



# City of Keene, New Hampshire



**Capital Improvement Program 2016/2017-2021/2022**



# CITY OF KEENE, NEW HAMPSHIRE

## 2017-2022 Capital Improvement Program

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January 21, 2016

The Honorable Mayor Lane and members of the Keene City Council:

I am pleased to present this year's proposed Capital Improvement Plan (CIP) spanning the next six years, through June 30, 2022, including the proposed budget for FY 2017 capital projects. City staff and the City Council work very hard to produce a Capital Budget, and an Operating Budget, that meets both citizen and community needs and City Council Fiscal Policy. The budgeting process is on-going and can be arcane to the average citizen so, with the leadership of the City Finance Director and the support of the Administrative Portfolio, we have together taken steps to demystify the process and create greater clarity. We hope during the upcoming cycles of CIP and annual operating budget presentations to continue this effort supporting the vision of the Comprehensive Master Plan of strong citizenship and proactive leadership. It is vital for the public, and the public through their elected officials, to understand City budgetary processes, or tools, which adjust and direct priorities. The priorities articulated by the public, the City Council, and Comprehensive Master Plan clearly show an emphasis towards the city road and bridge systems, flood control, support for public safety services and a number of other initiatives (e.g. library, parks facilities).

City staff has been careful to see that all newly identified projects deemed important to the realization of the goals and objectives of the City of Keene, Comprehensive Master Plan and V.O.I.C.E. (internal priorities) are incorporated into this plan that guides our community's future. Such projects are highlighted in the narrative portion of this message under DISCUSSION AND FUTURE INITIATIVES. I am particularly pleased that the City staff once again has been able to find ways to meet both City priorities and fiscal objectives, while crafting this budget document.

The proposed CIP is modest when viewed in the context of actual use of property tax dollars and has been crafted with the Operating Budget in mind. With a reliance on grants, capital campaigns, and other revenue sources to offset city property taxes, much has been accomplished. These next few years with continued collaboration, and adherence to frugality, will provide opportunities for new projects and priorities to be advanced. Whether it is improvements to the Library, which are currently in the pre-planning stage, or a newly completed Ice Skating Rink, improvements to utility and storm water systems, sidewalks and roads, airport obstruction clearing, or city parks; this year's CIP with continuing collaboration includes them all.

In a geocentric world, Keene competes for investment, jobs, and resultant tax base with the world. Quality of life is huge in helping the City to remain competitive. The right balance between expenditures and affordability ensure the City will remain an attractive place to live, learn, work, and play.

### **CAPITAL IMPROVEMENT PLAN**

The focus of the CIP process is planning for our City's future. The guiding principle of this planning effort is to advance the vision of the Comprehensive Master Plan (CMP) including;

- ❖ A quality built environment,
- ❖ Unique natural environment,
- ❖ A vibrant economy,
- ❖ Strong citizenship and proactive leadership,
- ❖ A creative and learning culture, and
- ❖ A healthy community.

Guided by fiscal policy, the CMP, input from the community and actions of the City Council, each year anticipated capital expenditures are identified in a six-year Capital Improvement Program (CIP). The CIP includes projects with an estimated cost in excess of \$20,000, and anticipated useful life of at least five years. Individual project requests are consolidated into a capital program that includes revenue and operating cost projections to provide estimated property tax and rate impacts. The capital planning process provides a framework to consider projects, over the time frame of the CIP, in the context of the community's vision, values, and goals, along with impact on property taxes, utility and other user rates. Following review by the City Council and Planning Board and a public hearing, the adopted program's first year is included in the next operating budget proposal as the capital budget.

This CIP includes capital expenditures planned for the six-year period starting July 1, 2016, and ending June 30, 2022. This program is fluid and will change from CIP to CIP, and can also be amended from time to time upon action of the City Council. While the vast majority of capital activity advances through the CIP process, the CIP document is a planning tool. Occasionally projects are presented to and approved by the City Council outside of the formal CIP process, particularly when grant funding or community partnership becomes available. As a planning document, it also does not bind any public body to undertaking any project but serves the City Council as a tool to identify and schedule needed improvements, and to forecast and plan for the impact of those improvements.

In accordance with past practice when developing projections, no change in property assessments has been factored in to any year within this program. The City's motor vehicle registration revenue numbers continue to improve, but non-tax revenue growth are projected to remain constrained in the next operating budget cycle. Non-property tax revenues are projected with annual increases that range from .5% to 1.8%. Negotiated agreements providing for contributions from Keene State College supporting public safety related services and a payment in lieu of taxes from Cheshire Medical Center are included in these projections. No restoration of shared revenues from the State of NH (withdrawn in FY09/10), or growth in Rooms and Meals Tax distributions, or highway funds derived from the gas has been factored into any year of this program.

Budgeted use of General Fund balance is forecasted in during each year of this program. In future years, the City will need to be attentive to this component of the financing plan ensuring General Fund unassigned fund balance is retained, at levels established by fiscal policy, between 7-10% of the total of the City's General Fund Budget plus the tax assessments supporting education and the county.

Department expenditures (exclusive of costs mandated by the NH Retirement System (NHRS)) are adjusted through application of historical averages, by portfolio, and range between 1.8% and 2.9%, along with separate allowances for future NHRS rate adjustments. Projections anticipate continued scrutiny of open positions, and alternatives, to accomplish required tasks. The further refinement of budget projections for years included in the Capital Budget and Capital Plan will take place before the Operating Budget is presented in May 2016.

In accordance with recommendations contained in a water and sewer user charges rate study presented to City Council in the summer of 2005, an annual review has been incorporated into our operating practices to ensure the financial health of these utilities. This CIP anticipates that the rates will continue to change each year of this six-year program, as they have since.

The sale of bonds is a significant part of the CIP, representing 28.4% of its funding, over six-years. That figure is up slightly from the FY 2016-2021 CIP figure of 26%. The increase can be attributed to new projects anticipated to be funded through the issuance of bonds. These include the Babbidge Dam project and Library Campus Development in FY17, Police Department dispatch and communications system in FY20, Carpenter Field development in FY21, and Victoria Street Extension in FY22.

Long term borrowing is used to finance projects that have a significant cost and are of a lasting nature. While projects are often bundled together into one annual sale in order to minimize bond issuance costs,



the time over which the bonds are repaid (the term) varies based on the financed improvement's expected useful life. The City's past practice to issue bonds with a term that is significantly less than the project's useful life in order to speed the payoff and to reduce interest costs, is viewed favorably when the City goes to market.

The CIP reflects continuation of the philosophy of seeking opportunity for strategic investments that leverage other resources and partnerships to advance the goals of the CMP as reflected in the recent Courthouse and Ice Rink projects, and proposed Library and Skateboard Park projects. Through engagement with employers, the Chamber of Commerce, City/College Commission, social service agencies, other governmental partners and community groups, our organization, community, and City Council priorities advance. Building a Spirit of Place, a Community Development Program launched as part of the FY13 budget message continues to stimulate new partners in our effort to make our City the best in America. Through this program, the generous assistance of individual, organization, business and institutional partners, have enhanced our City adding to our sense of community.

**TRANSPORTATION IMPROVEMENTS FUND CAPITAL RESERVE**

The Transportation Improvements Fund Capital Reserve was established by the City Council in 2015. The Reserve is funded through a \$5 surcharge on motor vehicle registrations allowing projects to be advanced without property tax rate impacts. Proposed funding, uses, and projected balances of this recently established capital reserve incorporated into the FY 2017-2022 CIP are as follows (all are General Fund Projects):

<b>Transportation Improvements Fund</b>				
<b><u>FY</u></b>	<b><u>Appropriation</u></b>	<b><u>Use</u></b>	<b><u>Balance</u></b>	<b><u>Project</u></b>
2016	125,000.00	(50,000.00)	75,000.00	Rail Trail Match
2017	100,000.00	(130,000.00)	45,000.00	Emerald Street Sidewalk
2017		(25,000.00)	20,000.00	Marlboro Street Design
2017		(20,000.00)	-	JD Trail Study
2018	100,000.00	-	100,000.00	
2019	100,000.00	(171,017.00)	28,983.00	Marlboro St improvements
2020	100,000.00		128,983.00	
2021	100,000.00		228,983.00	
2022	100,000.00	(72,773.00)	256,210.00	State By Pass Project
2022	-	(222,000.00)	34,210.00	Victoria St Extension Design
<b>Totals</b>	<b>725,000.00</b>	<b>(690,790.00)</b>	<b>34,210.00</b>	

**FISCAL POLICY IMPACT**

- A. Policy - The City of Keene will contain its General Fund debt service and current revenue capital outlay appropriations, on a five-year average, at or less than 15% of the General Fund operating budget.
  - 1. Discussion – The City has exceeded this cap by a small amount for several years due to the loss of state revenue sharing and other revenues sensitive to fluctuations during economic downturns which occurred after commitments had been made to fund or repay several large projects. Projections based upon the proposed CIP indicate positive reductions in this critical ratio from 16.25% in FY 2016 to 15.12% in FY 2021 and 14.5% in FY 2022, the last year of the CIP. The ratio would decrease in each year covered by the CIP, and through FY 2026.

- B. Policy - Unassigned fund balance for the General Fund will be maintained at between seven (7) and ten (10) percent of the sum of the total of the General Fund annual operating budget and the property tax commitment for the school (both local and state) and the county.
1. Discussion – projections based upon the proposed CIP and FY 16 budgets and projections, and tax commitments to the school and county increased by 3% per year indicate that the City will remain in compliance with this policy throughout the life of the CIP (FY 2022) and through FY 2026. Over this period, unassigned fund balance is projected to range between 8.07% and 8.45%.

## **DISCUSSION AND FUTURE INITIATIVES**

The proposed CIP includes several projects and programs designed to mitigate the impact of more frequent and severe storm events. These programs range from the broadly focused Climate Vulnerability Assessment, to the more local area focused Beaver Brook Hydrologic and Hydraulic Study and Storm Water System Management studies. Also included are programs to address ongoing maintenance and repair issues in the drainage system. A major new program has been developed to address specific areas in the community that have experienced repetitive flooding and pooling problems. To advance broader programs, partnerships with residents, property owners, government agencies, state and federal officials will be required. As costs for mitigating storm water issues rise in coming years, the concept of developing a storm water utility as a mechanism to fund such activity will be explored.

With accelerated investment in highway infrastructure completed by an influx of funding through the American Recovery and Reinvestment Act of 2009, this CIP continues to advance rehabilitation and other repair strategies maximizing the impact of the City's investment during this planning period rather than complete reconstruction of roads. This strategy, advanced to the City Council in November of 2013, incorporates an evaluation and ranking of City streets that considers condition, traffic volume, and proximity of other work when prioritizing road improvements. Responding to funding constraints and the competitiveness of the NHDOT Municipal Bridge Program, prioritization of bridge projects is also incorporated into this CIP.

A parking deck and intermodal transportation facility is also under consideration at the site of the current Gilbo Avenue parking lot. The project remains in the conceptual stage, pending further development in the Wells Street Parking Structure & Infrastructure Improvement Tax Increment Financing District, and investigation of additional funding opportunities including grants and new market tax credits. This project, when it is advanced through City Council, will form a significant component of downtown revitalization efforts.

Recently two concepts have been advanced to the City and are under review. The first is a potential partnership between the Parks, Recreation and Facilities Department and the Keene Senior Center. The partnership would focus on issues related the community's changing demographic and serving an aging population and future parks and recreation needs. The second is an idea, known as Gigabit Keene, which will identify partners and opportunities to significantly improve broadband availability fostering long term economic development and innovation in Keene. The project will most likely be initiated though a feasibility study that will consider the legislative landscape, implementation methods, costs and funding alternatives.

## **FINANCIAL INFORMATION & PROJECT REQUESTS**

Organization of the CIP follows the City's fund structure and includes sections for the General Fund, Special Revenue Funds (Parking & Solid Waste), Enterprise Funds (Water & Sewer) and the Equipment Internal Service Fund. For each fund, the presentation begins with a summary that includes multi-year projections of both operating and capital revenues and expenditures. For the General Fund and Enterprise Funds, projected tax rates, water, and sewer rates are developed. These projections are followed by a summary of the fund's capital program project requests and overall financial plan. Debt summaries, detailing current obligations and the impact of projects financed by new issues during this CIP cycle, are a portion of the financial presentation. Following the fund financial summary provided, are the project request worksheets with supporting information for each project request.

Considering priorities identified in the Comprehensive Master Plan, a department master plan, public demand for services or facilities, or by operational needs, project requests are developed by City departments. Requests, in addition to articulating scope, justification, a financial plan and schedule, are aligned to a Master Plan focus area, strategy, and the values articulated by V.O.I.C.E., as follows:

- ❖ Value everyone
- ❖ Obtain public input
- ❖ Inform the public
- ❖ Continually assess facilities and infrastructure
- ❖ Establish priorities

When developing a project's financial plan, the funding mechanisms proposed consider the capacity of its source, or fund, as well as timing relative to other projects. Projects identified as funded by long-term debt are repaid at a term that considers the anticipated useful life of that project. An amount appearing in the "Prior" column of the Financial Plan section of a project request indicates amounts from appropriations or other sources that have been determined to be available for future years' work. An estimate of the anticipated impact of a project on a department's operating budget and project status is also part of each project request.

The remaining steps to be taken in the CIP process are:

- Thursday, January 21, 2016 Documents distributed to City Council, Planning Board
- Thursday, January 28, 2016 Finance, Organization & Personnel (FOP) Committee review
- Thursday, February 11, 2016 FOP Committee review
- Thursday, February 25, 2016 FOP Committee review
- Thursday, March 3, 2016 Public Hearing
- Thursday, March 10, 2016 FOP Committee develops recommendation
- Thursday, March 17, 2016 Council vote

The Planning Board will conduct its independent review at its February 2016 meeting, and will report the result of their review directly to the City Council.

An Executive Summary of the proposed FY 17-22 Capital Improvements Program follows this message.

Thank you for your careful consideration of this document and the various projects proposed to move toward a sustainable future for our community.

