2020 - 2021	10	-	-	-	-	40,000	-
Ford SUV	32,000	2021 - 2022	5	-	-	-	-	-	32,000
Police K-9 Vehicle	27,000	2021 - 2022	5	-	-	-	-	-	27,000
Voice Logging Recorder	25,000	2022-23	10	-	-	-	-	-	-
Repeater Station	45,000	2025-26	10	-	-	-	-	-	-
Dispatch Radio & Computer Equipment	<u>98,000</u>	2025-26	10	-	-	-	-	-	-
	424,000								
				<u>25,000</u>	<u>92,000</u>	<u>25,000</u>	<u>15,000</u>	<u>40,000</u>	<u>89,000</u>
Ending Capital Reserve Balance FY-14				229,785	87,785	30,785	40,785	60,785	55,785
Contribution FY-15				50,000					
Proposed Expenditures FY-15				(202,000)					
Proposed Contribution FY-16				35,000	35,000	35,000	35,000	35,000	35,000
Proposed Expenditure FY-16				<u>(25,000)</u>	<u>(92,000)</u>	<u>(25,000)</u>	<u>(15,000)</u>	<u>(40,000)</u>	<u>(89,000)</u>
Ending Estimated Capital Reserve Balance				87,785	30,785	40,785	60,785	55,785	1,785

CAPITAL RESERVE PROGRAM - FIRE DEPARTMENT TRUCKS AND AMBULANCES

	Anticipated	Scheduled	Est.						
	Cost	Purchase	Life	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
		Year							
1993 Tanker Truck (T-1)	355,000	2016 - 2017	20	355,000	-	-	-	-	-
2002 Pumper (E-3)	650,000	2017 - 2018	15	-	650,000	-	-	-	-
1997 Tanker Truck (T-3)	250,000	2018 - 2019	20	-	-	250,000	-	-	-
2009 Fire Ambulance (A-2)	240,000	2019 - 2020	10	-	-	-	240,000	-	-
2012 Fire SUV(C-1)	45,000	2021 - 2022	10	-	-	-	-	-	45,000
2004 forestry truck (F-1)	96,000	2023-24	20	-	-	-	-	-	-
2014 ambulance (A-1)	250,000	2024-25	10	-	-	-	-	-	-
2009 pumper (E-1)	800,000	2024-25	15	-	-	-	-	-	-
2007 rescue truck (R-1)	200,000	2027-28	20	-	-	-	-	-	-
	2,886,000			355,000	650,000	250,000	240,000	-	45,000
Ending Capital Reserve Balance FY-14				1,457,082	1,192,082	587,082	382,082	187,082	232,082
Contribution FY-15				45,000					
Proposed Expenditures FY-15				-					
Proposed Contribution FY-16				45,000	45,000	45,000	45,000	45,000	45,000
Proposed Expenditure FY-16				(355,000)	(650,000)	(250,000)	(240,000)	-	(45,000)
Ending Estimated Capital Reserve Balance				1,192,082	587,082	382,082	187,082	232,082	232,082

Location of Hydrants and Cisterns



CAPITAL RESERVE PROGRAM - FIRE DEPARTMENT EQUIPMENT

	Anticipated Cost	Scheduled	Est. Life	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
		Purchase Year							
Radio Equipment	40,000	2016 - 2017	10	40,000					
Self-Contained Breathing Apparatus (SCBA)	172,000	2018 - 2019	10	-	-	172,000	-	-	-
Vehicle Extraction Rescue Equipment (Jaws of Life)	30,000	2020 - 2021	10	-	-			30,000	-
Defibrillator	60,000	2021 - 2022	10	-	-	-	-	-	60,000
Turnout gear	120,000	2021 - 2022	10	-	-	-	-	-	120,000
Lucas CPR Machine \$15,000 X 2	30,000	2021 - 2022	10						30,000
Skid tank and pump-Forestry truck	31,000	2023-24	20	-	-	-	-	-	-
Air compressor and filling station for SCBA	45,000	2024-25	15	-	-	-	-	-	-
SCBA cascade system	30,000	2024-25	15	-	-	-	-	-	-
Rescue Boat	18,000	2032-33	20						
	576,000			-	-	-	-	-	-
				40,000	-	172,000	-	30,000	210,000
Ending Capital Reserve Balance FY-14				161,869	213,869	255,869	125,869	167,869	179,869
Contribution FY-15				50,000					
Proposed Expenditures FY-15				-					
Proposed Contribution FY-16				42,000	42,000	42,000	42,000	42,000	42,000
Proposed Expenditure FY-16				(40,000)	-	(172,000)	-	(30,000)	(210,000)
Ending Estimated Capital Reserve Balance				213,869	255,869	125,869	167,869	179,869	11,869

CAPITAL RESERVE PROGRAM - DEPARTMENT OF PUBLIC WORKS HIGHWAY EQUIPMENT									
	Anticipated	Scheduled	Est.						
	Cost	Purchase	Life	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
		Year							
Excavator	110,000	2016 - 2017	15	110,000	-	-	-	-	-
2004 International Dump Truck (Serial # 4228)	158,000	2017 - 2018	14		158,000				
2005 International Dump Truck (Serial # 8444)	164,320	2018 - 2019	12			164,320	-	-	-
2002 Kubota Tractor (Serial # 7328)	80,000	2018 - 2019	14			80,000	-	-	-
2007 Freightliner M2106V dump truck (4731)	170,640	2019 - 2020	12	-			170,640	-	-
1993 Sullair 125Q compressor	15,000	2019 - 2020	20	-	-	-	15,000	-	-
2010 F-350 Utility Truck (Serial # 2655)	40,000	2019 - 2020	8	-			40,000	-	-
2008 Freightliner Dump Truck (Serial # 1305)	176,960	2020 - 2021	12	-	-	-		176,960	-
2012 F-550 Dump Truck (Serial # 8744)	75,000	2020 - 2021	8	-	-	-		75,000	-
2000 Champion Grader	195,000	2020 - 2021	20	-	-			195,000	-
2008 Freightliner M2106V dump truck (1304)	183,280	2021 - 2022	12	-	-	-			183,280
Mowing Attachment for 2002 Kubota tractor	25,000	2021 - 2022	10	-	-	-			25,000
2009 International 4900 dump truck (0849)	190,611	2022-23	12	-	-	-	-	-	-
2013 Ford F-150 1/2-ton pickup truck (5453)	30,000	2022-23	8						-
2012 Ford F-550 (8744)	75,000	2022-23	10						-
2010 International 4900 dump truck (8640)	198,235	2022-23	12	-	-	-	-		
2013 Caterpillar Backhoe	125,000	2023-24	9						
2014 DPW loader	190,000	2026-27	12						
2014 International 7400 dump truck (2563)	195,920	2026-27	12						
2007 Dyna-Vac Jet-N-Vac SC600	125,000	2028-29	20	-	-	-	-	-	-
2012 Bandit Chipper	50,000	2029-30	20	-	-	-	-	-	-
	2,572,966			110,000	158,000	244,320	225,640	446,960	208,280
Ending Capital Reserve Balance FY-14				612,476	742,476	704,476	580,156	474,516	147,556
Contribution FY-15				120,000					
Proposed Expenditures FY-15				-					
Proposed Contribution FY-16				120,000	120,000	120,000	120,000	120,000	120,000
Proposed Expenditure FY-16				(110,000)	(158,000)	(244,320)	(225,640)	(446,960)	(208,280)
Ending Estimated Capital Reserve Balance				742,476	704,476	580,156	474,516	147,556	59,276

The CIP Committee is aware difference in the ending balance in their 2014 DPW equipment capital reserve account and the beginning balance in 2015. At the 2014 Annual Town Meeting the taxpayers approved in warrant article 11, the purchase of a loader in the amount of \$190,000. This purchase was not included in the 2014 CIP report.

Excavator rentals

*Note: The below rentals have a minimum correlation to the need of an excavator
 The rental line item in the operating budget is normally \$2000
 The ability to have an excavator readily available will prove to be of an asset to the town regarding timely maintenance and repairs.*

Year	Totals	Locations	Rental cost	# Days
2010	\$2,800	Ridgewood Dr. - W/A funds	2200	7
		Town Dam / Debris removal	300	1
2011	\$5,300	Long View Dr. - W/A funds	5000	10
		Knox Road culvert replacement	300	1
2012	\$600	Whiterock Culvert repair over the bank	300	1
		Brush Dump chip brush pile	300	1
2013	\$2,000	Snow roller drainage	500	2
		Brush Dump chip brush pile	300	1
		DPW retention pond	1200	3
2014	\$2,200	Putney Rd	1600	1
		Gosling Field	600	2
2015	\$3,375	Johanathan Ln	1200	5
		Johanathan Ln	725	1
		Old Town Hall	1450	5

Future Excavator uses

All Road reconstruction and town wide ditching - Many developments have detention ponds that have not been properly maintained

Existing Retention Pond Maintenance - Many developments have detention ponds that have not been maintained

Municipal Building Generator Electrical Trenching - Generator needs to be moved across the parking lot per code

Municipal Building Drainage improvement plan - Poor drainage is a major cause of moisture in the lower level

Recreation field improvements - Recreation fields are being managed more professionally and require additional trenching

Water valve have repairs have been added to our maintenance load

BBMH Underground Electrical - Electrical upgrades have been requested

Bow Ctr school Underground Electrical - Electrical upgrades have been requested

CAPITAL RESERVE PROGRAM - MUNICIPAL BUILDINGS AND GROUNDS									
	Anticipated	Scheduled Purchase	Est.						
	Cost	Year	Life	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Salt Shed Construction - DPW	325,000	2016-17		325,000					
Emergency Generator - Fire House	70,000	2016-17	15	35,000					
Parking lot and drainage - Municipal Building	90,000	2017-18			90,000				
Furnace and A/C - Old Town Hall	25,000	2017-18			25,000				
Fire Life Safety Upgrades - Old Town Hall	37,000	2017-18			25,000				
Boiler/heating system - Muni Building	80,000	2018-19				80,000			
Electrical Upgrades - Muni Building	90,000	2019-20					90,000		
Fuel Pump Replacement - DPW	110,000	2021-22							110,000
Total	827,000			360,000	140,000	80,000	90,000	0	110,000
Ending Capital Reserve Balance FY-14				299,444	44,444	29,444	74,444	109,444	234,444
Contribution FY-15				115,000					
Proposed Expenditures FY-15				(180,000)					
Proposed Contribution FY-16				170,000	125,000	125,000	125,000	125,000	125,000
Proposed Expenditure FY-16				(360,000)	(140,000)	(80,000)	(90,000)	0	(110,000)
Ending Estimated Capital Reserve Balance				44,444	29,444	74,444	109,444	234,444	249,444

TOWN OF BOW CAPITAL IMPROVEMENT PROJECT SHEET

PROJECT TITLE: Emergency Generator (Fire House)

DEPARTMENT: Public Works Department

NEW UPDATE

EXPENDITURE YEAR: 2016 - 2017

CAPITAL RESERVE ACCOUNT: Municipal Buildings and Grounds

PROJECT COST: \$ 70,000

SOURCE AND AMOUNT OF FUNDS:	CRF	\$ 35,000
	GR	\$ 35,000
		\$ -
		\$ -
		\$ -
		\$ -
		\$ -
		\$ -
		\$ -
		<u>\$ 70,000</u>

PROJECT DESCRIPTION AND JUSTIFICATION:

This project will replace the existing 25 year old 35kw unit that is in service currently and is in poor condition. During the most recent storms, the generator has not been dependable including complete failure. The replacement generator should be sized (100kw) which a 800 amp transfer switch so that it could be used at a new station which is in the planning stages. This item has not been part of the Capital Improvement Program. The expected life of the unit is 15 years. The Town is looking into submitting a grant to cover some of the cost of this generator.

CAPITAL RESERVE PROGRAM - PARKS AND RECREATION IMPROVEMENTS

	Anticipated	Scheduled	Est.						
	Cost	Purchase	Life	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
	<u>Cost</u>	<u>Year</u>	<u>Life</u>	<u>2016-17</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>
2-Additional Artesian Wells, Pumps, Piping and Electrical, Hanson Park	30,000	2018 - 2019				30,000			
ST Cyr Playground/Fencing Replacement	70,000	2019 - 2020	20	-	-	-	70,000		
	100,000			-	-	30,000	70,000	-	-
Ending Capital Reserve Balance FY-14				25,113	47,913	67,913	57,913	7,913	12,913
Contribution FY-15				25,000					
Proposed Expenditures FY-15				(22,200)					
Proposed Contribution FY-16				20,000	20,000	20,000	20,000	5,000	5,000
Proposed Expenditure FY-16				-	-	(30,000)	(70,000)	-	-
Ending Estimated Capital Reserve Balance				47,913	67,913	57,913	7,913	12,913	17,913

CAPITAL RESERVE PROGRAM - PARKS AND RECREATION DEPARTMENT EQUIPMENT									
	Anticipated	Scheduled							
	Cost	Purchase	Est.	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
	Year	Life							
Tractor	31,707	2016 - 2017	12	41,207		-	-	-	-
Pick-up Truck	25,000	2018 - 2019	8			25,000			
Field Shatter Tine Aerator	30,000	2019 - 2020					30,000		
	86,707			41,207	-	25,000	30,000	-	-
Ending Capital Reserve Balance FY-14				102,197	28,990	36,990	19,990	(2,010)	5,990
Contribution FY-15				-					
Proposed Expenditures FY-15				(40,000)					
Proposed Contribution FY-16				8,000	8,000	8,000	8,000	8,000	8,000
Proposed Expenditure FY-16				(41,207)	-	(25,000)	(30,000)	-	-
Ending Estimated Capital Reserve Balance				28,990	36,990	19,990	(2,010)	5,990	13,990

CAPITAL RESERVE PROGRAM - CEMETERY DEVELOPMENT

	Anticipated	Scheduled Purchase	Est.						
	<u>Cost</u>	<u>Year</u>	<u>Life</u>	<u>2016-17</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>
				-	-	-	-	-	-
				-	-	-	-	-	-
Ending Capital Reserve Balance FY-14				114,853	114,853	114,853	114,853	114,853	114,853
Contribution FY-15									
Proposed Expenditures FY-15									
Proposed Contribution FY-16				-	-	-	-	-	-
Proposed Expenditure FY-16				-	-	-	-	-	-
Ending Estimated Capital Reserve Balance				114,853	114,853	114,853	114,853	114,853	114,853

CAPITAL RESERVE PROGRAM - LAND PURCHASE

	Anticipated	Scheduled Purchase	Est.						
	<u>Cost</u>	<u>Year</u>	<u>Life</u>	<u>2016-17</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>
				-	-	-	-	-	-
				-	-	-	-	-	-
Ending Capital Reserve Balance FY-14				299,223	299,223	299,223	299,223	299,223	299,223
Contribution FY-15									
Proposed Expenditures FY-15									
Proposed Contribution FY-16				-	-	-	-	-	-
Proposed Expenditure FY-16				-	-	-	-	-	-
Ending Estimated Capital Reserve Balance				299,223	299,223	299,223	299,223	299,223	299,223

CAPITAL RESERVE PROGRAM - PUBLIC SAFETY BUILDING									
	Anticipated	Scheduled Purchase	Est.						
	Cost	Year	Life	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Public Safety Building Construction				5,969	-	-	-	-	-
				5,969	-	-	-	-	-
Ending Capital Reserve Balance FY-14				5,969	-	-	-	-	-
Contribution FY-15									
Proposed Expenditures FY-15									
Proposed Contribution FY-16				-	-	-	-	-	-
Proposed Expenditure FY-16				(5,969)	-	-	-	-	-
Ending Estimated Capital Reserve Balance				-	-	-	-	-	-

CAPITAL RESERVE PROGRAM - MUNICIPAL FACILITIES EMERGENCY REPAIR									
	Anticipated	Scheduled Purchase	Est.						
	Cost	Year	Life	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
				-	-	-	-	-	-
				-	-	-	-	-	-
Ending Capital Reserve Balance FY-14				-	25,000	25,000	25,000	25,000	25,000
Contribution FY-15				25,000					
Proposed Expenditures FY-15				(5,000)					
Proposed Contribution FY-16				5,000					
Proposed Expenditure FY-16				-	-	-	-	-	-
Ending Estimated Capital Reserve Balance				25,000	25,000	25,000	25,000	25,000	25,000

CAPITAL RESERVE PROGRAM - SEWER SYSTEM

	Anticipated	Scheduled Purchase	Est. Life	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
	<u>Cost</u>	<u>Year</u>	<u>Life</u>						
				-	-	-	-	-	-
				-	-	-	-	-	-
Ending Capital Reserve Balance FY-14				20,022	20,022	20,022	20,022	20,022	20,022
Contribution FY-15									
Proposed Expenditures FY-15									
Proposed Contribution FY-16				-	-	-	-	-	-
Proposed Expenditure FY-16				-	-	-	-	-	-
Ending Estimated Capital Reserve Balance				20,022	20,022	20,022	20,022	20,022	20,022