Respectfully Submitted,

Medard Kopczynski  
Acting City Manager

# EXECUTIVE SUMMARY

## FY 17 - 22 Proposed CIP, By Year, Fund, and Funding Source

<b>FY16/17</b>	<b>Current Revenues</b>	<b>City Bonds</b>	<b>Federal</b>	<b>State</b>	<b>Other</b>	<b>Total</b>	<b>% of program</b>
General Fund	\$ 1,336,293	\$ 3,619,167	\$ 260,100	\$ 14,450	\$ 7,389,013	\$ 12,619,023	65.23%
Parking Fund	255,209					255,209	1.32%
Solid Waste Fund	45,000					45,000	0.23%
Sewer Fund	913,909				1,277,294	2,191,203	11.33%
Water Fund	860,508	843,119			1,062,486	2,766,113	14.30%
Equipment Fund	575,000				893,451	1,468,451	7.59%
<b>TOTAL</b>	<b>\$ 3,985,919</b>	<b>\$ 4,462,286</b>	<b>\$ 260,100</b>	<b>\$ 14,450</b>	<b>\$ 10,622,244</b>	<b>\$ 19,344,999</b>	
<b>% of program</b>	<b>20.60%</b>	<b>23.07%</b>	<b>1.34%</b>	<b>0.07%</b>	<b>54.91%</b>	<b>100.00%</b>	

<b>FY17/18</b>	<b>Current Revenues</b>	<b>City Bonds</b>	<b>Federal</b>	<b>State</b>	<b>Other</b>	<b>Total</b>	<b>% of program</b>
General Fund	\$ 1,420,196	\$ 2,250,787	\$ 2,670,000	\$ 258,733	\$ 1,277,600	\$ 7,877,316	65.16%
Parking Fund	150,000				25,000	175,000	1.45%
Solid Waste Fund	45,000				77,244	122,244	1.01%
Sewer Fund	918,826				196,625	1,115,451	9.23%
Water Fund	1,037,128				405,430	1,442,558	11.93%
Equipment Fund	625,000				731,752	1,356,752	11.22%
<b>TOTAL</b>	<b>\$ 4,196,150</b>	<b>\$ 2,250,787</b>	<b>\$ 2,670,000</b>	<b>\$ 258,733</b>	<b>\$ 2,713,651</b>	<b>\$ 12,089,321</b>	
<b>% of program</b>	<b>34.71%</b>	<b>18.62%</b>	<b>22.09%</b>	<b>2.14%</b>	<b>22.45%</b>	<b>100.00%</b>	

<b>FY18/19</b>	<b>Current Revenues</b>	<b>City Bonds</b>	<b>Federal</b>	<b>State</b>	<b>Other</b>	<b>Total</b>	<b>% of program</b>
General Fund	\$ 1,191,822	\$ 2,890,754	\$ 2,404,000	\$ 3,618,498	\$ 1,716,900	\$ 11,821,974	63.41%
Parking Fund	150,000				118,708	268,708	1.44%
Solid Waste Fund	45,000	166,750			250,000	461,750	2.48%
Sewer Fund	1,048,891	1,142,560			762,989	2,954,440	15.85%
Water Fund	1,076,639				702,694	1,779,333	9.54%
Equipment Fund	650,000				708,302	1,358,302	7.29%
<b>TOTAL</b>	<b>\$ 4,162,352</b>	<b>\$ 4,200,064</b>	<b>\$ 2,404,000</b>	<b>\$ 3,618,498</b>	<b>\$ 4,259,593</b>	<b>\$ 18,644,507</b>	
<b>% of program</b>	<b>22.32%</b>	<b>22.53%</b>	<b>12.89%</b>	<b>19.41%</b>	<b>22.85%</b>	<b>100.00%</b>	

<b>FY19/20</b>	<b>Current Revenues</b>	<b>City Bonds</b>	<b>Federal</b>	<b>State</b>	<b>Other</b>	<b>Total</b>	<b>% of program</b>
General Fund	\$ 1,037,661	\$ 4,280,053	\$ 486,000	\$ 2,129,719	\$ -	\$ 7,933,433	54.71%
Parking Fund	150,000				50,000	200,000	1.38%
Solid Waste Fund	45,000					45,000	0.31%
Sewer Fund	1,054,108				840,661	1,894,769	13.07%
Water Fund	1,098,439	1,022,025			791,507	2,911,971	20.08%
Equipment Fund	675,000				840,783	1,515,783	10.45%
<b>TOTAL</b>	<b>\$ 4,060,208</b>	<b>\$ 5,302,078</b>	<b>\$ 486,000</b>	<b>\$ 2,129,719</b>	<b>\$ 2,522,951</b>	<b>\$ 14,500,956</b>	
<b>% of program</b>	<b>28.00%</b>	<b>36.56%</b>	<b>3.35%</b>	<b>14.69%</b>	<b>17.40%</b>	<b>100.00%</b>	

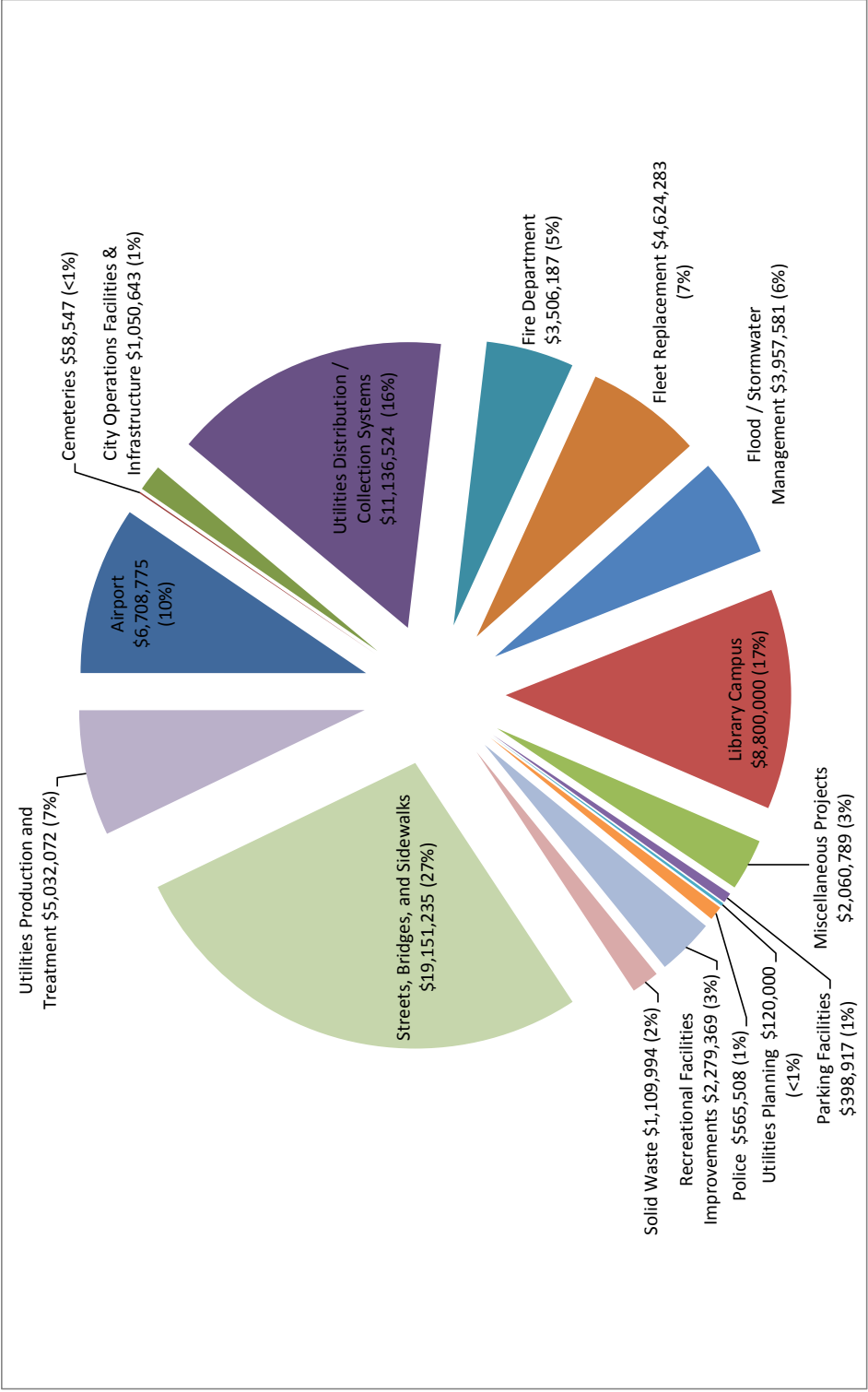
# EXECUTIVE SUMMARY

## FY 17 - 22 Proposed CIP, By Year, Fund, and Funding Source (continued)

FY20/21	Current Revenues	City Bonds	Federal	State	Other	Total	% of program
General Fund	\$ 916,226	\$ 2,926,718	\$ -	\$ 108,890	\$ 117,223	\$ 4,069,057	40.35%
Parking Fund	150,000					150,000	1.49%
Solid Waste Fund	101,000					101,000	1.00%
Sewer Fund	984,481	1,455,512			439,187	2,879,180	28.55%
Water Fund	1,112,033				325,000	1,437,033	14.25%
Equipment Fund	700,000				747,836	1,447,836	14.36%
<b>TOTAL</b>	<b>\$ 3,963,740</b>	<b>\$ 4,382,230</b>	<b>\$ -</b>	<b>\$ 108,890</b>	<b>\$ 1,629,246</b>	<b>\$ 10,084,106</b>	
% of program	39.31%	43.46%	0.00%	1.08%	16.16%	100.00%	

FY21/22	Current Revenues	City Bonds	Federal	State	Other	Total	% of program
General Fund	\$ 846,815	\$ 3,617,613	\$ -	\$ 808,341	\$ 1,395,062	\$ 6,667,831	52.95%
Parking Fund	200,000				50,000	250,000	1.99%
Solid Waste Fund	45,000	560,000				605,000	4.80%
Sewer Fund	990,015				409,241	1,399,256	11.11%
Water Fund	1,125,600				1,141,689	2,267,289	18.01%
Equipment Fund	700,000				702,159	1,402,159	11.14%
<b>TOTAL</b>	<b>\$ 3,907,430</b>	<b>\$ 4,177,613</b>	<b>\$ -</b>	<b>\$ 808,341</b>	<b>\$ 3,698,151</b>	<b>\$ 12,591,535</b>	
% of program	31.03%	33.18%	0.00%	6.42%	29.37%	100.00%	

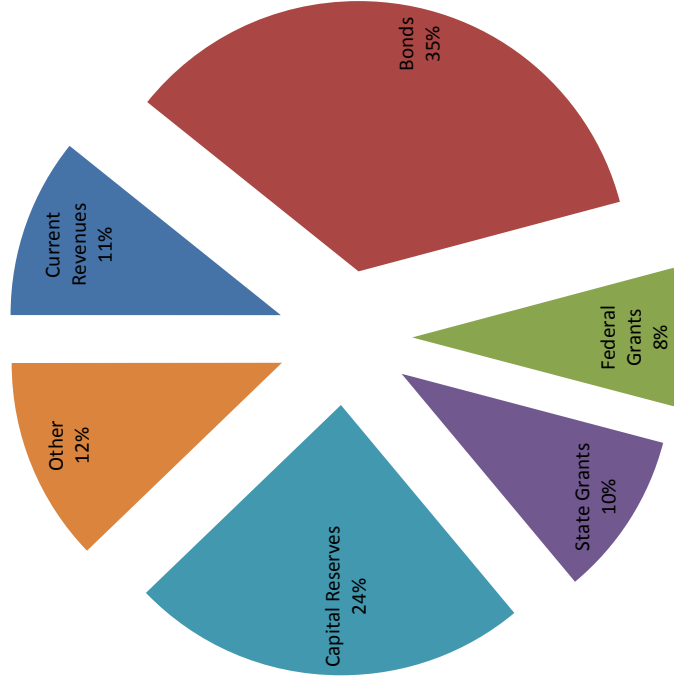
**FY 17-22 Proposed CIP: All Project Requests by Program - net capital reserve appropriations (Total - \$70,560,424)**



Does not include capital reserve appropriations totalling \$16,695,000. Capital reserve appropriations fund projects in this and future CIPs.

## FY 17-22 Proposed CIP Project (net reserve appropriations) Funding by

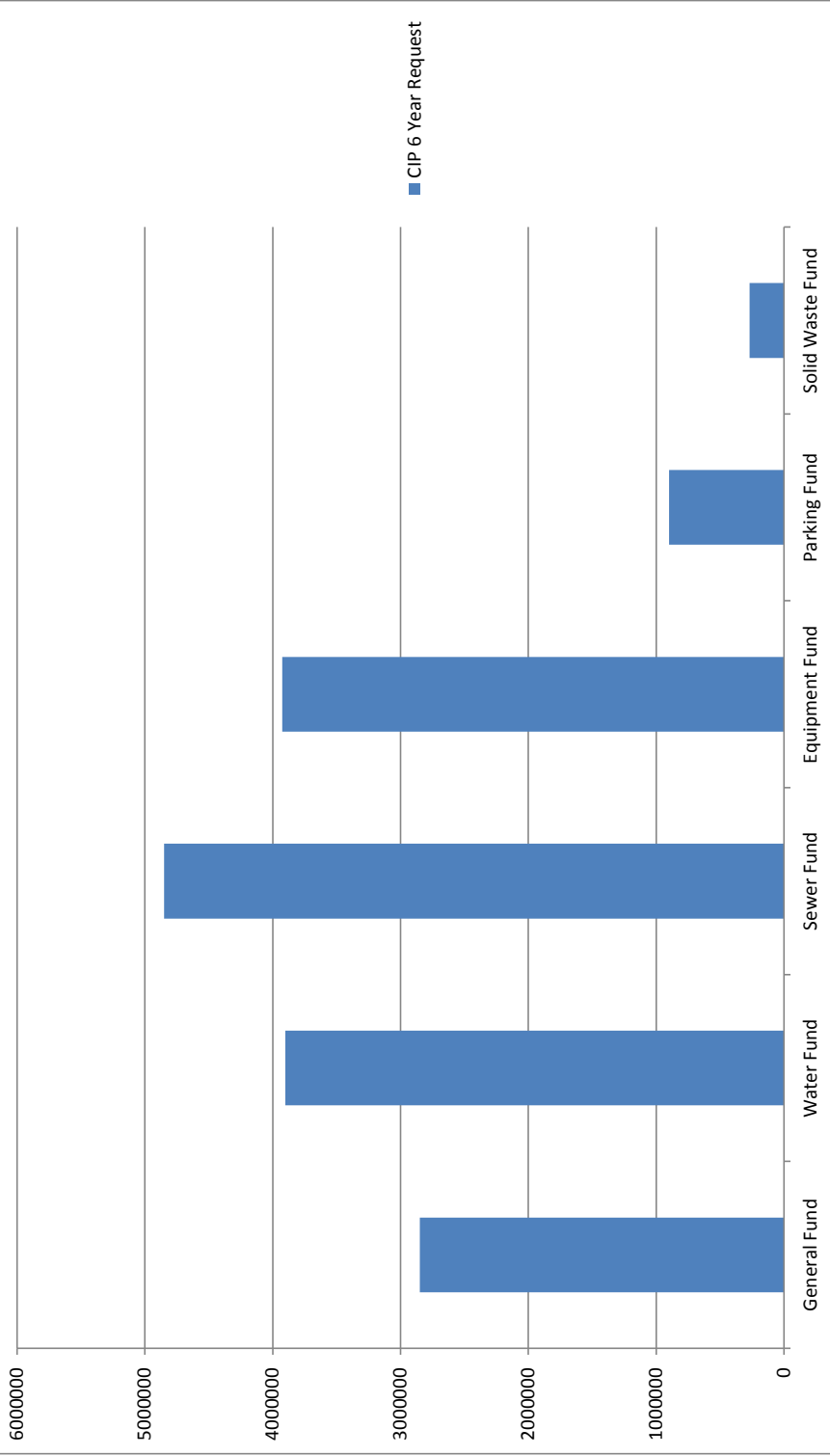
Source - Total \$70,560,424



This funding presentation includes withdrawals from capital reserves to fund projects, but does not include appropriations into capital reserves, which are also included in the proposed CIP.

Other (12%)		
Library Campus Development	6,800,000	Capital campaign (donations)
Castle Street Rehabilitation	100,000	Keene Housing Authority
Wheelock Park Improvements	314,013	Proceeds of land sale
Skate Park	350,000	Capital campaign (donations)
Robin Hood Splash Pad	43,483	To be determined
560 Main Street Site Remediation	1,000,000	Proceeds from sale of 560 Main St

## FY 17-22 Capital Reserve Appropriation by Fund



Capital Reserves are used to smooth tax and rate changes generated as a result of the replacement of equipment and systems in the various funds. Capital Reserves also provide emergency funding in the case of equipment or system failure. All uses of capital reserves are approved by vote of the City Council, either through the operating budget process, or by Council vote on a separate resolution.

Capital Reserve Appropriations total \$16,695,000 over the life of the proposed CIP across all funds. These funds will be used to fund projects over the life of the CIP, and in future CIPs. Over that same period, \$16,838,340 of capital reserve funds are programmed in the proposed CIP to be spent on capital projects.

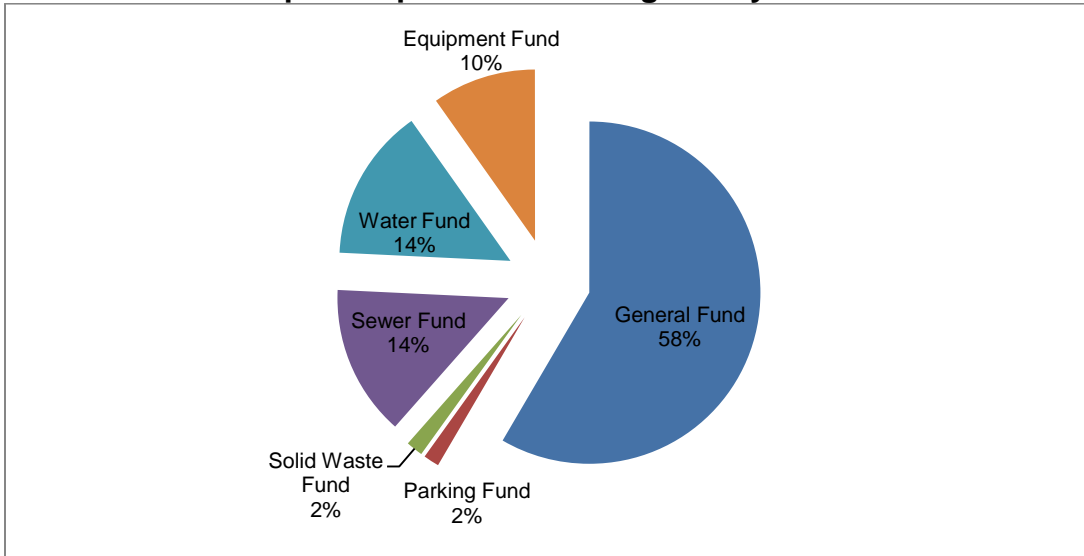
Funded completely by current revenue by fund, either user rates, property taxes, or other revenue generated during each fiscal year.



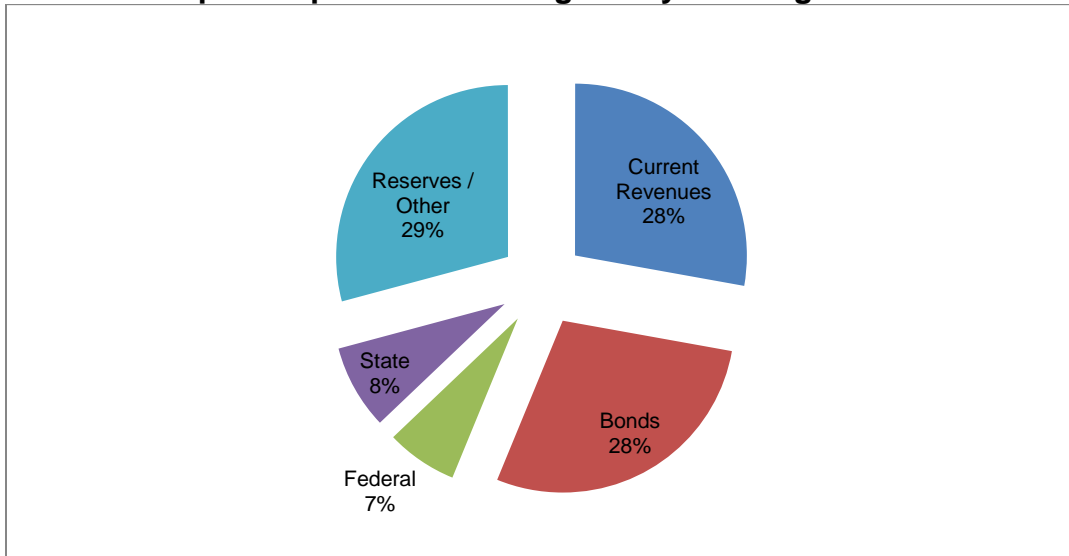
## HIGHLIGHTS OF THE CAPITAL IMPROVEMENTS PROGRAM

The charts below summarize the proposed Capital Improvements Program (CIP) in two ways. The first summarizes total appropriations (\$87 million) by fund for the program. The second provides a funding profile of the program and highlights three major sources of funding; current revenues (property taxes, other General Fund revenues, and utility rates), bonding, and capital reserves and other (donations and community based fundraising efforts). These sources fund 85% of the program.

### Capital Improvements Program By Fund



### Capital Improvements Program by Funding Source



The FY 2017-2022 proposed CIP invests \$87 million (M) in City infrastructure and equipment over next six years. The proposed CIP is approximately \$13M or 17.6% larger than the FY 2016-2021 CIP.

Although many cost estimates, project schedules, new projects, and funding changes are reflected in every CIP, the following large projects are new to the program:

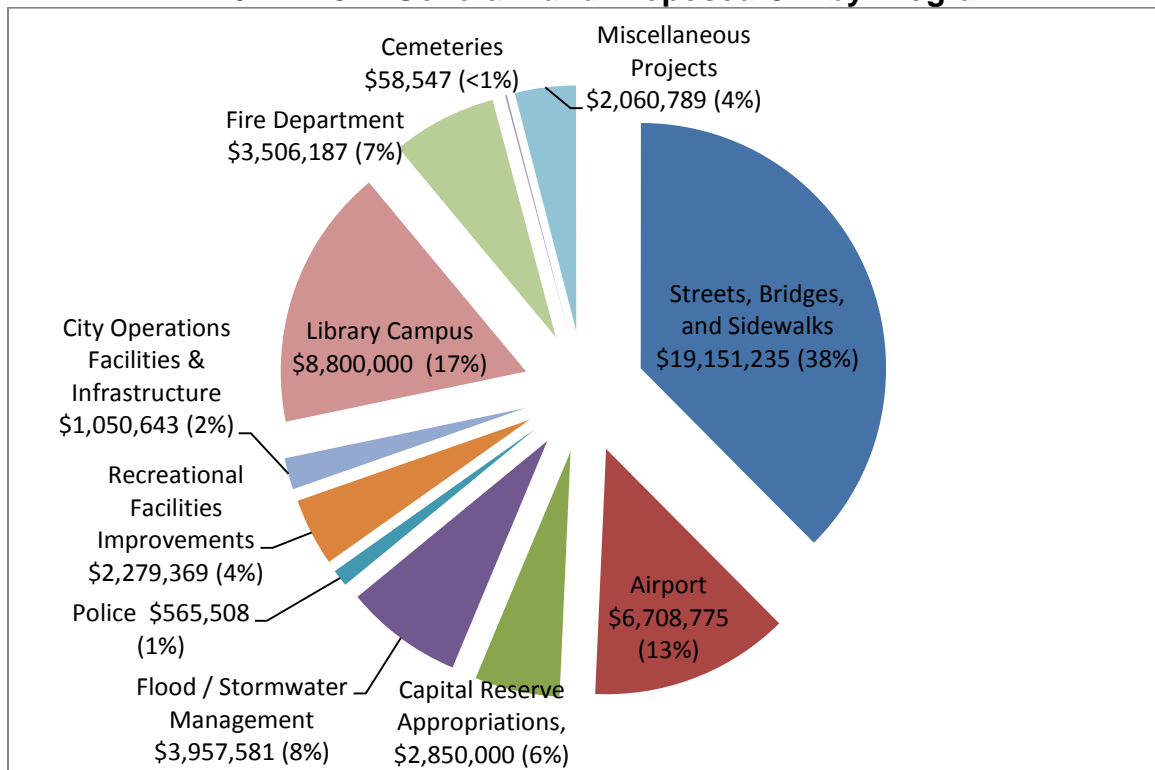
- a. Library Campus Development Project –although for planning purposes a debt service allowance for this project was included in financial projections in the FY 16-21 CIP, it was not formally included with a full project cost. The project, which will rehabilitate Heberton Hall, and connect it with the Library, is included in this proposed CIP with a cost estimate based on plans as developed to date of \$8.8 M with City support of \$2M.
- b. Carpenter Field Improvements – The proposed project would upgrade the park significantly improving parking and drainage, adding a walking path, lighting, seating, and other amenities.
- c. Police Communications and Portable Radio Replacement projects – New projects with a cost estimate of \$550,000.
- d. Victoria Street Extension – this project (scheduled for FY 22 with a cost estimate of \$1.7M) is a new project (re-introduced).

Analysis by fund indicates that the General Fund, Water and Sewer Funds drive 86% of the proposed six year CIP. With that in mind, what follows is a discussion of those major components of the CIP, in both programmatic and departmental formats.

### GENERAL FUND

The General Fund includes several departments with requests over the span of the CIP totaling nearly \$51M, or 58% of the proposed CIP with those requests, by program, illustrated below:

**FY 2017 - 2022 General Fund Proposed CIP by Program**



This chart summarizes the level of effort directed to various programs in the General Fund in the proposed CIP between FY 2017 and 2022. Streets, Bridges, and Sidewalks (transportation) are

the focus of 38% of activity, and Flood and Stormwater Management activity comprises 8% of the program. Large stormwater management projects are scheduled to address specific areas of concern in alternating years.

The Library Campus Development project, estimated at \$8.8M, comprises 17% of the proposed General Fund CIP. Of that amount, \$6.8M is to be funded through a capital campaign and tax credits, while \$2M is to be funded by the City.