Bow School District

CAPITAL RESERVE PROGRAM - BOW SCHOOL DISTRICT									
		Scheduled							
	Anticipated	Purchase	Est.						
	<u>Cost</u>	<u>Year</u>	<u>Life</u>	<u>2016-17</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>
Bow School District Middle and Elementary									
				-	-	-	-	-	-
				-	-	-	-	-	-
				-	-	-	-	-	-
Ending Capital Reserve Balance FY-14				235,900	235,900	235,900	235,900	235,900	235,900
Contribution FY-15									
Proposed Expenditures FY-15									
Proposed Contribution FY-16									
Proposed Expenditure FY-16				-	-	-	-	-	-
Ending Estimated Capital Reserve Balance				235,900	235,900	235,900	235,900	235,900	235,900

Bow School District

CAPITAL IMPROVEMENTS PROGRAM - BOW SCHOOL DISTRICT - PAVING									
		Scheduled							
	Anticipated	Purchase	Est.						
	<u>Cost</u>	<u>Year</u>	<u>Life</u>	<u>2016-17</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>
Bow School District Paving									
				-	-	-	-	-	-
				-	-	-	-	-	-
Ending Capital Reserve Balance FY-14				8,588	8,588	8,588	8,588	8,588	8,588
Contribution FY-15									
Proposed Expenditures FY-15									
Proposed Contribution FY-16									
Proposed Expenditure FY-16				-	-	-	-	-	-
Ending Estimated Capital Reserve Balance				8,588	8,588	8,588	8,588	8,588	8,588

CAPITAL IMPROVEMENTS PROGRAM - BOW SCHOOL DISTRICT - HVAC

		Scheduled							
	Anticipated	Purchase	Est.						
	Cost	Year	Life	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Bow School District HVAC									
				-	-	-	-	-	-
				-	-	-	-	-	-
Ending Capital Reserve Balance FY-14				512,372	512,372	512,372	512,372	512,372	512,372
Contribution FY-15									
Proposed Expenditures FY-15									
Proposed Contribution FY-16									
Proposed Expenditure FY-16				-	-	-	-	-	-
Ending Estimated Capital Reserve Balance				512,372	512,372	512,372	512,372	512,372	512,372

CAPITAL IMPROVEMENTS PROGRAM - BOW HIGH SCHOOL									
	Anticipated	Scheduled Purchase	Est. Life						
	<u>Cost</u>	<u>Year</u>	<u>Life</u>	<u>2016-17</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>
Bow High School Capital Improvements									
				-	-	-	-	-	-
				-	-	-	-	-	-
Ending Capital Reserve Balance FY-14				142,439	142,439	142,439	142,439	142,439	142,439
Contribution FY-15									
Proposed Expenditures FY-15									
Proposed Contribution FY-16									
Proposed Expenditure FY-16				-	-	-	-	-	-
Ending Estimated Capital Reserve Balance				142,439	142,439	142,439	142,439	142,439	142,439

CAPITAL IMPROVEMENTS PROGRAM - AREA SCHOOL CAPITAL IMPROVEMENTS/DUNBARTON									
	Anticipated	Scheduled Purchase	Est. Life						
	<u>Cost</u>	<u>Year</u>	<u>Life</u>	<u>2016-17</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>
AREA School Capital Improvements									
				-	-	-	-	-	-
				-	-	-	-	-	-
Ending Capital Reserve Balance FY-14					24,510	24,510	24,510	24,510	24,510
Contribution FY-15				24,510					
Proposed Expenditures FY-15									
Proposed Contribution FY-16									
Proposed Expenditure FY-16				-	-	-	-	-	-
Ending Estimated Capital Reserve Balance				24,510	24,510	24,510	24,510	24,510	24,510

Paving - 2017 - \$443,500						
Street Name	Length in Miles	Year Constructed	Year Last Paved	Length in Feet	Total Tons @ 2 inches	Total Cost @ \$ 80 / ton
Foote Road	0.44		2003	2,323.20	958.32	\$85,000.00
Everett Avenue	0.13	1974	1994	686.4	102.96	\$8,236.80
Northeast Avenue	0.07	1969	1994	369.6	101.64	\$8,131.20
Tally Ho Lane	0.08	1970	1994	422.4	116.16	\$9,292.80
Merrill Crossing	0.399	1995	1996	2,106.72	579.35	\$46,347.84
River Rd -RR Bridge to Johnson Rd.	0.994	1972	2003	5,250.00	1,463.00	\$117,040.00
Hemlock Road	0.101	1974	1999 Rehab.		2015	11,900.00
Westgate Drive	0.21	1974	2003 Rehab.		2014	14,725.00
Surrey Drive	0.24	?	1999 Rehab.		2015	28,250.00
Old Coach Road/Surrey Coach Lane	0.739	1971	1996 Rehab.	3,901.92	1,073.03	\$85,842.24
River Road North End				1,350.00		\$28,820.00
						\$443,585.88

Paving -2018 - \$ 433,500						
Street Name	Length in Miles	Year Constructed	Year Last Paved	Length in Feet	Total Tons @ 2 inches	Total Cost @ \$ 80/ ton
Lincoln Drive	0.29	1969	1994 Rehab.	1,531.00	426.6	\$34,131.00
Dean Avenue	0.487	1976	2000	2,571.36	707.12	\$56,569.92
Juniper Drive	0.06	1969	1994 Rehab.	317	88	\$7,067.00
Betty Lane	0.331	1970	1999 Rehab.	1,748.00	487.1	\$38,969.00
Deer Run Drive	0.423	1995	1995	2,233.44	614.2	\$49,135.68
Beaver Brook Road	0.34	1980	2002	1,795.20	493.68	\$39,494.40
Rollins Road	0.16	1989	1994	844.8	232.32	\$18,585.60
Erin Drive	0.528	1996	1996	2,787.84	766.66	\$61,332.48
Heidi Lane	1.104	1987	1997	5,829.12	1,603.08	\$128,246.40
						\$433,531.48

Paving -2019 - \$ 439,760						
Street Name	Length in Miles	Year Constructed	Year Last Paved	Length in Feet	Total Tons @ 2 inches	Total Cost @ \$ 80 / ton
So. Bow Rd	2.71	1981	2005	14,309	3985	318,800
Quimby Rd	0.85	2005	2002 Rehab.	4,488	1250	100,000
Cardinal Dr	0.178	2000	2000	940	262	20,960
						439,760

Paving -2020 - \$ 422,560						
Street Name	Length in Miles	Year Constructed	Year Last Paved	Length in Feet	Total Tons @ 2 inches	Total Cost @ \$ 80 / ton
Allen Rd	2.24	1979	2004	11,827	3295	263,600
Whiterock Hill Rd -- Back Side	0.72	1980	2005	3,800	1060	84,800
Page Rd - Whiterock to Shaw Div.	0.663		2,006.00	3,326	927	74,160
						422,560

TOWN OF BOW, NH
ANNUAL DEBT SERVICE ON OUTSTANDING
TOWN AND SCHOOL BONDS as of June 30, 2015

Fiscal Year	2007 Hammond	2008 Water/Sewer	2011 Water/Sewer	1996 *High School	2006 *Memorial School	Total
2016-17	\$78,337.50	\$172,562.50	\$903,100.00	\$586,643.75	\$232,900.00	\$1,973,543.75
2017-18	\$73,289.50	\$166,787.50	\$880,175.00		\$224,300.00	\$1,344,552.00
2018-19	\$70,337.50	\$161,012.50	\$857,250.00		\$215,700.00	\$1,304,300.00
2019-20	\$64,037.50	\$155,375.00	\$834,325.00		\$207,000.00	\$1,260,737.50
2020-21	\$57,731.25	\$150,356.25	\$814,675.00		\$198,200.00	\$1,220,962.50
2021-22	\$56,418.75	\$145,818.75	\$795,025.00		\$189,400.00	\$1,186,662.50
2022-23	\$55,106.25	\$141,212.50	\$772,100.00		\$180,500.00	\$1,148,918.75
2023-24		\$136,537.50	\$741,000.00		\$171,500.00	\$1,049,037.50
2024-25		\$131,862.50	\$715,000.00		\$162,500.00	\$1,009,362.50
2025-26		\$127,118.75	\$689,000.00		\$153,500.00	\$969,618.75
2026-27		\$122,306.25	\$663,000.00		\$144,500.00	\$929,806.25
2027-28		\$117,425.00				\$117,425.00
2028-29		\$112,475.00				\$112,475.00
2029-30						
	\$455,258.25	\$1,840,850.00	\$8,664,650.00	\$586,643.75	\$2,080,000.00	\$13,627,402.00

*Note: School Bond Debt minus State Revenue

RSA 33:4-b Debt Limit; Computation. The debt limitations hereinbefore prescribed, except for counties, shall be based upon the applicable last locally assessed valuation of the municipality as last equalized by the commissioner of revenue administration under RSA 21-J:3, XIII and shall include the equalized value of property formerly taxed pursuant to the provisions of RSA 72:7; 72:15, I, V, VII, VIII, IX, X and XI; 72:16; 72:17; 73:26; 73:27 and 73:11 through 16 inclusive, all as amended, which was relieved from taxation by 1970, 5:3, 5:8, and 57:12, as determined under the provisions of RSA 71:11 as amended. Whenever several municipalities possessing the power to incur indebtedness cover or extend over identical territory, each such municipality shall so exercise the power to incur indebtedness of such municipalities **shall not exceed 9.75 percent** of the valuation of the taxable property as hereinbefore determined, except as provided for cooperative school districts under RSA 195:6.