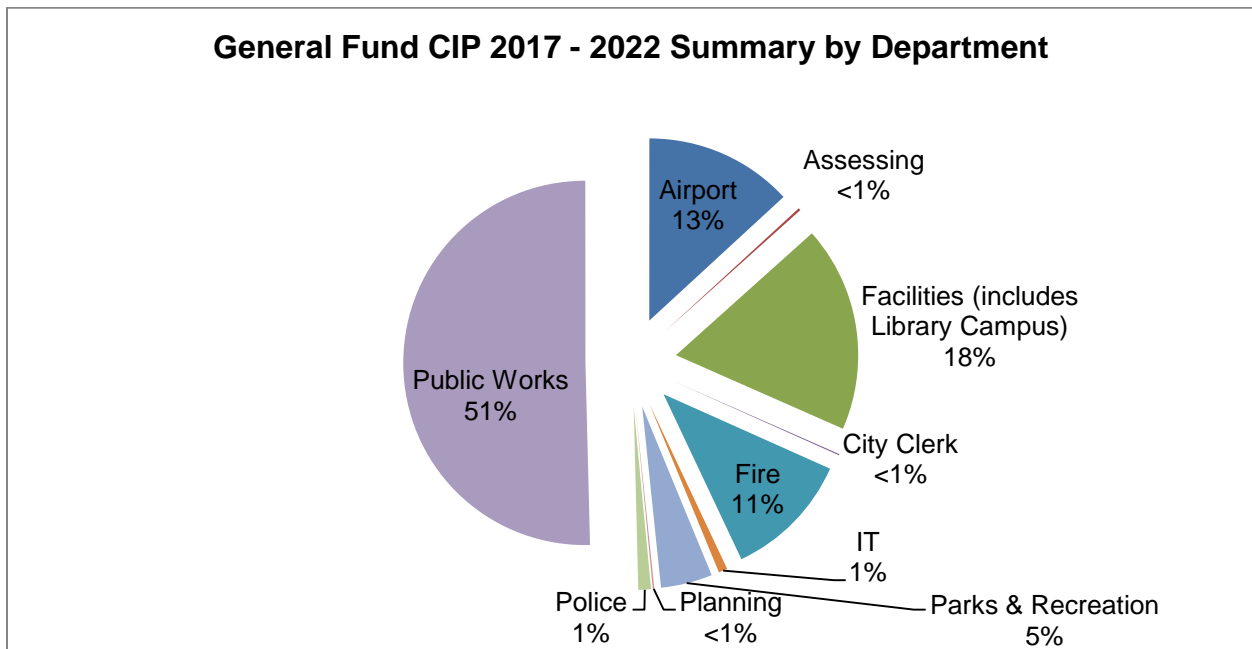
The Fire Department makes up about 7% of the program. This department's projects are largely the acquisition of fire apparatus and ambulances, along with upgrading fire alarm system infrastructure and replacement/upgrading of smaller equipment.

Airport development comprises 13% of the program. These projects are about 92% grant funded.

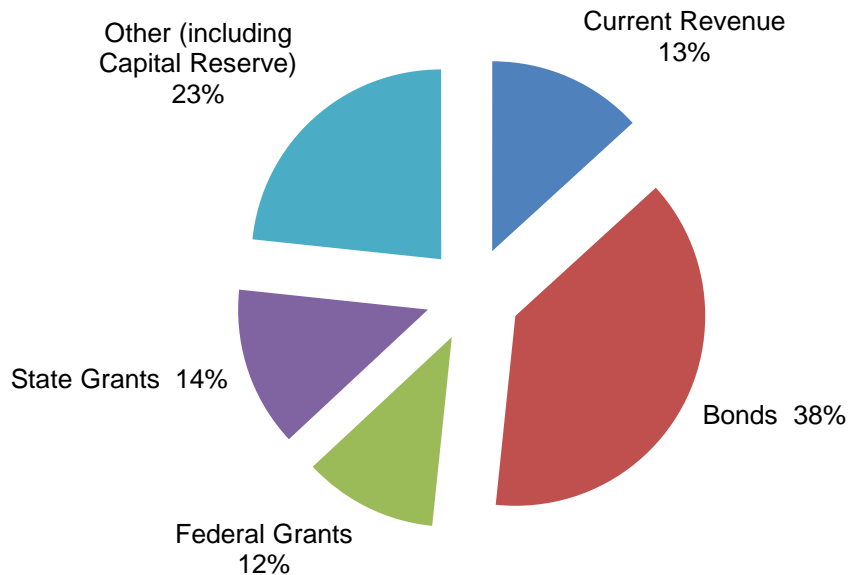
The Miscellaneous Projects category is comprised of the 560 Main Street Landfill Site Remediation, Goose Pond Dam Improvements, and Downtown Revitalization and Infrastructure Study projects.

Capital Reserve Appropriations include the Ambulance Capital Reserve, the Fire Apparatus Capital Reserve, and the Transportation Improvements Fund Capital Reserve. The total amount of capital reserve appropriations is \$2,850,000, and are used to fund the acquisition of ambulances, fire apparatus, and various transportation projects in this and future CIPs.

The following charts highlight the proposed General Fund CIP by department and funding source:



### General Fund CIP 2017-2022 Funding Sources



With planned investment of \$25.7M, the single largest component of the CIP relates to the Public Works highway infrastructure, primarily roads and bridges. Major projects include:

- a. Winchester Street reconstruction from Route 101 to the Winchester Street bridge and south to the Swanzey town line. These projects are funded by the State of New Hampshire (80-20). Construction of a pedestrian bridge over Route 101 which will add to the City's multi-use trail system, funded 100% by the State of New Hampshire is incorporated too.
- b. Goose Pond Dam rehabilitation.
- c. Programs to address storm water related issues, road resurfacing, and the replacement of several bridges: Main Street / Route 12 bridge over Beaver Brook, the Winchester Street / Route 10 bridge, the Roxbury Street bridge over Beaver Brook, and the Island Street bridge (as a component of the state bypass project on Winchester Street), and George Street.
- d. Downtown Revitalization and Infrastructure Study - (drainage, parking, landscaping, sidewalks, and streets) and aesthetics to include significant public input to develop plans for beautifying and revitalizing the downtown. The last major downtown revitalization project took place in 1988, over 25 years ago.
- e. Victoria Street Extension – to connect Victoria and Marlboro Streets.
- f. 560 Main Street Remediation – remediates a former waste disposal site. The cleanup is anticipated to be funded through grants and proceeds from the sale of the property, and is not anticipated to require local property tax funding.

Other projects of note included in the General Fund CIP request include:

- a. Runway rebuilding and relocation and replacement of the fuel farm at the airport.
- b. Library Campus development project.
- c. The Municipal Buildings Improvement program developed by Facilities as a result of the Building Conditions Assessment project funded through a prior CIP.
- d. The replacement of three pieces of Fire Department apparatus and two ambulances.

- e. Improvements in Wheelock Park (funded through a sale of property to Eversource (PSNH) and at Carpenter Field, and construction of a skate park (to be funded through a capital campaign).
- f. Replacement of Police Department communications equipment.
- g. A “Climate Adaptation and Vulnerability” study advanced by the Planning Department.

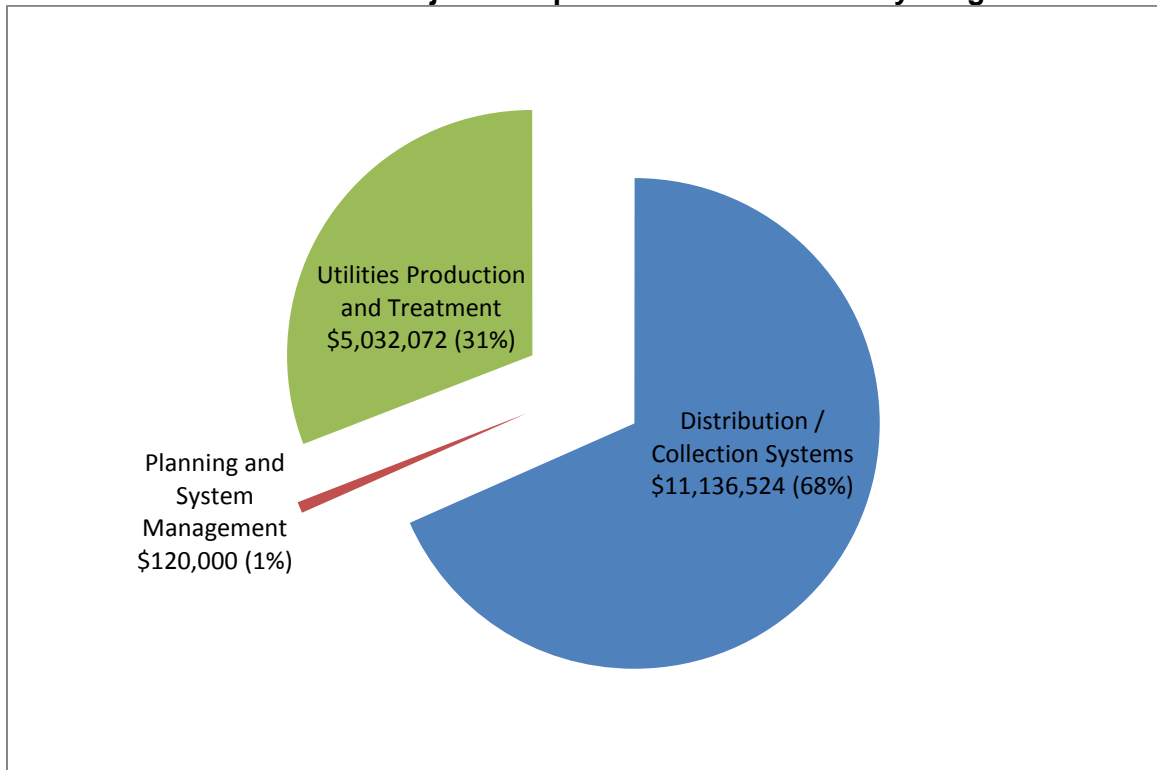
**WATER AND SEWER FUNDS**

The Water and Sewer Funds combined CIP request totals approximately \$25.038M. Of that, \$8,750,000, or 35% consists of appropriations to capital reserves. The capital reserves are used to help manage and smooth the rate impacts of large capital outlays through setting aside funds over time to pay for those projects.

The balance of the Water and Sewer combined CIP (\$16,288,956) funds system improvements and equipment replacement as outlined in the proposed FY 17-22.

The following chart and discussion provide consolidated information on major water and sewer utility projects by program, in terms of dollar value, and percent of the proposed program.

**Water and Sewer Projects Proposed FY 2017 to 2022 by Program**



**Sewer Fund:**

- a. Replacement of two major sewer lines (the Perham Street main, and Colony Court main), as well as several smaller water and sewer mains. These include the Blossom Street sewer line, as well as new projects which will be identified through the Inflow and Infiltration, Phase 2 study funded in FY 2015-2016.
- b. Sewer main replacements associated with state funded road and bridge projects, including the reconstruction of Winchester Street from Route 101/9 to the Ashuelot River.

- c. The Headworks Treatment project at Martell Court, which will replace grinders used to shred solids (such as cloth, plastics, etc.) in the wastewater stream prior to treatment.
- d. Wastewater Treatment Plant (WWTP) and Martell Court Pump Station Phase 2 – funds the replacement of the transformer and emergency generator at the pump station, and the generator at the WWTP, which were installed in 1985.
- e. WWTP Blower Replacement – Replaces 4 blowers installed in the plant in 1985. The blowers aerate (provide oxygen) to various wastewater treatment processes.
- f. WWTP Gate and Mixer Replacement – Replaces various gates and mixers integral to the wastewater treatment process.

**Water Fund:**

- a. Water Main Cleaning and Lining - \$1.428M is proposed over six years to clean and reline water mains. Over time, mineral deposits build up in water mains, reducing flow and potentially impacting water quality. This program is a cost effective alternative to replacing water lines.
- b. Water Main Replacement – including the Glen Road, Darling Road, and Mountain View areas, along with Hastings Avenue from Hurricane Road to Maple Avenue.
- c. Rehabilitation / reconstruction of the Woodward and Babbidge water supply dams.
- d. Water main replacements associated with state funded road and bridge projects, including the reconstruction of Winchester Street from Route 101/9 to the Ashuelot River.
- e. Water Treatment Facility (WTF) improvements – includes the replacement of the water filter media and underdrain (installed in 1993), chlorine analyzer and SCADA transmitters, and pressure relief valve upgrade.
- f. Water Tanks Improvements - identified during the Tighe and Bond review of the City's water infrastructure, a variety of projects are proposed to inspect and repair and/or determine the best alternatives to replace aging tanks.
- g. Well Field Evaluation Plan – a study of the Court and West Street Wellfields to determine whether these wellfields should be replaced with alternative facilities or rehabilitated.

**OTHER FUNDS**

Equipment Fund activity represents approximately 10% of the program, and its' purpose is to fund timely replacement of worn out vehicles and accessories (police cars, dump trucks, sidewalk plows, staff vehicles, etc.). The Parking Fund and Solid Waste Funds, each comprising approximately 2% of the proposed CIP, relate primarily to maintenance and improvement of facilities.