**Statement of Appropriations, Estimated Revenues
And Property Tax Assessed for 2014**

Assessing Department Report

For the fiscal year 2014, Bow had a total of 3,408 parcels, of which 3,246 were taxable and 162 were tax exempt. There were 2,671 improved residential properties. This includes 137 residential condominiums. The vacant residential land included 99 parcels, 41 condominium sites, and 138 tracts of land solely under the Current Use program. There were 201 developed commercial and industrial properties. This includes 89 commercial and industrial condominiums. There were 72 vacant commercial/industrial parcels. The remaining 23 properties were in the public utility category.

The Assessing Department completed a full town-wide revaluation during the 2014 tax year. All property assessments were updated to reflect current market values in August and all property owners were mailed notification of their new values. We offered taxpayers the opportunity to come in to discuss their new values prior to the issuance of final fall tax bill. The average single family property value saw an increase of 3 to 4 percent.

We are continuing with the Cycled Inspection process, whereby one-fifth of the town is measured and inspected each year on a rotating basis. The streets and neighborhoods we will be visiting is currently posted on the Town's website. Property owners in the selected area receive notification from the Assessing Department informing them that a data collector will be in their neighborhood at which time the data collector will measure the outside and ask an adult for permission to inspect the interior of the home. In addition, all properties that have had a building permit issued over the last year or that have sold in the last year will also be visited by the Assessing Department to verify the details of the building permit and or the sale.

The annual tax rate applies to your property's assessed value and determines the amount of tax you will pay. The municipal, the local school district, the county, and the state education taxing agencies all contribute to the total tax rate. The following chart compares the tax rates of each agency per \$1,000 of assessed value for the last five years:

YEAR	2014	2013	2012	2011	2010
Town of Bow	\$7.04	\$7.05	\$ 6.76	\$ 5.88	\$ 5.27
Bow School District	\$17.18	\$17.61	\$ 16.38	\$ 15.46	\$ 14.21
State Education	\$2.42	\$2.57	\$ 2.61	\$ 2.70	\$ 2.48
County	\$2.87	\$2.96	\$ 3.32	\$ 3.11	\$ 2.70
TOTAL RATE	\$29.51	\$30.19	\$ 29.07	\$ 27.15	\$ 24.66

Bow offers various property tax exemptions and credits to eligible residents, including veterans, elderly, blind, and disabled, as well as for solar and central wood heating systems. All financial information is kept confidential and returned after review. The deadline for all these applications is April 15th.

Bow offers the maximum amount allowed by the State of New Hampshire for all Veteran's Tax Credits. The

Veteran's Tax Credits' allocations were as follows for 2014:

Standard Veteran's Tax Credit of \$500 (341).....	\$169,750
Permanently Disabled Veteran's Credit of \$2,000 (6)	\$12,000
Surviving Spouse of Service member Killed of \$2,000 (2)	\$4,000
Total Amount of Veterans Credits	\$185,750

The following is the official summary of inventory in Bow of all real estate which was used to calculate the 2014 tax rate:

Residential Land	\$245,100,104
Commercial/Industrial Land	\$53,484,900
Discretionary Preservation Easement Land	\$1,600
Current Use Land	\$322,299
Total of Taxable Land	\$298,908,903

Residential Buildings	\$490,810,655
Commercial/Industrial	\$108,480,825
Discretionary Preservation Easement Buildings.....	\$56,900
Total of Taxable Buildings	\$599,348,380

Public Utilities	\$189,769,487
Other Utilities (private water companies).....	\$74,600
Total of Utilities.....	\$189,844,087

Total Valuation (Before exemptions) **\$1,088,101,370**

Less Air Pollution Control Exemption to PSNH-\$25,500,000
 Less Improvements to Assessing the Disabled (2) . -\$84,549

Modified Assessed Valuation **\$1,062,516,821**
 (This is used to calculate the total equalized value)

Total Exemptions in Bow for 2014

Blind Exemption (4)	\$262,500
Elderly Exemption (46).....	\$6,968,000
Disabled Exemption (7)	\$929,500
Wood-Heating Exemption (8).....	\$18,800
Solar Energy Exemption (4)	\$19,331
Total Amount of Exemptions.....	\$8,198,131

In 2013, our equalization ratio, as determined by the Department of Revenue Administration was at 98.3%. The new ratio for the Town will be given in the spring 2015. Based on our sales analysis from October 1, 2013

through September 30, 2014, and the updated made to the values from the revaluation process, we are projecting the equalization rate for 2014 to be 97.1%. The equalization rate measures the level of assessment and equity for each municipality. The ratio of 97.1% means our assessments are within 2.9% of market value (2.9% less than market).

The following averages were found for 2014:

Single Family Home sale price	\$285,000 (3.6% increase from 2013)
Residential Condominium sale price	\$252,000

The commercial and industrial real estate market remains stable. The residential market continues to increase at a rate of .25% per month.

If you wish to file an abatement application form, because you feel your assessment is not in line with the equalized market value, or if there is a data error on your property record, the deadline is March 1st following receipt of the final tax bill. Applications are available in the Assessing Office. We maintain a record of sales for your convenience. For property information, please visit www.visionappraisal.com along with our online maps at www.caigisonline.com/BowNH. If you have a question, or you need to obtain the most current, official property information, please contact the Assessing Office. We are here to help you however we can.

We would like to encourage everyone to visit the Town of Bow's website at www.bow-nh.com. The Assessing Department can be found under Services, where more detailed information is provided, including links to our tax maps, assessing data, and various applications. You may call 228-1187, Ext. 115, or email the assessor@bow-nh.gov.

Respectfully Submitted,

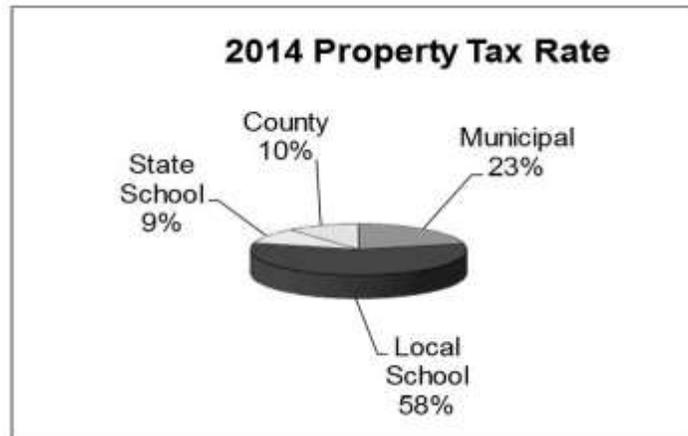
Monica Hurley, Certified New Hampshire Assessor

Corcoran Consulting Associates

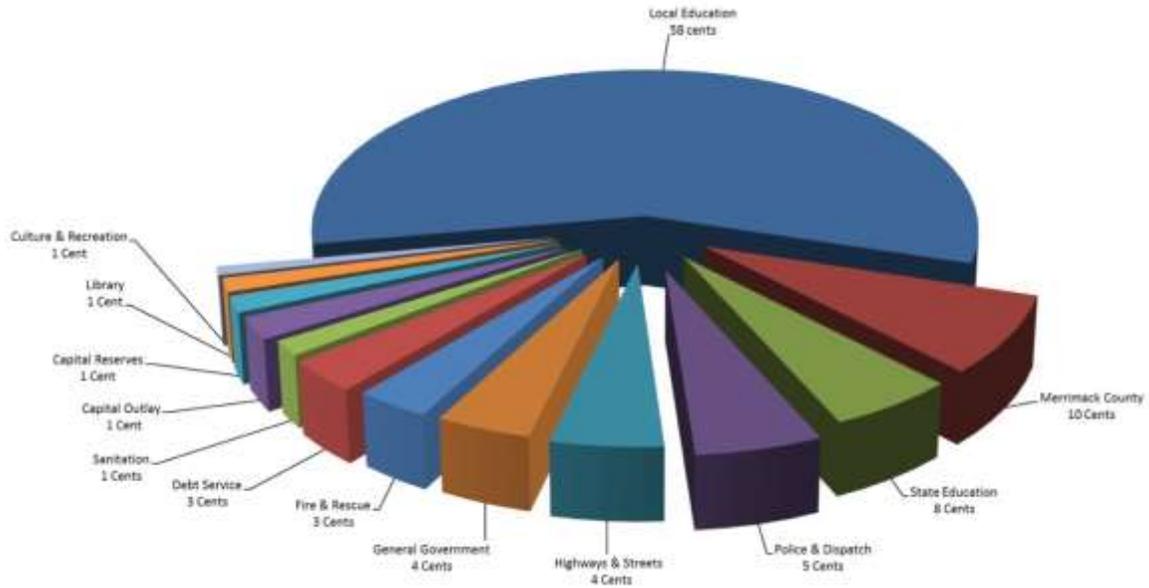
Janette Shuman, Assessing and Building Clerk

<u>Tax Rate Computation</u>	<u>Assessment</u>	<u>Assessed Valuation (\$1,000's)</u>	<u>Tax Rate*</u>
Municipal	7,422,140	1,054,318.690	7.04
Local school	18,111,815	1,054,318.690	17.18
County	3,029,545	1,054,318.690	2.87
State education	2,151,913	890,049.203	2.42
Total	30,715,413		29.51

* Tax rate = assessment divided by property valuation



How Each Dollar Was Spent in 2014 (Town Operations Total = 24 Cents)



2013 Comparison of Full Value Tax Rates (Bow 206)
 Complete Report Can be Found at: <http://revenue.nh.gov/publications/reports/index.htm>

Revised 8/14/14

2013 COMPARISON OF FULL VALUE TAX RATES

The full value tax rate represents the estimated tax rate for a municipality if all the taxable property was assessed at 100% and includes the equalized value of properties for which a payment in lieu of property taxes is made.

The full value tax rate is calculated as follows: The 2013 gross local property taxes to be raised as reported by the Department of Revenue Administration, Municipal & Property Division divided by the total equalized valuation including utility values and equalized railroad taxes.

The full value rates are ranked in ascending order from lowest to highest (1-227 for 2013). If two municipalities have the same full value tax rate they are ranked with the same number. The unincorporated towns (signified by ****) have no 2013 tax rate, and thus are not ranked.

The full value tax rate can only be used to make a limited comparison of what a property in one municipality would pay for taxes to a property of equal value in another municipality.

For example:	Town A	$100,000 \times 21.95$	
		$1000 =$	\$2,195.00
	Town B	$100,000 \times 26.56$	
		$1000 =$	\$2,656.00

Due to diverse real estate values in New Hampshire, properties of equal value do not equate to properties of equal size or quality.

Prior to making any assumptions or decisions regarding a property owner's tax burden in a municipality, other factors should be considered such as real estate values, municipal services, schools, community make-up, and locational factors including proximity to urban areas, medical facilities, highways, recreation areas, etc.

**2013 COMPARISON OF FULL VALUE TAX RATES RANKING
(AVERAGE LEVEL OF ASSESSMENTS (RATIO) SHOWN IN COLM. 4)
PREPARED BY NEW HAMPSHIRE DEPARTMENT OF REVENUE ADMINISTRATION**

MUNICIPALITY	2013 VALUATION		COMPARATIVE TAX RATES AND RANKINGS			
	MODIFIED LOCAL ASSESSED VALUATION	TOTAL EQUALIZED VALUATION INCLUDING UTILITIES AND RAILROAD	2013 LOCAL TAX RATE	2013 EQ RATIO	FULL VALUE TAX RATE	RANKING *
ATKINSON & GILMANTON	676,714	649,299	\$0.00	106.2	\$0.00	****
BEAN'S GRANT	540	537	\$0.00	106.2	\$0.00	****
BEAN'S PURCHASE	0	0	\$0.00	106.2	\$0.00	****
CAMBRIDGE	8,546,375	8,084,204	\$0.00	106.2	\$0.00	****
CHANDLER'S PURCHASE	40,414	38,179	\$0.00	106.2	\$0.00	****
CRAWFORD'S PURCHASE	187,781	176,840	\$0.00	106.2	\$0.00	****
CUTT'S GRANT	0	0	\$0.00	106.2	\$0.00	****
DIX GRANT	788,018	735,560	\$0.00	106.2	\$0.00	****
DIXVILLE	8,239,724	30,552,072	\$0.00	106.2	\$0.00	****
ERVING'S GRANT	46,704	46,704	\$0.00	106.2	\$0.00	****
HADLEY'S PURCHASE	0	0	\$0.00	106.2	\$0.00	****
KILKENNY	12,904	12,904	\$0.00	106.2	\$0.00	****
LIVERMORE	134,100	134,100	\$0.00	100.0	\$0.00	****
LOW & BURBANK GRANT	0	0	\$0.00	106.2	\$0.00	****
MARTIN'S LOCATION	27,170	27,170	\$0.00	106.2	\$0.00	****
MILLSFIELD	7,876,220	92,040,732	\$0.00	106.2	\$0.00	****
ODELL	2,085,048	1,976,105	\$0.00	106.2	\$0.00	****
SARGENT'S PURCHASE	1,881,460	1,771,620	\$0.00	106.2	\$0.00	****
SECOND COLLEGE GRANT	1,084,011	1,045,426	\$0.00	106.2	\$0.00	****
SUCCESS	11,535,304	10,888,762	\$0.00	106.2	\$0.00	****
THOM & MES PURCHASE	5,216,520	5,049,143	\$3.05	106.2	\$3.15	1
HALE'S LOCATION	74,988,800	74,450,115	\$4.02	100.8	\$4.04	2
GROTON	77,408,166	191,829,656	\$10.95	106.4	\$4.29	3
PINKHAM'S GRANT	2,730,070	4,133,904	\$7.17	106.2	\$4.65	4
HART'S LOCATION	15,887,300	15,079,883	\$4.58	106.1	\$4.77	5
NEW CASTLE	640,386,131	647,672,238	\$6.39	98.8	\$6.30	6
NEWINGTON	954,375,112	1,026,512,414	\$8.99	90.4	\$7.22	7
HEBRON	261,630,319	267,489,153	\$8.05	99.0	\$7.84	8
MOULTONBOROUGH	2,688,633,071	2,845,912,975	\$8.69	94.6	\$8.20	9
BRIDGEWATER	336,807,000	354,560,663	\$9.51	93.8	\$8.96	10
TUFTONBORO	1,027,509,410	1,019,824,910	\$9.18	100.0	\$9.21	11
BARTLETT	918,941,302	943,952,126	\$9.98	97.4	\$9.69	12
WENTWORTH LOCATION	7,174,246	6,772,978	\$9.50	106.2	\$10.03	13
JACKSON	391,161,542	378,127,988	\$9.86	103.5	\$10.18	14
RYE	1,776,420,090	1,900,684,092	\$10.97	93.5	\$10.21	15
GREEN'S GRANT	3,093,188	2,942,546	\$10.16	106.2	\$10.59	16
EASTON	66,741,401	65,991,573	\$10.62	101.4	\$10.71	17
EATON	105,953,950	101,856,011	\$10.78	104.1	\$11.19	18
WATERVILLE VALLEY	331,908,280	357,132,927	\$12.40	93.0	\$11.51	19
SANDWICH	442,335,976	405,597,973	\$11.20	108.4	\$12.16	20
WAKEFIELD	895,637,528	888,649,182	\$12.28	100.9	\$12.32	21
LINCOLN	749,106,914	763,973,790	\$12.84	97.3	\$12.51	22
CENTER HARBOR	382,907,426	403,195,612	\$13.19	95.0	\$12.51	22
ALBANY	105,454,724	99,850,986	\$11.91	106.3	\$12.54	23
ERROL	84,517,995	80,783,726	\$12.35	100.3	\$12.65	24
WINDSOR	24,418,947	24,873,219	\$13.34	102.1	\$13.03	25
ALTON	1,455,337,692	1,494,341,768	\$13.44	97.4	\$13.06	25
HOLDERNESS	661,128,884	734,829,571	\$14.54	89.8	\$13.07	27
WOLFEBORO	2,038,346,025	1,987,905,225	\$12.83	102.6	\$13.12	28
FREEDOM	494,339,173	445,001,983	\$12.36	111.1	\$13.69	29
CLARKSVILLE	41,468,214	42,450,957	\$14.10	106.2	\$13.70	30
MEREDITH	1,743,869,194	1,760,304,783	\$14.41	99.2	\$14.24	31