**CITY OF KEENE, NEW HAMPSHIRE  
CAPITAL IMPROVEMENT PROGRAM FY17 - FY22  
General Fund Multi-Year Projections**

	ACTUAL FY 14/15	BUDGET FY 15/16	PROJECTED FY 16/17	PROJECTED FY 17/18	PROJECTED FY 18/19	PROJECTED FY 19/20	PROJECTED FY 20/21	PROJECTED FY 21/22
<b>REVENUES</b>								
Property Tax	\$23,352,375	\$24,174,436	\$25,051,504	\$25,942,534	\$26,692,758	\$27,417,878	\$28,197,358	\$28,981,223
Other Local Taxes	433,228	416,220	418,301	420,393	422,495	424,607	426,730	428,864
Tax Increment Financing	71,949	68,414	66,109	62,156				
Licenses, Permits & Fees	3,294,505	3,355,378	3,388,932	3,422,821	3,457,049	3,491,620	3,526,536	3,561,801
Intergovernmental	2,411,981	2,504,403	2,528,925	2,541,570	2,554,277	2,567,049	2,579,884	2,592,784
Charges for Services	1,774,172	1,689,637	1,666,953	1,696,458	1,726,485	1,757,044	1,788,144	1,819,794
Fines & Forfeits	155,985	145,100	146,551	148,017	149,497	150,992	152,502	154,027
Miscellaneous	1,265,428	1,321,037	1,327,901	1,334,540	1,341,213	1,347,919	1,354,658	1,361,432
Other Financing Sources (net capital financing- not current)	2,142,351	3,692,010	2,303,970	2,276,458	2,310,481	2,245,049	2,280,169	2,315,852
Noncurrent revenue sources to fund capital								
Use of Fund Balance	0	1,100,500	875,000	905,000	715,000	775,000	650,000	675,000
Use of Fund Balance - appropriations carried forward	0	278,287	0	0	0	0	0	0
SUBTOTAL - current revenues	\$34,901,972	\$37,208,422	\$37,774,145	\$38,749,945	\$39,369,255	\$40,177,157	\$40,955,982	\$41,890,776
Sale of Bonds	\$3,580,000	1,933,000	\$3,619,167	\$2,250,787	\$2,890,754	\$4,280,053	\$2,926,718	\$3,617,613
TOTAL REVENUES & OTHER FIN SOURCES	\$38,481,972	\$39,141,422	\$41,393,312	\$41,000,732	\$42,260,009	\$44,457,210	\$43,882,700	\$45,508,389
<b>EXPENDITURES</b>								
<b>ELECTED/APPOINTED OFFICIALS:</b>								
Mayor & City Council	\$107,995	\$160,632	\$137,030	\$139,500	\$142,016	\$144,576	\$147,183	\$149,837
City Manager	244,163	246,684	266,132	270,930	275,815	280,788	285,850	291,004
City Clerk & Elections	524,885	566,324	573,567	583,909	594,437	605,154	616,065	627,173
City Attorney	270,831	355,823	336,788	342,860	349,042	355,335	361,742	368,264
Outside Agencies	220,000	239,000	243,309	247,696	252,162	256,708	261,337	266,049
Unclassified	113,951	63,913	93,565	95,252	96,970	98,718	100,498	102,310
Employee Benefits	249,964	467,338	585,764	657,968	719,380	793,993	857,858	934,967
Risk Management	242,272	273,286	278,213	283,230	288,336	293,535	298,827	304,215
Total Elected/Appointed Officials	\$1,974,061	\$2,373,000	\$2,514,368	\$2,621,345	\$2,718,157	\$2,828,807	\$2,929,360	\$3,043,819
<b>ADMINISTRATIVE SERVICES:</b>								
Assessment	\$415,749	\$433,594	\$444,432	\$455,540	\$466,926	\$478,597	\$490,560	\$502,821
Finance	1,412,723	1,500,590	1,532,562	1,570,869	1,610,133	1,650,378	1,691,629	1,733,911
Human Resources	315,997	319,885	322,756	330,823	339,092	347,567	356,255	365,159
Information Technology	1,137,928	1,280,597	1,255,233	1,286,608	1,318,767	1,351,729	1,385,516	1,420,147
Total Administrative Services	\$3,282,397	\$3,534,666	\$3,554,983	\$3,643,840	\$3,734,917	\$3,828,272	\$3,923,959	\$4,022,039
<b>COMMUNITY SERVICES:</b>								
Fire & Ambulance	\$6,284,340	\$6,485,411	\$6,673,423	\$6,866,886	\$7,065,957	\$7,270,799	\$7,481,579	\$7,698,470
Human Services	702,695	730,755	751,695	773,486	795,910	818,983	842,725	867,156
Library	1,272,802	1,323,799	1,362,176	1,401,666	1,442,300	1,484,112	1,527,137	1,571,408
Parks, Recreation & Facilities	2,759,046	3,004,026	2,967,971	3,054,013	3,142,549	3,233,651	3,327,395	3,423,856
Police	6,749,469	7,041,101	7,285,675	7,496,886	7,714,221	7,937,856	8,167,975	8,404,765
Youth Services	127,251	128,390	132,112	135,942	139,883	143,938	148,111	152,405
Total Community Services	\$17,895,603	\$18,713,482	\$19,173,052	\$19,728,879	\$20,300,819	\$20,889,340	\$21,494,922	\$22,118,060

**CITY OF KEENE, NEW HAMPSHIRE  
CAPITAL IMPROVEMENT PROGRAM FY17 - FY22  
General Fund Multi-Year Projections**

	ACTUAL FY 14/15	BUDGET FY 15/16	PROJECTED FY 16/17	PROJECTED FY 17/18	PROJECTED FY 18/19	PROJECTED FY 19/20	PROJECTED FY 20/21	PROJECTED FY 21/22
MUNICIPAL DEVELOPMENT SERVICES:								
Airport	\$549,447	\$588,808	\$599,738	\$614,209	\$629,029	\$644,207	\$659,751	\$675,671
Health & Code Enforcement	920,062	995,939	1,014,970	1,039,460	1,064,541	1,090,228	1,116,534	1,143,475
Planning	415,597	465,483	474,342	485,787	497,509	509,513	521,807	534,398
Public Works	4,010,775	4,365,379	4,275,989	4,379,164	4,484,829	4,593,044	4,703,869	4,817,369
Total Mun. Development Services	\$5,895,880	\$6,415,609	\$6,365,039	\$6,518,621	\$6,675,909	\$6,836,992	\$7,001,962	\$7,170,912
CAPITAL:								
Debt Service (including repayment of interfund loan)	4,569,285	5,240,001	4,830,410	4,817,065	4,747,631	4,756,085	4,689,553	4,689,132
CAPITAL PROJECTS (funded by current revenues)	922,647	931,664	1,336,293	1,420,196	1,191,822	1,037,661	916,226	846,815
Total Capital	\$5,491,932	\$6,171,665	\$6,166,703	\$6,237,261	\$5,939,453	\$5,793,746	\$5,605,779	\$5,535,947
SUBTOTAL - current expenditures	\$34,539,874	\$37,208,422	\$37,774,145	\$38,749,945	\$39,369,255	\$40,177,157	\$40,955,982	\$41,890,776
CAPITAL PROJECTS (funded by bonds)	\$3,580,000	\$1,933,000	\$3,619,167	\$2,250,787	\$2,890,754	\$4,280,053	\$2,926,718	\$3,617,613
TOTAL EXPENDITURES	\$38,119,874	\$39,141,422	\$41,393,312	\$41,000,732	\$42,260,009	\$44,457,210	\$43,882,700	\$45,508,389
CITY PROPERTY TAX REVENUE INCREASE	\$	\$ 877,068	\$ 891,030	\$ 750,224	\$ 725,120	\$ 779,481	\$ 783,864	
CITY PROPERTY TAX REVENUE INCREASE (%)		3.63%	3.56%	2.89%	2.72%	2.84%	2.78%	
Assessments (trended 0% per year)		1,843,788.7	1,843,788.7	1,843,788.7	1,843,788.7	1,843,788.7	1,843,788.7	1,843,788.7
ADD: Overlay		\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
ADD: War Service Credits		\$237,800	\$240,000	\$240,000	\$240,000	\$240,000	\$240,000	\$240,000
Property Tax Rate - City share		\$13.88	\$14.36	\$14.77	\$15.16	\$15.59	\$16.01	\$16.01
city tax rate increase (decrease)		3.48%	3.46%	2.86%	2.64%	2.84%	2.69%	
CAPITAL (current) & DEBT AS % OF BUDGET		16.50%	16.00%	15.00%	14.40%	13.60%	13.20%	
GENERAL FUND INCREASE (EXCLUDING BONDS)		1.5%	2.6%	1.6%	2.1%	1.9%	2.3%	
GENERAL FUND INCREASE (INCLUDING BONDS)		5.8%	-0.9%	3.1%	5.2%	-1.3%	3.7%	
Noncurrent Revenue Sources Used to Fund Capital FY 2015-2016								
Capital Reserves	1,095,000							
Project Balances - Wheelock Park Improvements	374,000							
Revaluation	38,000							
Donations - Rail Trail	30,000							
Total	1,537,000							



# CITY OF KEENE, NEW HAMPSHIRE

## General Fund 2017 - 2022 Capital Improvement Program Summary

Dept.	Project Name	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	TOTAL
Airport	Fuel Farm	-	-	-	540,000	-	-	540,000
Airport	Obstruction Removal	-	666,666	166,665	-	-	-	833,331
Airport	Pavement Maintenance	-	-	52,000	54,000	56,000	58,000	220,000
Airport	Pavement Marking	-	-	22,000	-	-	-	22,000
Airport	Runway 14/32 Reconstruction	289,000	2,300,000	-	-	-	-	2,589,000
Airport	Runway 20 PAPI Replacement	-	-	60,000	-	-	-	60,000
Airport	Taxiway A Relocation	-	-	2,444,444	-	-	-	2,444,444
<b>TOTAL AIRPORT</b>		<b>\$ 289,000</b>	<b>\$ 2,966,666</b>	<b>\$ 2,745,109</b>	<b>\$ 594,000</b>	<b>\$ 56,000</b>	<b>\$ 58,000</b>	<b>\$ 6,708,775</b>
Assessing	Revaluation	107,000	-	-	-	-	-	107,000
<b>TOTAL ASSESSING</b>		<b>\$ 107,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 107,000</b>
<b>TOTAL AIRPORT</b>		<b>\$ 289,000</b>	<b>\$ 2,966,666</b>	<b>\$ 2,745,109</b>	<b>\$ 594,000</b>	<b>\$ 56,000</b>	<b>\$ 58,000</b>	<b>\$ 6,708,775</b>
Facilities	Library Campus Development	8,800,000	-	-	-	-	-	8,800,000
Facilities	Municipal Buildings Improvements	46,500	50,000	100,000	100,000	100,000	100,000	496,500
<b>TOTAL FACILITIES</b>		<b>\$ 8,846,500</b>	<b>\$ 50,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 9,296,500</b>
City Clerk	Mobile Shelving	49,000	-	-	-	-	-	49,000
<b>TOTAL CITY CLERK</b>		<b>\$ 49,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 49,000</b>
Fire	Ambulance Replacement	-	-	230,000	-	-	260,000	490,000
Fire	Apparatus Replacement	-	900,000	-	-	90,000	710,982	1,700,982
Fire	Apparatus Replacement - Ladder 1	-	-	-	1,000,000	-	-	1,000,000
Fire	Capital Reserve Ambulance Replacement	70,000	70,000	80,000	80,000	80,000	90,000	470,000
Fire	Capital Reserve Apparatus Replacement	400,000	400,000	245,000	245,000	245,000	245,000	1,780,000
Fire	Defibrillator Replacement	66,205	-	-	-	-	-	66,205
Fire	Fire Alarm System Infrastructure	50,000	-	-	-	-	-	50,000
Fire	Mobile Radio Replacement	23,000	-	-	-	-	-	23,000
Fire	Portable Radio Replacement	30,000	42,000	42,000	42,000	-	-	156,000
Fire	West Keene Fire Station Study	-	-	20,000	-	-	-	20,000
<b>TOTAL FIRE</b>		<b>\$ 639,205</b>	<b>\$ 1,412,000</b>	<b>\$ 617,000</b>	<b>\$ 1,367,000</b>	<b>\$ 415,000</b>	<b>\$ 1,305,982</b>	<b>\$ 5,756,187</b>
IT	Network Equipment Replacement	-	55,000	18,000	44,800	-	-	117,800
IT	Database Software	86,000	-	-	-	-	-	86,000
IT	Server Replacement	12,000	3,000	54,343	30,000	12,000	3,000	114,343
IT	Storage Area Network	-	80,000	-	-	-	-	80,000
<b>TOTAL IMS</b>		<b>\$ 98,000</b>	<b>\$ 138,000</b>	<b>\$ 72,343</b>	<b>\$ 74,800</b>	<b>\$ 12,000</b>	<b>\$ 3,000</b>	<b>\$ 398,143</b>
Parks & Rec.	Carpenter Field Improvements	-	-	-	-	1,500,000	-	1,500,000
Parks & Rec.	Cemetery Roads Repaving	36,410	22,137	-	-	-	-	58,547
Parks & Rec.	Robin Hood Splash Pad	-	-	86,966	-	-	-	86,966
Parks & Rec.	Robin Hood Park Tennis Courts	-	28,390	-	-	-	-	28,390
Parks & Rec.	Skate Park	-	350,000	-	-	-	-	350,000
Parks & Rec.	Wheelock Park Improvements	314,013	-	-	-	-	-	314,013
<b>TOTAL PARKS &amp; RECREATION</b>		<b>\$ 350,423</b>	<b>\$ 400,527</b>	<b>\$ 86,966</b>	<b>\$ -</b>	<b>\$ 1,500,000</b>	<b>\$ -</b>	<b>\$ 2,337,916</b>
Planning	Climate Adaptation Vulnerability Assessment	-	50,000	-	-	-	-	50,000
Planning	Jonathan Daniels Trail Study	20,000	-	-	-	-	-	20,000
<b>TOTAL PLANNING</b>		<b>\$ 20,000</b>	<b>\$ 50,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 70,000</b>
Police	Mobile Radio Replacement	-	-	53,144	79,716	79,716	-	212,576
Police	Fixed Communication System Replacement	-	-	-	352,932	-	-	352,932
<b>TOTAL POLICE</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ 53,144</b>	<b>\$ 432,648</b>	<b>\$ 79,716</b>	<b>\$ -</b>	<b>\$ 565,508</b>
Public Works	Capital Reserve- Transportation Imp.	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Public Works	560 Main Street Assessment	-	-	1,000,000	-	-	-	1,000,000
Public Works	Beaver brook Hydrologic / Hydraulic Study	-	150,000	-	-	-	-	150,000
Public Works	Bridge Program	-	138,000	1,362,000	-	136,113	646,537	2,282,650
Public Works	Castle Street Rehab	214,390	-	-	-	-	-	214,390
Public Works	Curb Installation	59,922	61,720	63,571	65,478	68,752	70,815	390,258
Public Works	Downtown Revitalization Study	45,000	30,000	-	-	-	-	75,000
Public Works	Flood Management	-	900,000	-	861,380	-	577,380	2,338,760
Public Works	Goose Pond Dam Improvements	106,389	-	879,400	-	-	-	985,789
Public Works	Marlboro Street Corridor Improvements	25,000	-	171,017	-	-	-	196,017
Public Works	Road Rehabilitation	1,182,347	1,195,627	1,262,876	1,409,105	1,289,214	1,417,603	7,756,772
Public Works	Sidewalks - New	208,927	-	-	-	-	-	208,927
Public Works	Sidewalks - Replacement/Repair	59,922	61,720	63,571	65,478	68,752	70,815	390,258
Public Works	State By-Pass Projects	-	-	3,016,680	2,628,399	-	363,884	6,008,963
Public Works	Storm Drainage Cleaning	106,506	108,291	110,090	113,392	116,794	120,297	675,370
Public Works	Stormwater Drainage Spot Repair Program	59,992	61,720	63,571	65,478	68,752	70,815	390,328
Public Works	Stormwater System Management	51,500	53,045	54,636	56,275	57,964	59,703	333,123
Public Works	Victoria Street Extension	-	-	-	-	-	1,703,000	1,703,000
<b>TOTAL PUBLIC WORKS</b>		<b>\$ 2,219,895</b>	<b>\$ 2,860,123</b>	<b>\$ 8,147,412</b>	<b>\$ 5,364,985</b>	<b>\$ 1,906,341</b>	<b>\$ 5,200,849</b>	<b>\$ 25,699,605</b>
<b>GRAND TOTAL - ALL GENERAL FUND PROJECTS</b>		<b>\$ 12,619,023</b>	<b>\$ 7,877,316</b>	<b>\$ 11,821,974</b>	<b>\$ 7,933,433</b>	<b>\$ 4,069,057</b>	<b>\$ 6,667,831</b>	<b>\$ 50,988,634</b>

## General Fund 2017 Capital Improvement Program Detail

<u>Dept.</u>	<u>Project Name</u>	<u>cur rev</u>	<u>bonds</u>	<u>federal</u>	<u>state</u>	<u>other</u>	<u>TOTAL</u> <u>2016/2017</u>
Airport	Runway 14/32 Reconstruction	14,450		260,100	14,450		289,000
Assessing	Revaluation	107,000					107,000
City Clerk	Mobile Shelving	49,000					49,000
Facilities	Municipal Buildings Improvements	46,500					46,500
Fire	Capital Reserve Ambulance Replacement	70,000					70,000
Fire	Capital Reserve Apparatus Replacement	400,000					400,000
Fire	Defibulator Replacement		66,205				66,205
Fire	Fire Alarm System Infrastructure	50,000					50,000
Fire	Mobile Radio Replacement	23,000					23,000
Fire	Portable Radio Replacement	30,000					30,000
IT	Database Software	86,000					86,000
IT	Server Replacement	12,000					12,000
Parks & Rec.	Cemetery Roads Repaving	36,410					36,410
Parks & Rec.	Library Campus Development		2,000,000			6,800,000	8,800,000
Parks & Rec.	Wheelock Park Improvements					314,013	314,013
Planning	Jonathan Daniels Trail Study					20,000	20,000
Public Works	Capital Reserve - Transportation Imp.	100,000					100,000
Public Works	Bridge Program						-
Public Works	Castle Street Rehab		114,390			100,000	214,390
Public Works	Curb Installation		59,922				59,922
Public Works	Downtown Revitalization Study	45,000					45,000
Public Works	Goose Pond Dam Improvements		106,389				106,389
Public Works	Marlboro St Corridor Improvements					25,000	25,000
Public Works	Road Rehabilitation		1,182,347				1,182,347
Public Works	Sidewalks - New	78,927				130,000	208,927
Public Works	Sidewalks - Replacement/Repair		59,922				59,922
Public Works	Storm Drainage Cleaning	106,506					106,506
Public Works	Stormwater Drainage Spot Repair Program	30,000	29,992				59,992
Public Works	Stormwater System Management	51,500					51,500
<b>GRAND TOTAL - ALL GENERAL FUND PROJECTS</b>		<b>\$ 1,336,293</b>	<b>\$ 3,619,167</b>	<b>\$ 260,100</b>	<b>\$ 14,450</b>	<b>\$ 7,389,013</b>	<b>\$ 12,619,023</b>

## General Fund 2018 Capital Improvement Program Detail

<u>Dept.</u>	<u>Project Name</u>	<u>cur rev</u>	<u>bonds</u>	<u>federal</u>	<u>state</u>	<u>other</u>	<u>TOTAL</u> <u>2017/2018</u>
Airport	Runway 14/32 Reconstruction	115,000		2,070,000	115,000		2,300,000
Airport	Runway 20 Obstruction Removal	33,333		600,000	33,333		666,666
Facilities	Municipal Buildings Improvements	50,000					50,000
Fire	Capital Reserve Ambulance Replacement	70,000					70,000
Fire	Capital Reserve Apparatus Replacement	400,000					400,000
Fire	Apparatus Replacement					900,000	900,000
Fire	Portable Radio Replacement	42,000					42,000
IT	Network Equipment Replacement	55,000					55,000
IT	Storage Area Network	80,000					80,000
IT	Server Replacement	3,000					3,000
Parks & Rec.	Cemetery Roads Repaving	22,137					22,137
Parks & Rec.	Skate Park					350,000	350,000
Parks & Rec.	Robin Hood Park Tennis Courts	28,390					28,390
Planning	Climate Adaptation Vulnerability Assessment	50,000					50,000
Public Works	Capital Reserve - Transportation Imp.	100,000					100,000
Public Works	Beaver Brook Hydrologic / Hydraulic	150,000					150,000
Public Works	Bridge Program				110,400	27,600	138,000
Public Works	Curb Installation		61,720				61,720
Public Works	Downtown Revitalization Study	30,000					30,000
Public Works	Flood Management		900,000				900,000
Public Works	Road Rehabilitation		1,195,627				1,195,627
Public Works	Sidewalks - Replacement/Repair		61,720				61,720
Public Works	Storm Drainage Cleaning	108,291					108,291
Public Works	Stormwater Drainage Spot Repair Program	30,000	31,720				61,720
Public Works	Stormwater System Management	53,045					53,045
<b>GRAND TOTAL - ALL GENERAL FUND PROJECTS</b>		<b>\$ 1,420,196</b>	<b>\$ 2,250,787</b>	<b>\$ 2,670,000</b>	<b>\$ 258,733</b>	<b>\$ 1,277,600</b>	<b>\$ 7,877,316</b>

## General Fund 2019 Capital Improvement Program Detail

Dept.	Project Name	cur rev	bonds	federal	state	other	<b>TOTAL 2018/2019</b>
Airport	Pavement Maintenance	52,000					52,000
Airport	Pavement Marking	22,000					22,000
Airport	Runway 20 PAPI Replacement	3,000		54,000	3,000		60,000
Airport	Runway 20 Obstruction Removal	8,333		150,000	8,332		166,665
Airport	Taxiway A Relocation	122,222		2,200,000	122,222		2,444,444
Facilities	Municipal Buildings Improvements	100,000					100,000
Fire	Ambulance Replacement					230,000	230,000
Fire	Capital Reserve Ambulance Replacement	80,000					80,000
Fire	Capital Reserve Apparatus Replacement	245,000					245,000
Fire	Portable Radio Replacement	42,000					42,000
Fire	West Keene Fire Station Study	20,000					20,000
IT	Network Equipment Replacement	18,000					18,000
IT	Server Replacement	54,343					54,343
Parks & Rec.	Cemetery Roads Repaving						-
Parks & Rec.	Robin Hood Park Splash Pad	43,483				43,483	86,966
Police	Mobile Radio Replacement	53,144					53,144
Public Works	Capital Reserve - Transportation Imp.	100,000					100,000
Public Works	560 Main Street Assessment					1,000,000	1,000,000
Public Works	Bridge Program				1,089,600	272,400	1,362,000
Public Works	Curb Installation		63,571				63,571
Public Works	Goose Pond Dam Improvements		879,400				879,400
Public Works	Marlboro St Corridor Improvements	-				171,017	171,017
Public Works	Road Rehabilitation		1,262,876				1,262,876
Public Works	Sidewalks - Replacement/Repair		63,571				63,571
Public Works	State By-Pass Projects		621,336		2,395,344		3,016,680
Public Works	Storm Drainage Cleaning	110,090					110,090
Public Works	Stormwater Drainage Spot Repair Program	63,571					63,571
Public Works	Stormwater System Management	54,636					54,636
<b>GRAND TOTAL - ALL GENERAL FUND PROJECTS</b>		<b>\$ 1,191,822</b>	<b>\$ 2,890,754</b>	<b>\$ 2,404,000</b>	<b>\$ 3,618,498</b>	<b>\$ 1,716,900</b>	<b>\$ 11,821,974</b>

## General Fund 2020 Capital Improvement Program Detail

Dept.	Project Name	cur rev	bonds	federal	state	other	<b>TOTAL 2019/2020</b>
Airport	Pavement Maintenance	54,000					54,000
Airport	Pavement Marking						-
Airport	Fuel Farm	27,000		486,000	27,000		540,000
Facilities	Municipal Buildings Improvements	100,000					100,000
Fire	Ambulance Replacement	-					-
Fire	Ladder 1 Replacement		1,000,000				1,000,000
Fire	Capital Reserve Ambulance Replacement	80,000					80,000
Fire	Capital Reserve Apparatus Replacement	245,000					245,000
Fire	Portable Radio Replacement	42,000					42,000
IT	Network Equipment Replacement	44,800					44,800
IT	Server Replacement	30,000					30,000
Police	Fixed Communications System Repl.		352,932				352,932
Police	Mobile Radio Replacement	79,716					79,716
Public Works	Capital Reserve - Transportation Imp.	100,000					100,000
Public Works	Curb Installation		65,478				65,478
Public Works	Flood Management		861,380				861,380
Public Works	Road Rehabilitation		1,409,105				1,409,105
Public Works	Sidewalks - Replacement/Repair		65,478				65,478
Public Works	State By-Pass Projects		525,680		2,102,719		2,628,399
Public Works	Storm Drainage Cleaning	113,392					113,392
Public Works	Stormwater Drainage Spot Repair Program	65,478					65,478
Public Works	Stormwater System Management	56,275					56,275
<b>GRAND TOTAL - ALL GENERAL FUND PROJECTS</b>		<b>\$ 1,037,661</b>	<b>\$ 4,280,053</b>	<b>\$ 486,000</b>	<b>\$ 2,129,719</b>	<b>\$ -</b>	<b>\$ 7,933,433</b>

### General Fund 2021 Capital Improvement Program Detail

<u>Dept.</u>	<u>Project Name</u>	<u>cur rev</u>	<u>bonds</u>	<u>federal</u>	<u>state</u>	<u>other</u>	<u>TOTAL</u> <u>2020/2021</u>
Airport	Pavement Maintenance	56,000		-	-	-	56,000
Facilities	Municipal Buildings Improvements	100,000					100,000
Fire	Capital Reserve Ambulance Replacement	80,000		-	-	-	80,000
Fire	Capital Reserve Apparatus Replacement	245,000		-	-	-	245,000
Fire	Apparatus Replacement			-	-	90,000	90,000
IT	Server Replacement	12,000		-	-	-	12,000
Parks & Rec.	Carpenter Field Improvements (sup)		1,500,000				1,500,000
Police	Mobile Radio Replacement	79,716					79,716
Public Works	Capital Reserve - Transportation Imp.	100,000					100,000
Public Works	Bridge Program				108,890	27,223	136,113
Public Works	Curb Installation		68,752	-	-	-	68,752
Public Works	Road Rehabilitation		1,289,214	-	-	-	1,289,214
Public Works	Sidewalks - Replacement/Repair		68,752	-	-	-	68,752
Public Works	Storm Drainage Cleaning	116,794		-	-	-	116,794
Public Works	Stormwater Drainage Spot Repair Program	68,752		-	-	-	68,752
Public Works	Stormwater System Management	57,964		-	-	-	57,964
<b>GRAND TOTAL - ALL GENERAL FUND PROJECTS</b>		<b>\$ 916,226</b>	<b>\$ 2,926,718</b>	<b>\$ -</b>	<b>\$ 108,890</b>	<b>\$ 117,223</b>	<b>\$ 4,069,057</b>

### General Fund 2022 Capital Improvement Program Detail

<u>Dept.</u>	<u>Project Name</u>	<u>cur rev</u>	<u>bonds</u>	<u>federal</u>	<u>state</u>	<u>other</u>	<u>TOTAL</u> <u>2021/2022</u>
Airport	Pavement Maintenance	58,000					58,000
Facilities	Municipal Buildings Improvements	100,000					100,000
Fire	Ambulance Replacement					260,000	260,000
Fire	Apparatus Replacement					710,982	710,982
Fire	Capital Reserve Ambulance Replacement	90,000					90,000
Fire	Capital Reserve Apparatus Replacement	245,000					245,000
IT	Server Replacement	3,000					3,000
Public Works	Capital Reserve - Transportation Imp.	100,000					100,000
Public Works	Bridge Program				517,230	129,307	646,537
Public Works	Curb Installation		70,815				70,815
Public Works	Flood Management		577,380				577,380
Public Works	Road Rehabilitation		1,417,603				1,417,603
Public Works	Sidewalks - Replacement/Repair		70,815				70,815
Public Works	State By-Pass Projects				291,111	72,773	363,884
Public Works	Storm Drainage Cleaning	120,297					120,297
Public Works	Stormwater Drainage Spot Repair Program	70,815					70,815
Public Works	Stormwater System Management	59,703					59,703
Public Works	Victoria St. Extension		1,481,000			222,000	1,703,000
<b>GRAND TOTAL - ALL GENERAL FUND PROJECTS</b>		<b>\$ 846,815</b>	<b>\$ 3,617,613</b>	<b>\$ -</b>	<b>\$ 808,341</b>	<b>\$ 1,395,062</b>	<b>\$ 6,667,831</b>

## General Fund 2017 - 2022 Capital Improvement Program Debt Summary

	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>
Existing and Authorized Debt	\$27,796,849	\$27,517,029	\$25,864,359	\$24,881,931	\$25,281,012	\$24,397,635
New Issues Proposed	3,619,167	2,250,787	2,890,753	4,280,053	2,926,718	3,617,612
Principal Paid	(3,898,987)	(3,903,456)	(3,873,181)	(3,880,972)	(3,810,096)	(3,822,767)
<b>Total Existing Debt &amp; Issues Proposed</b>	<b>\$27,517,029</b>	<b>\$25,864,359</b>	<b>\$24,881,931</b>	<b>\$25,281,012</b>	<b>\$24,397,635</b>	<b>\$24,192,479</b>