*RANKING BASED ON LOWEST TO HIGHEST FULL VALUE TAX RATE

**2013 COMPARISON OF FULL VALUE TAX RATES RANKING
(AVERAGE LEVEL OF ASSESSMENTS (RATIO) SHOWN IN COLM. 4)
PREPARED BY NEW HAMPSHIRE DEPARTMENT OF REVENUE ADMINISTRATION**

MUNICIPALITY	2013 VALUATION		COMPARATIVE TAX RATES AND RANKINGS			
	MODIFIED LOCAL ASSESSED VALUATION	TOTAL EQUALIZED VALUATION INCLUDING UTILITIES AND RAILROAD	2013 LOCAL TAX RATE	2013 EQ RATIO	FULL VALUE TAX RATE	RANKING *
SUNAPEE	1,151,345,231	1,167,591,352	\$14.62	98.3	\$14.39	32
GREENLAND	657,203,900	687,741,493	\$15.50	95.2	\$14.67	33
NEWBURY	701,457,041	706,227,728	\$14.93	99.1	\$14.81	34
CHATHAM	51,946,240	48,449,347	\$14.07	108.2	\$15.05	35
NEW LONDON	1,097,835,482	1,087,298,277	\$15.05	100.8	\$15.15	36
SEABROOK	2,626,431,950	2,393,624,563	\$15.27	95.9	\$15.21	37
ELLSWORTH	13,639,335	14,011,786	\$16.00	97.4	\$15.51	38
MADISON	464,079,550	462,214,473	\$15.78	99.7	\$15.78	39
PITTSBURG	244,079,653	251,647,486	\$16.70	97.6	\$16.05	40
NORTH HAMPTON	1,009,617,600	1,038,349,369	\$16.75	97.2	\$16.09	41
PORTSMOUTH	4,119,413,775	4,526,473,144	\$17.91	91.9	\$16.11	42
FRANCONIA	285,418,987	274,395,358	\$15.88	103.7	\$16.47	43
HANOVER	1,948,529,400	2,053,974,062	\$17.82	94.7	\$16.88	44
GILFORD	1,538,655,940	1,647,533,032	\$18.16	93.5	\$16.91	45
CONWAY	1,407,696,765	1,472,427,962	\$17.86	95.3	\$16.97	46
RANDOLPH	67,446,132	63,734,496	\$16.29	102.2	\$17.06	47
SHELBURNE	81,702,598	67,929,150	\$15.29	99.8	\$17.20	48
SOUTH HAMPTON	135,031,557	132,314,937	\$17.53	101.3	\$17.47	49
HAMPTON	2,782,602,000	2,863,962,884	\$18.31	95.6	\$17.50	50
THORNTON	375,580,931	387,374,372	\$18.34	96.5	\$17.68	51
ORANGE	28,778,639	34,895,478	\$21.55	81.3	\$17.70	52
BROOKFIELD	103,293,248	93,711,507	\$16.13	109.7	\$17.71	53
CARROLL	315,178,458	311,406,767	\$17.66	101.3	\$17.81	54
WASHINGTON	226,283,239	227,332,554	\$17.97	98.9	\$17.83	55
HARRISVILLE	186,887,245	186,462,204	\$18.12	99.8	\$18.12	56
AUBURN	623,740,956	658,850,856	\$19.59	99.4	\$18.33	57
OSSIPEE	708,209,127	660,237,568	\$17.39	107.4	\$18.53	58
ATKINSON	849,204,712	858,387,793	\$19.00	98.9	\$18.61	59
STODDARD	284,963,330	239,445,917	\$15.74	118.1	\$18.64	60
WOODSTOCK	224,050,347	224,623,920	\$18.91	99.9	\$18.71	61
CROYDON	93,865,145	90,596,443	\$18.24	102.7	\$18.81	62
ROXBURY	25,638,777	29,179,673	\$21.85	100.0	\$19.13	63
MONROE	346,347,314	190,177,401	\$12.48	98.4	\$19.13	63
LYMAN	61,107,701	60,159,345	\$19.30	101.3	\$19.51	64
TILTON	524,873,516	477,749,645	\$18.30	107.7	\$19.79	65
HAMPTON FALLS	417,384,910	421,291,053	\$20.19	98.4	\$19.80	66
SURRY	76,199,217	82,199,707	\$21.50	95.8	\$19.87	67
NEW HAMPTON	298,782,671	282,511,530	\$19.17	101.4	\$19.94	68
SALEM	3,879,320,877	3,936,929,706	\$20.46	97.8	\$20.01	69
CHESTERFIELD	484,349,331	493,215,149	\$20.50	98.3	\$20.05	70
LANDAFF	51,056,492	48,384,640	\$19.17	103.0	\$20.12	71
DUMMER	67,418,559	48,746,354	\$16.14	101.3	\$20.30	72
HUDSON	2,578,825,108	2,555,157,971	\$20.56	98.0	\$20.32	73
STRATHAM	1,226,671,118	1,177,199,177	\$19.65	103.9	\$20.37	74
STARK	68,890,170	57,095,072	\$17.48	123.1	\$20.50	75
DORCHESTER	40,777,573	36,910,141	\$18.61	111.0	\$20.51	76
NELSON	117,207,597	112,443,244	\$19.88	103.2	\$20.57	77
BEDFORD	3,211,293,134	3,402,000,314	\$22.17	94.1	\$20.74	78
CANDIA	412,837,486	382,497,161	\$19.50	107.9	\$20.81	79
ANDOVER	267,753,327	239,316,302	\$18.75	108.8	\$20.83	80
SUGAR HILL	151,677,574	145,880,560	\$20.17	103.7	\$20.91	81
BRISTOL	468,563,875	448,748,009	\$20.18	101.8	\$20.92	82

*RANKING BASED ON LOWEST TO HIGHEST FULL VALUE TAX RATE

**2013 COMPARISON OF FULL VALUE TAX RATES RANKING
(AVERAGE LEVEL OF ASSESSMENTS (RATIO) SHOWN IN COLM. 4)
PREPARED BY NEW HAMPSHIRE DEPARTMENT OF REVENUE ADMINISTRATION**

MUNICIPALITY	2013 VALUATION		COMPARATIVE TAX RATES AND RANKINGS			
	MODIFIED LOCAL ASSESSED VALUATION	TOTAL EQUALIZED VALUATION INCLUDING UTILITIES AND RAILROAD	2013 LOCAL TAX RATE	2013 EQ RATIO	FULL VALUE TAX RATE	RANKING *
CORNISH	187,065,659	184,517,950	\$20.97	101.3	\$21.08	83
JEFFERSON	124,850,186	115,719,029	\$19.75	106.7	\$21.12	84
LITCHFIELD	820,097,054	790,696,845	\$20.57	102.5	\$21.14	85
SANBORNTON	388,289,493	420,392,004	\$22.97	92.6	\$21.15	86
BENTON	25,323,941	23,939,629	\$20.24	107.4	\$21.30	87
WILMOT	179,751,382	174,289,291	\$20.79	102.8	\$21.39	88
RUMNEY	195,255,714	179,720,079	\$19.93	103.6	\$21.45	89
CAMPTON	416,956,143	383,954,541	\$19.99	108.3	\$21.46	90
COLUMBIA	84,702,042	74,666,606	\$19.58	103.5	\$21.50	91
TAMWORTH	358,804,580	331,091,824	\$20.00	109.1	\$21.50	91
LACONIA	1,810,270,476	1,843,806,053	\$22.08	99.1	\$21.57	92
BATH	129,766,366	106,821,607	\$18.24	115.0	\$21.67	93
HANCOCK	245,345,957	248,716,488	\$22.27	98.1	\$21.88	94
NEW DURHAM	420,314,960	428,302,579	\$22.50	98.1	\$21.98	95
ACWORTH	95,332,940	97,580,449	\$22.62	97.7	\$22.01	96
NOTTINGHAM	546,583,577	528,436,825	\$21.55	103.5	\$22.03	97
SPRINGFIELD	200,974,872	184,533,414	\$20.40	106.4	\$22.06	98
EFFINGHAM	180,274,037	155,964,041	\$19.18	115.4	\$22.07	99
SHARON	54,606,562	49,061,087	\$19.90	110.9	\$22.08	100
ENFIELD	565,881,655	534,833,893	\$21.32	105.1	\$22.10	101
MARLOW	66,085,500	62,337,095	\$21.05	106.3	\$22.16	102
HOLLIS	1,187,001,402	1,207,116,233	\$22.82	97.6	\$22.28	103
NASHUA	8,126,718,978	8,386,760,928	\$23.50	96.0	\$22.31	104
MANCHESTER	8,523,618,600	8,439,859,665	\$22.67	101.0	\$22.33	105
PELHAM	1,408,651,318	1,428,377,883	\$22.87	98.0	\$22.34	106
HOOKSETT	1,580,045,743	1,625,730,434	\$23.48	96.1	\$22.38	107
LOUDON	534,018,966	488,603,239	\$20.71	108.9	\$22.47	108
LEMPSTER	161,541,336	141,363,549	\$20.39	108.0	\$22.50	109
MILAN	124,088,386	111,567,431	\$20.78	103.3	\$22.56	110
ALEXANDRIA	202,275,184	187,196,782	\$21.26	103.4	\$22.62	111
WEBSTER	210,423,681	198,114,293	\$21.73	99.0	\$22.78	112
WINDHAM	2,079,009,410	2,135,023,621	\$23.60	97.4	\$22.82	113
FARMINGTON	480,321,339	435,073,539	\$21.00	110.3	\$22.86	114
PLAISTOW	842,783,950	910,862,857	\$25.24	91.8	\$22.91	115
WALPOLE	417,353,639	397,211,498	\$22.04	104.1	\$22.99	116
WENTWORTH	94,661,974	87,276,678	\$21.45	106.2	\$23.09	117
MIDDLETON	162,266,023	165,064,244	\$23.60	97.5	\$23.13	118
DUNBARTON	311,517,580	279,967,387	\$21.01	105.4	\$23.14	119
BRADFORD	221,476,152	213,368,009	\$22.42	102.9	\$23.17	120
LYME	329,911,000	330,698,358	\$23.58	98.7	\$23.22	121
WEARE	818,815,418	756,271,407	\$21.75	107.1	\$23.27	122
LONDONDERRY	3,504,573,730	3,093,766,590	\$21.10	108.5	\$23.31	123
GRANTHAM	516,045,870	473,090,541	\$21.44	108.8	\$23.32	124
DALTON	84,107,977	79,193,031	\$22.53	95.6	\$23.44	125
WESTMORELAND	173,919,184	165,794,620	\$22.41	105.0	\$23.46	126
GILMANTON	482,761,564	430,037,190	\$21.15	110.9	\$23.58	127
FRANKLIN	519,985,700	529,927,820	\$24.60	99.2	\$23.72	128
STRAFFORD	459,714,700	436,459,146	\$22.68	105.3	\$23.83	129
EXETER	1,640,180,570	1,747,957,486	\$26.03	93.8	\$23.88	130
NEW BOSTON	546,394,562	549,699,575	\$24.24	98.6	\$23.90	131
EPPING	657,810,900	658,804,899	\$24.27	98.8	\$23.95	132
SUTTON	270,180,523	265,689,169	\$23.64	101.8	\$23.95	132