	<u>Issue</u>	<u>Term</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>
<b>Existing &amp; Authorized Debt Service (P &amp; I)</b>			\$4,767,074	\$4,380,432	\$4,038,995	\$3,715,459	\$3,154,929	\$2,864,831
<b><u>Proposed Debt Service CIP FY17</u></b>								
Library Campus Development	2,000,000	20	35,000	168,250	164,750	161,250	157,750	154,250
Consolidated Infrastructure	1,446,753	10	25,315	192,756	187,693	182,630	177,567	172,504
Goose Pond Dam	106,389	5	1,862	24,629	23,884	23,140	22,395	21,650
Defibrillator Replacement	66,205	7	1,159	11,610	11,278	10,947	10,616	10,285
<b><u>Proposed Debt Service CIP FY18</u></b>								
Consolidated Infrastructure	1,350,787	10		23,639	179,992	175,265	170,537	165,809
Flood Management	900,000	15		15,750	90,450	88,350	86,250	84,150
<b><u>Proposed Debt Service CIP FY19</u></b>								
Consolidated Infrastructure	1,390,017	10			24,325	185,220	180,355	175,490
Goose Pond Dam	879,400	20			15,390	73,980	72,441	70,902
State Bypass Project	621,336	15			10,873	62,444	60,994	59,545
<b><u>Proposed Debt Service CIP FY20</u></b>								
Consolidated Infrastructure	1,409,105	10				26,951	205,213	199,823
Fixed Dispatch Infrastructure	352,932	7				6,176	61,889	60,124
Flood Management	861,380	15				15,074	86,569	84,559
Ladder Truck	1,000,000	10				20,000	138,000	134,000
State Bypass Project	525,680	15				9,199	52,831	51,604
<b><u>Proposed Debt Service CIP FY21</u></b>								
Consolidated Infrastructure	1,426,718	10					24,968	190,110
Carpenter Field	1,500,000	20					26,250	126,188
<b><u>Proposed Debt Service CIP FY22</u></b>								
Consolidated Infrastructure	1,559,232	10						27,287
Flood Management	577,380	15						10,104
Victoria Street Extension	1,481,000	20						25,918
<b>Total CIP17-22 Debt Service Proposed</b>			<b>63,335</b>	<b>436,633</b>	<b>708,636</b>	<b>1,040,626</b>	<b>1,534,624</b>	<b>1,824,301</b>
<b>Total Projected Debt Service: General Fund</b>			<b>\$4,830,410</b>	<b>\$4,817,065</b>	<b>\$4,747,631</b>	<b>\$4,756,085</b>	<b>\$4,689,553</b>	<b>\$4,689,132</b>



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

**Project Name:** Fuel Farm Replacement  
**Department:** Airport  
**Physical Location:** Keene Dillant-Hopkins Airport  
**Federal Mandate:** N/A  
**State Regulation or Law:** N/A  
**Master Plan (CMP) Focus Area:** Quality Built Environment  
**CMP Vision/Strategy:** Infrastructure  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** To maintain compliance with underground fuel storage tank regulations and to provide services required by the flying public.



## PROJECT DESCRIPTION/JUSTIFICATION

The current aviation fuel facility consists of two 10,000 gallon underground storage tanks with associated piping, pumps, and dispensers. One tank is for Jet-A aviation fuel and the other for 100 Low Lead aviation fuel. The City acquired the fuel farm from the Town of Swanzey in 1999 when it took ownership from a former tenant because of failure to pay property taxes. Since then, the City has improved the system to be in compliance with all Federal and State regulations. Installed in 1988, the tanks are double-walled, have interstitial leak monitoring, and a corrosion protection system. There is no history of these tanks leaking. Unfortunately, with the tanks being more than 25 years old, insurance companies are more reluctant to provide environmental contamination insurance. The insurance premium is expected to increase as the tanks age. Expecting this trend to continue as the tanks continue to age, it is appropriate to plan for replacement. Due to increased costs that have resulted from more stringent underground storage tank regulations, it also appears to be more prudent to replace the entire system because a retrofit would most likely be more expensive. The project would included the installation of two new 10,000 gallon tanks and related pumping and dispensing equipment. The new system would be an above ground system providing better maintenance access and reducing the potential for large-scale contamination. Subject to the City adequately addressing other safety-related projects at the airport, there may be an opportunity to secure FAA and NHDOT grants for a large portion of this project. Staff will continue to develop this opportunity.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design					40,000			40,000
Construction/Implementation					500,000			500,000
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$540,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$540,000</b>
<b>FUNDING</b>								
Current Revenue					27,000			\$27,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants					513,000			513,000
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$540,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$540,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
One time

**PROJECT STATUS:** Re-introduced



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

Project Name: **Pavement Maintenance**  
 Department: **Airport**  
 Physical Location: **Keene Dillant-Hopkins Airport**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **To maintain the integrity and safety of the facilities for the good of the airport users.**



## PROJECT DESCRIPTION/JUSTIFICATION

Nearly all pavement at the airport has been constructed with the assistance of various federal grant programs. These grants have historically provided up to 95% of the cost of construction. As a condition of accepting these grants the City has agreed to maintain the pavement to Federal standards for safety reasons. Through regular pavement maintenance the City can assure maximum pavement life. This maintenance includes the routine repair of defective, deteriorated, or otherwise failing pavement on aircraft movement areas. Defects include cracks of varying widths from 1/4" to over 1.5". For larger cracks the repair involves machine saw cutting on either side of the crack to provide clean edges. Loose pavement is removed, the base is compacted, and new asphalt is applied. The repair area is then sealed. Smaller cracks will be routed, cleaned, and sealed as necessary. FAA policy relative to grant eligibility for pavement maintenance is being revised. This project may be eligible for grants from the Federal Aviation Administration or the New Hampshire Department of Transportation Bureau of Aeronautics. This opportunity will be developed further with those agencies in future CIP plans.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation				52,000	54,000	56,000	58,000	220,000
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$52,000</b>	<b>\$54,000</b>	<b>\$56,000</b>	<b>\$58,000</b>	<b>\$220,000</b>
<b>FUNDING</b>								
Current Revenue				52,000	54,000	56,000	58,000	\$220,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$52,000</b>	<b>\$54,000</b>	<b>\$56,000</b>	<b>\$58,000</b>	<b>\$220,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
Ongoing

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

**Project Name:** Pavement Marking  
**Department:** Airport  
**Physical Location:** Keene Dillant-Hopkins Airport  
**Federal Mandate:** Title 49, US Code, Subtitle VII  
**State Regulation or Law:** FAA AC 150/5340-1J  
**Master Plan (CMP) Focus Area:** Quality Built Environment  
**CMP Vision/Strategy:** Infrastructure  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** To maintain the integrity and safety of the facilities for the good of the airport users.



### PROJECT DESCRIPTION/JUSTIFICATION

Airports are used in all weather conditions, at all times of the day, and at all times of the year. Pavement markings communicate important information to a pilot using the airport. Over time, these markings become obliterated due to weather fading, failing paint, and rubber obscuration from landing aircraft tires. Routine repainting of these markings (every four years) is essential for safety.

This project includes the remarking of airfield paved surfaces. This includes touch down points, runway and taxiway centerlines, aircraft hold position lines, aircraft parking areas, runway threshold bars, and other critical pavement markings. In total, there is approximately 75,000 square feet of pavement markings. This project may be eligible for grants from the Federal Aviation Administration and the NH Department of Transportation Bureau of Aeronautics. This opportunity will be developed further with these agencies in the coming CIP plans.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation				22,000				22,000
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$22,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$22,000</b>
<b>FUNDING</b>								
Current Revenue				22,000				\$22,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$22,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$22,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
Ongoing

**PROJECT STATUS:** Ongoing CIP





# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

**Project Name:** Runway 14/32 Reconstruction  
**Department:** Airport  
**Physical Location:** Keene Dillant-Hopkins Airport  
**Federal Mandate:** Title 49, US Code, Subtitle VII  
**State Regulation or Law:** FAA AC 150/5340-1J  
**Master Plan (CMP) Focus Area:** Quality Built Environment  
**CMP Vision/Strategy:** Infrastructure  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** To maintain the integrity and safety of the facilities for the good of the airport users.



### PROJECT DESCRIPTION/JUSTIFICATION

Portions of Runway 14/32 are over 40 years old. As with any paved surface over time materials break down and need to be replaced. Due to the project type and location, an environmental assessment may be required prior to the construction. This study determines the various environmental permits which may be required. The current runway is 150 feet wide. The reconstructed runway will most likely be reduced in width, pending the outcome of the Airport Master Plan Update, which will examine the pavement needs relative to current Federal Aviation Administration criteria. Existing runway lights will also be relocated to the new runway edge. Completion of this project is subject to receipt of grants from the Federal Aviation Administration and the New Hampshire Department of Transportation Bureau of Aeronautics equal to 90% and 5% respectively. The final 5% of the project will be the responsibility of the City.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design		289,000						289,000
Construction/Implementation			2,300,000					2,300,000
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$289,000</b>	<b>\$2,300,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,589,000</b>
<b>FUNDING</b>								
Current Revenue		14,450	115,000					\$129,450
Capital Reserve								0
Debt Funded								0
Federal or State Grants		274,550	2,185,000					2,459,550
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$289,000</b>	<b>\$2,300,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,589,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
Ongoing

**PROJECT STATUS:** Re-introduced



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

**Project Name:** Taxiway A Relocation  
**Department:** Airport  
**Physical Location:** Keene Dillant-Hopkins Airport  
**Federal Mandate:** Title 49, US Code, Subtitle VII  
**State Regulation or Law:** FAA AC 150/5380-6B  
**Master Plan (CMP) Focus Area:** Quality Built Environment  
**CMP Vision/Strategy:** Infrastructure  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** To replace deteriorating pavement, improve airport safety and to comply with current runway/taxiway separation requirements.



### PROJECT DESCRIPTION/JUSTIFICATION

This project includes the engineering, design, and construction of a new Taxiway A. It will be approximately 3,500 feet long and 60 feet wide. Taxiway A serves the Airport's primary Runway 2/20. The current Taxiway A is over 24 years old, having been constructed in 1989. It has received routine maintenance and repair over the years but has started to deteriorate at an accelerated rate and will need to be replaced. The location of the current Taxiway A does not meet taxiway/runway separation criteria so relocation to meet Federal Aviation Regulation standards is anticipated. Its new location will be approximately 110 feet closer to Runway 2. Completion of this project is subject to receipt of grants from the Federal Aviation Administration and the New Hampshire Department of Transportation Bureau of Aeronautics equal to 90% and 5% respectively. The final 5% of the project will be the responsibility of the City.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design				300,000				300,000
Construction/Implementation				2,144,444				2,144,444
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,444,444</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,444,444</b>
<b>FUNDING</b>								
Current Revenue				122,222				\$122,222
Capital Reserve								0
Debt Funded								0
Federal or State Grants				2,322,222				2,322,222
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,444,444</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,444,444</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:**

N/A

**PROJECT STATUS:**



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Runway 20 PAPI Replacement**  
 Department: **Airport**  
 Physical Location: **Keene Dillant-Hopkins Airport**  
 Federal Mandate: **Title 49, US Code, Subtitle VII**  
 State Regulation or Law: **Title XXXI, RSA Chapter 424:2**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **To provide a precision landing aid to those using the Runway 20 approach, improving airport safety.**

### Precision Approach Path Indicator Runway 20 Navigational Aide



### PROJECT DESCRIPTION/JUSTIFICATION

This project includes the replacement of the Precision Approach Path Indicator (PAPI) system at the end of Runway 20 (similar to the Runway 2 installation pictured above). This equipment is used by pilots to help them stay on the correct approach angle as they land on Runway 20. The existing system is more than 24 years old and in need of replacement. Completion of this project is subject to receipt of grants from the Federal Aviation Administration and the New Hampshire Department of Transportation Bureau of Aeronautics equal to 90% and 5% respectively. The final 5% of the project will be the responsibility of the City.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design				20,000				20,000
Construction/Implementation								0
Property/Equip. Acquisition				40,000				40,000
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$60,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$60,000</b>
<b>FUNDING</b>								
Current Revenue				3,000				\$3,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants				57,000				57,000
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$60,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$60,000</b>

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Airport Obstruction Removal**  
 Department: **Airport**  
 Physical Location: **Dillant-Hopkins Airport**  
 Federal Mandate: **Title 49, US Code, Subtitle VII**  
 State Regulation or Law: **Title XXXI, RSA Chapter 424:2**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **To remove hazards affecting the approach to Runway 20 and improve airport safety.**

### Runway 20 Approach Obstructions



### PROJECT DESCRIPTION/JUSTIFICATION

As sponsor of the Dillant-Hopkins Airport, the City is obligated to operate the facility in compliance with all applicable safety regulations. This includes maintaining aerial approaches that are clear of obstructions that constitute hazards to air navigation. Having learned of obstructions to the approach to Runway 20, both on and off City property, the City undertook an effort to examine alternative approaches to address the problem. It also conducted an environmental assessment to assure consideration was paid to all aspects of the solution. These efforts have concluded that removal of the obstructions is the best practical alternative. Under a separate project, the City will acquire aviation easements from private property owners to allow for the removal of these trees. This project is for the engineering, design, administrative services, and actual removal of the problem trees. The clearing effort will incorporate factors associated with the environmental assessment. With regard to on-airport clearing, it would be the City's intent to return the area affected as quickly as possible to a forested state with lower growing trees. A forest management plan would also be developed to prevent any future issues. It is the City's intent to work with individual property owners on how obstructions are removed from their property. Completion of this project is subject to obtaining the necessary property rights and on receipt of grants from the Federal Aviation Administration and the New Hampshire Department of Transportation Bureau of Aeronautics equal to 90% and 5% of its costs respectively. The final 5% of the project will be the responsibility of the City. Based on the methodology used in the removal process, all project costs may not be eligible under the terms of the grants. Any in-eligible expenses will be presented to City Council for its consideration.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design			80,000	15,000				95,000
Construction/Implementation			586,666	151,665				738,331
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$666,666</b>	<b>\$166,665</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$833,331</b>
<b>FUNDING</b>								
Current Revenue			33,333	8,333				\$41,666
Capital Reserve								0
Debt Funded								0
Federal or State Grants			633,333	158,332				791,665
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$666,666</b>	<b>\$166,665</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$833,331</b>