*RANKING BASED ON LOWEST TO HIGHEST FULL VALUE TAX RATE.

2013 COMPARISON OF FULL VALUE TAX RATES RANKING
(AVERAGE LEVEL OF ASSESSMENTS (RATIO) SHOWN IN COLM. 4)
PREPARED BY NEW HAMPSHIRE DEPARTMENT OF REVENUE ADMINISTRATION

MUNICIPALITY	2013 VALUATION		COMPARATIVE TAX RATES AND RANKINGS			
	MODIFIED LOCAL ASSESSED VALUATION	TOTAL EQUALIZED VALUATION INCLUDING UTILITIES AND RAILROAD	2013 LOCAL TAX RATE	2013 EQ RATIO	FULL VALUE TAX RATE	RANKING *
EPSOM	407,783,742	382,190,281	\$22.57	106.3	\$23.95	132
CANAAN	323,982,943	338,331,486	\$25.17	94.2	\$23.96	133
BRENTWOOD	508,644,059	503,452,982	\$23.88	99.1	\$23.97	134
MERRIMACK	2,968,396,410	2,903,304,538	\$23.91	101.0	\$24.05	135
CONCORD	3,865,691,446	4,074,453,253	\$25.58	94.4	\$24.07	136
DOVER	2,696,745,950	2,850,372,307	\$25.97	94.7	\$24.10	137
RAYMOND	845,575,157	813,575,881	\$23.64	102.4	\$24.14	138
KENSINGTON	301,215,478	301,336,758	\$24.55	98.8	\$24.14	138
DUBLIN	255,544,828	249,529,201	\$23.64	102.2	\$24.17	139
PLYMOUTH	418,785,550	412,707,620	\$24.03	99.9	\$24.20	140
KINGSTON	618,713,785	615,470,604	\$24.28	100.5	\$24.21	141
GRAFTON	127,663,016	109,097,272	\$20.84	116.6	\$24.28	142
BARRINGTON	926,068,265	844,634,823	\$22.46	109.2	\$24.30	143
CHESTER	483,569,200	484,059,366	\$25.17	96.9	\$24.31	144
HAMPSTEAD	1,020,898,871	979,943,155	\$23.68	103.7	\$24.36	145
CHICHESTER	262,932,957	269,951,104	\$25.32	97.1	\$24.52	146
LEBANON	1,877,490,125	1,928,408,404	\$25.51	98.1	\$24.57	147
PIERMONT	97,716,208	88,147,191	\$22.35	111.0	\$24.69	148
NORTHFIELD	282,375,205	275,272,077	\$24.66	101.6	\$24.72	149
NEWFIELDS	242,721,299	234,593,238	\$24.28	103.5	\$24.81	150
NEWMARKET	751,506,283	732,953,940	\$24.46	102.6	\$24.83	151
NORTHWOOD	481,943,297	469,159,740	\$24.49	102.5	\$24.85	152
SALISBURY	127,062,431	121,776,807	\$24.30	101.3	\$24.88	153
COLEBROOK	189,545,153	173,903,760	\$23.07	106.8	\$24.91	154
DANBURY	110,303,293	103,201,453	\$23.44	107.1	\$24.91	154
LANCASTER	270,992,720	251,449,375	\$23.35	104.8	\$24.96	155
STEWARTSTOWN	89,257,157	81,439,043	\$23.38	100.4	\$24.98	156
WHITEFIELD	220,744,990	174,485,362	\$20.27	119.5	\$25.25	157
BETHLEHEM	224,431,138	251,574,068	\$28.55	89.2	\$25.26	158
DEERFIELD	549,356,397	483,202,693	\$22.65	107.5	\$25.32	159
ASHLAND	228,261,598	224,397,327	\$25.12	102.2	\$25.43	160
ROCHESTER	2,072,597,235	2,084,600,826	\$26.36	99.7	\$25.50	161
BARNSTEAD	468,879,854	430,146,314	\$23.50	109.0	\$25.52	162
LANGDON	61,564,968	60,008,756	\$25.10	102.7	\$25.54	163
FRANCESTOWN	213,242,869	188,521,577	\$22.77	112.3	\$25.68	164
SANDOWN	512,916,470	529,304,535	\$27.08	96.9	\$25.75	165
LYNDEBOROUGH	168,300,450	154,471,803	\$24.00	109.0	\$26.10	166
ROLLINSFORD	225,486,697	228,227,533	\$26.88	98.4	\$26.11	167
NEW IPSWICH	422,077,268	356,106,285	\$22.38	117.4	\$26.35	168
EAST KINGSTON	299,011,607	278,728,837	\$24.76	104.7	\$26.37	169
PLAINFIELD	266,613,611	268,967,265	\$27.50	97.9	\$26.50	170
AMHERST	1,578,709,700	1,559,656,458	\$26.45	100.7	\$26.53	171
BOSCAWEN	234,193,799	235,771,341	\$27.06	100.5	\$26.72	172
MILTON	368,841,834	353,002,134	\$25.88	104.5	\$26.75	173
WILTON	369,127,237	357,644,816	\$26.02	103.1	\$26.81	174
GOFFSTOWN	1,336,852,300	1,331,948,525	\$27.11	99.2	\$26.88	175
GOSHEN	76,266,955	68,789,255	\$24.51	111.1	\$27.12	176
RINDGE	560,304,829	512,145,807	\$25.46	109.3	\$27.20	177
BELMONT	738,651,693	602,680,025	\$22.44	122.6	\$27.23	178
MILFORD	1,262,784,467	1,260,216,766	\$26.97	101.9	\$27.26	179
LITTLETON	763,615,400	602,629,127	\$22.46	103.9	\$27.38	180
HILL	107,136,843	75,018,097	\$19.39	138.3	\$27.38	180

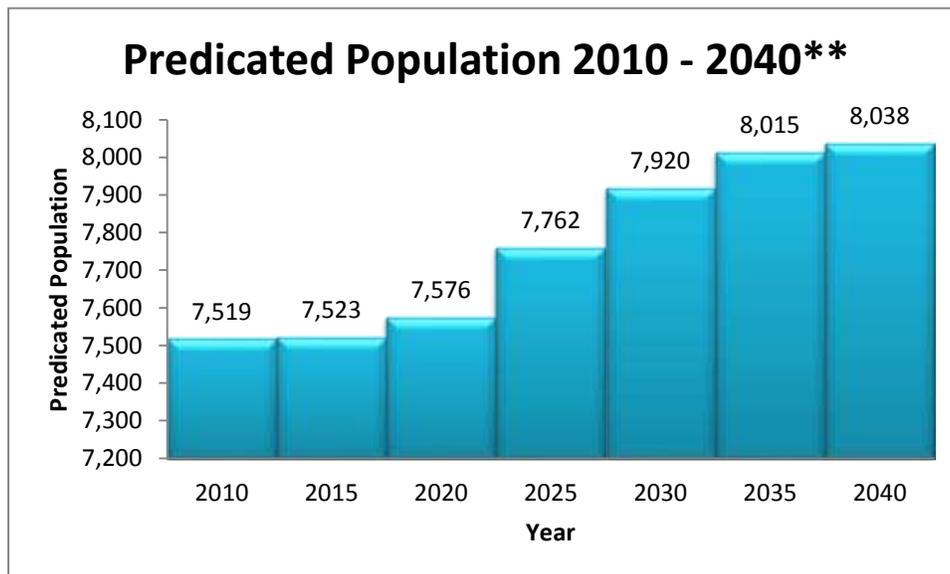
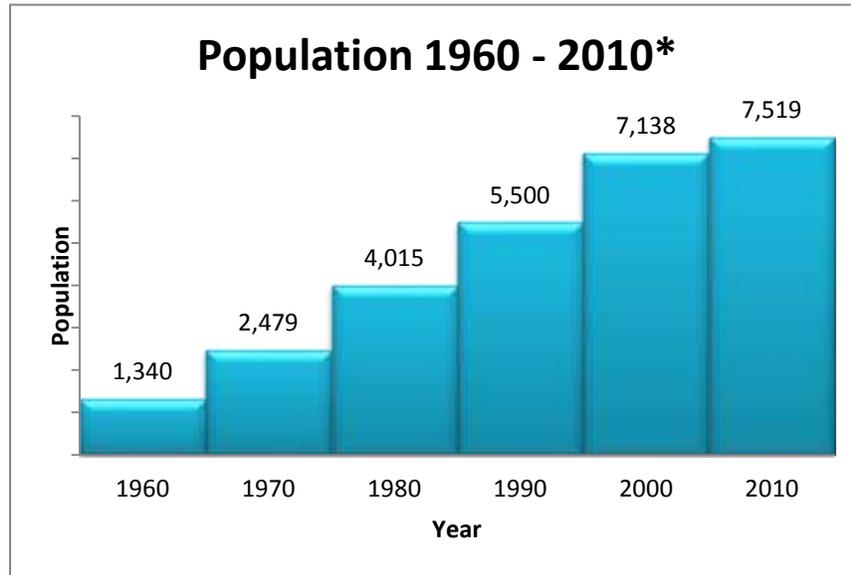
*RANKING BASED ON LOWEST TO HIGHEST FULL VALUE TAX RATE

2013 COMPARISON OF FULL VALUE TAX RATES RANKING
(AVERAGE LEVEL OF ASSESSMENTS (RATIO) SHOWN IN COLM. 4)
PREPARED BY NEW HAMPSHIRE DEPARTMENT OF REVENUE ADMINISTRATION

MUNICIPALITY	2013 VALUATION		COMPARATIVE TAX RATES AND RANKINGS			
	MODIFIED LOCAL ASSESSED VALUATION	TOTAL EQUALIZED VALUATION INCLUDING UTILITIES AND RAILROAD	2013 LOCAL TAX RATE	2013 EQ RATIO	FULL VALUE TAX RATE	RANKING *
RICHMOND	92,964,021	88,428,763	\$26.16	106.0	\$27.40	181
CANTERBURY	247,033,896	233,593,483	\$26.14	106.0	\$27.40	181
HINSDALE	353,577,121	321,258,440	\$25.85	100.6	\$27.40	181
PETERBOROUGH	607,729,902	640,626,120	\$29.80	94.8	\$27.44	182
DERRY	2,395,026,120	2,688,560,224	\$31.49	89.0	\$27.47	183
TEMPLE	151,921,489	134,942,843	\$24.50	111.9	\$27.52	184
UNITY	133,527,114	119,012,954	\$24.70	111.2	\$27.61	185
NEWTON	480,534,793	436,305,952	\$25.30	110.0	\$27.67	186
MADBURY	238,074,670	213,829,357	\$25.24	109.0	\$27.79	187
GREENFIELD	159,379,621	138,544,543	\$24.29	121.2	\$27.82	188
ORFORD	146,748,526	134,766,850	\$25.70	108.2	\$27.92	189
LEE	423,869,927	424,852,476	\$28.75	99.6	\$28.02	190
STRATFORD	88,862,594	55,720,595	\$23.92	103.8	\$28.05	191
DEERING	201,446,217	182,123,422	\$25.95	109.8	\$28.05	191
SWANZEY	594,393,302	524,918,065	\$25.37	113.1	\$28.22	192
DANVILLE	336,755,508	333,031,867	\$28.34	101.0	\$28.29	193
GREENVILLE	97,729,438	97,457,530	\$28.73	99.8	\$28.57	194
BENNINGTON	119,091,762	104,749,874	\$25.40	112.4	\$28.58	195
MASON	161,786,818	139,794,033	\$24.90	116.1	\$28.66	196
WARREN	89,274,243	68,156,887	\$22.40	110.0	\$28.71	197
ANTRIM	221,765,753	215,123,765	\$28.44	100.7	\$29.05	198
GILSUM	65,435,704	59,960,688	\$26.94	108.4	\$29.16	199
HAVERHILL	356,587,540	317,091,734	\$26.24	106.4	\$29.20	200
MONT VERNON	259,982,500	242,656,432	\$27.45	107.3	\$29.26	201
PEMBROKE	626,865,328	568,086,029	\$26.84	107.4	\$29.33	202
HILLSBOROUGH	508,147,714	479,283,848	\$28.06	102.9	\$29.42	203
FREMONT	375,278,497	361,487,287	\$28.51	102.6	\$29.43	203
DURHAM	910,158,142	930,568,820	\$30.41	96.8	\$29.56	204
FITZWILLIAM	251,418,395	235,161,684	\$28.34	103.9	\$29.68	205
BOW	1,024,799,739	1,014,659,034	\$30.19	97.1	\$29.76	206
MARLBOROUGH	185,911,470	165,569,933	\$26.68	111.9	\$29.86	207
WARNER	285,760,575	246,444,647	\$26.02	115.4	\$29.96	208
LISBON	112,581,334	111,723,361	\$30.43	100.9	\$30.39	209
NEWPORT	424,291,111	413,506,936	\$29.99	101.5	\$30.43	210
SOMERSWORTH	848,697,930	839,566,085	\$30.47	101.6	\$30.66	211
HOPKINTON	661,892,055	611,793,719	\$28.74	107.4	\$30.74	212
BROOKLINE	496,185,324	505,442,819	\$31.63	97.4	\$30.75	213
HENNIKER	392,339,737	376,806,434	\$30.34	103.7	\$31.07	214
ALSTEAD	160,303,383	155,132,029	\$26.80	116.7	\$31.08	215
ALLENSTOWN	248,811,983	249,463,764	\$31.53	98.2	\$31.13	216
JAFFREY	456,010,249	414,396,435	\$29.10	110.2	\$31.85	217
GORHAM	280,673,500	259,465,698	\$31.98	93.0	\$33.81	218
WINCHESTER	280,860,045	251,308,574	\$30.73	111.1	\$33.97	219
KEENE	1,877,480,100	1,765,219,898	\$32.75	105.8	\$34.20	220
CHARLESTOWN	271,981,894	254,173,102	\$32.28	107.7	\$34.38	221
SULLIVAN	57,120,276	45,787,934	\$29.42	123.8	\$36.27	222
PITTSFIELD	268,113,281	224,664,790	\$30.78	119.5	\$36.35	223
TROY	107,598,241	101,278,163	\$36.26	103.2	\$38.14	224
NORTHUMBERLAND	111,506,663	94,133,498	\$33.48	103.9	\$38.64	225
CLAREMONT	829,591,584	711,341,266	\$36.25	115.5	\$40.03	226
BERLIN	448,694,292	342,169,108	\$33.00	112.2	\$42.19	227
STATE TOTAL	156,228,298,852	155,235,384,527	\$21.49	101.0	\$21.43	

*RANKING BASED ON LOWEST TO HIGHEST FULL VALUE TAX RATE.

Actual and Predicated Population 1960 -2030



*US Census Bureau, Decennial Census

**NH Office of Energy and Planning, Fall, 2013