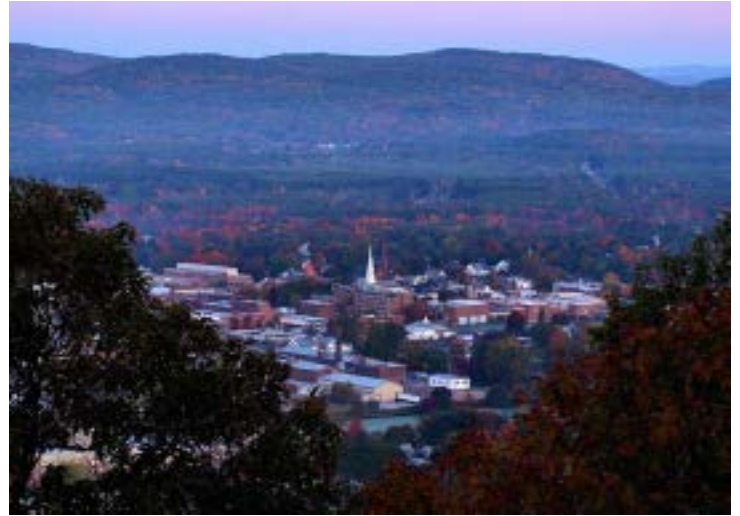
**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible < \$5,001 One time      **PROJECT STATUS:** Re-introduced



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

Project Name: **Revaluation**  
 Department: **Assessing**  
 Physical Location:  
 Federal Mandate: **N/A**  
 State Regulation or Law: **RSA 75:8-a**  
 Master Plan (CMP) Focus Area: **N/A**  
 CMP Vision/Strategy: **Municipal Governance & Financial Stability**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **N/A**  
 Departmental Objective: **To ensure the fair and equitable taxation of all property within the City of Keene in accordance with New Hampshire law.**



## PROJECT DESCRIPTION/JUSTIFICATION

There are two components of this project: 1) Implementing a CAMA (Computer Assisted Mass Appraisal) system and 2) Completing a city-wide revaluation. The CAMA system has been installed utilizing available FY16 CIP funds. The Assessing Department is already using the system in correlation to the second component of this project which is the revaluation.

The revaluation, the largest cost component of this project, is a requisite of RSA 75:8-a, requiring municipalities to "value anew" all real estate within the community at least as often as once in every five years. A revaluation, amongst other things, involves extensive market research. All property transactions occurring within the City need to be analyzed, building and construction costs will be reviewed, and income producing properties will be analyzed, including research on rental income, typical expenses, and investment rates. When completed, many variables will be developed and then calibrated for use in finalizing the valuation process. The values determined are statistically tested for accuracy and equity. Contracting out this project was necessary due to the scope of work and the time requirement involved. Two appraisal firms, one for commercial properties and one for residential properties, have already begun the revaluation work with prior year funds.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Revaluation	138,000	107,000						245,000
Construction/Implementation								0
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$138,000</b>	<b>\$107,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$245,000</b>
<b>FUNDING</b>								
Current Revenue	100,000	107,000						\$207,000
Capital Reserve								0
Debt Funded	38,000							38,000
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$138,000</b>	<b>\$107,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$245,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:**

N/A

**PROJECT STATUS:**

Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Municipal Building Improvements**  
 Department: **Facilities**  
 Physical Location: **Administration**  
 Federal Mandate: **Some**  
 State Regulation or Law: **Some**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Community Sustainability**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Maintain safe buildings**



### PROJECT DESCRIPTION/JUSTIFICATION

In FY 2017 the priority will be to replace a boiler at the Police Department. The Facilities Survey conducted by EMG Corporation in 2013 has provided an organized management tool for the division to utilize in an effort to maintain and address principal systems. The report reflects the present condition and the expected life of the systems components.

Through an annual review of the process of the EMG report, the identification of the project life cycles can be resolved. The process will constantly alter and reprioritize the improvements among all City facilities. Projects already identified at City Hall, the Municipal Services Complex, the Recreation Center and the Police Department will focus on updates that improve efficiencies in the energy consumption and heating. In the future, City Hall and the Recreation Center will need the exterior walls repointed. The Municipal Services Complex will need the heat pumps replaced and the Recreation Center will need a new boiler system.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation		46,500	50,000	100,000	100,000	100,000	100,000	496,500
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$46,500</b>	<b>\$50,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$496,500</b>
<b>FUNDING</b>								
Current Revenue		46,500	50,000	100,000	100,000	100,000	100,000	\$496,500
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$46,500</b>	<b>\$50,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$496,500</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:**

Ongoing

**PROJECT STATUS:**

Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Library Campus Development**  
 Department: **Facilities**  
 Physical Location: **76 Winter Street**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Historic Resources & Cultural Heritage**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Proactive Renovations / ESCO**



### PROJECT DESCRIPTION/JUSTIFICATION

Through the Energy Services Contract (ESCO) and Building Condition Assets projects, improvements were identified to be made to both the Library and Annex buildings. These projects included windows on the first and second floors of the library, repairs to the mansards of the Annex building, replacing carpeting in the Library, and minor roof repair at the Annex building. Prior Capital Improvement Programs (CIP) contained this work. However at the Annex, the improvements needed to make the building functional and code compliant includes fire safe exits, a fire suppression system, an elevator, and new heating and air conditioning systems.

These issues will be addressed as part of the campus development to link the Library and the Library Annex Buildings. A capital fundraising campaign is underway to fund a major portion of the project, and the City may be able to leverage additional financing through the use of the new market tax credits to complete the project.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation		8,800,000						8,800,000
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$8,800,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$8,800,000</b>
<b>FUNDING</b>								
Current Revenue								\$0
Capital Reserve								0
Debt Funded		2,000,000						2,000,000
Federal or State Grants								0
Other Sources		6,800,000						6,800,000
<b>TOTAL</b>	<b>\$0</b>	<b>\$8,800,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$8,800,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:**

N/A

**PROJECT STATUS:**

Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Mobile Compact Shelving**  
 Department: **City Clerk**  
 Physical Location: **410 Marlboro St. - Archive Facility**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **RSA Ch. 33-A**  
 Master Plan (CMP) Focus Area: **Strong Citizenship and Proactive Leadership**  
 CMP Vision/Strategy: **Historic Resources & Cultural Heritage**  
 Council Initiative: **Ordinance**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Maximize high quality storage space for permanent records with long term retention periods.**



### PROJECT DESCRIPTION/JUSTIFICATION

The current space in the archive room is reaching maximum storage capacity with the existing shelving equipment. Growth is limited to the size of the 965 square foot room. The records stored in this location are appraised as valuable archives and, as such, they are required to be retained for more than ten years to permanently. The use of movable shelving equipment will eliminate the need for multiple aisles for accessing the records and will double the room's current storage capacity. The City generates approximately \$17,000 annually in revenue for records storage and management services for qualified customers. This project will continue to allow the City to offer record storage and management services in the Archive room.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		49,000						49,000
<b>TOTAL</b>	<b>\$0</b>	<b>\$49,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$49,000</b>
<b>FUNDING</b>								
Current Revenue		49,000						\$49,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$49,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$49,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Reduce - will generate revenue Multi-year     
 **PROJECT STATUS:** Re-introduced



## FIRE & EMERGENCY MEDICAL SERVICE APPARATUS SCHEDULES

### CITY OF KEENE AMBULANCE REPLACEMENT SCHEDULE 2017 - 2022 Capital Improvement Program

Vehicle #	Description	Year	Use	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY 2019/2020	FY 2020/2021	FY 2021/2022	Later Years
19A3	Ambulance	2009	EMS				230,000			
19A2	Ambulance	2012	EMS						260,000	
			<b>TOTAL</b>	\$0	\$0	\$0	\$230,000	\$0	\$260,000	

Future CIP Programs: Anticipated Replacement Costs

FY22 Ambulance (19A1) \$245,000

### CITY OF KEENE FIRE APPARATUS REPLACEMENT SCHEDULE 2017 - 2022 Capital Improvement Program

Vehicle #	Description	Year	Use	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY 2019/2020	FY 2020/2021	FY 2021/2022	Later Years
19L2	Quint	2000	Fire		900,000					
19B2	Brush Truck	2002	Fire							
19L1	Ladder Truck*	1997	Fire				1,000,000			
19B1	Brush Truck	2003	Fire					90,000		
19T1	Tanker	2005	Fire						710,982	
19U1	Utility	2006	Fire							2023
19R1	Rescue	2010	Fire							2025
19M2	Engine	2013	Fire							2025
			<b>TOTAL</b>	\$0	\$900,000	\$0	\$1,000,000	\$90,000	\$710,982	

Future CIP Programs: Anticipated Replacement Costs

FY23 Replacement of Utility Truck \$120,000  
 FY25 Replacement of Rescue 1 \$756,396  
 FY28 Replacement of Engine 2 \$738,386  
 FY29 Fire Alarm Truck \$198,104  
 FY31 Engine M1 \$810,425  
 FY33 Quint 19L2 \$1,000,000

\*Funding programmed through lease/purchase or issuance of a bond.  
 All other apparatus acquisitions to be funded through capital reserve contributions.



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Ambulance Replacement Reserve**  
 Department: **Fire Department**  
 Physical Location: **31 Vernon Street**  
 Federal Mandate: **N/A**

State Regulation or Law: **Shall meet State Requirement for Licensing and DOT Inspections**  
 Master Plan (CMP) Focus Area: **Healthy Community**

CMP Vision/Strategy: **Emergency Preparedness**

Council Initiative: **N/A**

V.O.I.C.E.: **Establish Priorities**

Departmental Objective: **Ensure safety and reliability to staff and community with our fleet of ambulances**



### PROJECT DESCRIPTION/JUSTIFICATION

The Ambulance Capital Reserve Fund is designed to provide adequate resources for the replacement of ambulances in accordance with a schedule that calls for replacement of one of the city's three ambulances every three years. The replacement schedule is reviewed annually and replacements advanced considering equipment condition. The regular planned replacement of ambulances minimizes on-going maintenance costs, down-time, and need to rely on other back-up services. Vehicle costs are projected to continue to increase as national and state standards for ambulance requirements are updated. Replacement schedule for units during this CIP cycle includes replacement of 19A3 in FY19 and 19A2 in FY22.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition				230,000			260,000	490,000
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$230,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$260,000</b>	<b>\$490,000</b>
<b>FUNDING</b>								
Current Revenue	35,482	70,000	70,000	80,000	80,000	80,000	90,000	\$505,482
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		264	439	640	267	468	694	2,772
<b>TOTAL</b>	<b>\$35,482</b>	<b>\$70,264</b>	<b>\$70,439</b>	<b>\$80,640</b>	<b>\$80,267</b>	<b>\$80,468</b>	<b>\$90,694</b>	<b>\$508,254</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Reduce - will reduce operating costs  
Multi-year

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

Project Name: **Apparatus Capital Reserve**  
 Department: **Fire Department**  
 Physical Location: **31 Vernon Street**  
 Federal Mandate: **Annual Certifications**  
 State Regulation or Law: **Annual DOT Inspections**  
 Master Plan (CMP) Focus Area: **Healthy Community**  
 CMP Vision/Strategy: **Emergency Preparedness**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Establish Priorities**  
 Departmental Objective: **Ensure Safety and Reliability to Staff and Community**



## PROJECT DESCRIPTION/JUSTIFICATION

The Fire Equipment Reserve is designed to provide adequate funds to replace or rebuild fire apparatus as scheduled in the replacement plan. The fund can also be used periodically for major repairs to fire apparatus including the replacement of engines and transmissions. This fund has been used successfully for many years to ensure the availability of funds when the purchase of fire apparatus is required. Current and proposed funding rates will provide resources sufficient for all purchases excluding the replacement of Ladder 1, currently scheduled for FY20. It is anticipated that Ladder 1 would be acquired through a lease purchase or a similar financing arrangement.

Fire service responsibilities and equipment carried to meet our mission continue to evolve. To ensure a timely replacement of fire apparatus the current schedule was developed. The replacement schedule allows for new safety technology, ergonomics, structural integrity of vehicles, compliance with NFPA standards, and new innovations to be incorporated into the apparatus. This schedule also assures reliability to provide the best service to the community and the safety of our personnel. The need for reliable apparatus is a critical component of fire protection within the City. This reserve provides funding that will allow the City to replace all apparatus at the appropriate time assuring a reliable fleet.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition			900,000			90,000	710,982	1,700,982
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$900,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$90,000</b>	<b>\$710,982</b>	<b>\$1,700,982</b>
<b>FUNDING</b>								
Current Revenue	97,419	400,000	400,000	245,000	245,000	245,000	245,000	\$1,877,419
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		1,244	2,247	615	1,229	1,844	2,236	9,415
<b>TOTAL</b>	<b>\$97,419</b>	<b>\$401,244</b>	<b>\$402,247</b>	<b>\$245,615</b>	<b>\$246,229</b>	<b>\$246,844</b>	<b>\$247,236</b>	<b>\$1,886,834</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Reduce - will reduce operating costs  
 Multi-year
 
**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

Project Name: **Ladder Replacement**  
 Department: **Fire Department**  
 Physical Location: **31 Vernon Street**  
 Federal Mandate: **Annual Aerial Certificaions**  
 State Regulation or Law: **Annual DOT Inspections**  
 Master Plan (CMP) Focus Area: **Healthy Community**  
 CMP Vision/Strategy: **Emergency Preparedness**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Establish Priorities**  
 Departmental Objective: **Ensure Safety and Reliability to Staff and Community**



## PROJECT DESCRIPTION/JUSTIFICATION

The Ladder Replacement Project funds the replacement of the department's ladder truck currently scheduled for FY20. While regular contributions to the Apparatus Capital Reserve Fund have successfully provided needed funds for many of the City's past apparatus purchases, its current and proposed funding rates will not provide resources sufficient to accommodate the anticipated replacement of Ladder 1. It is anticipated that this vehicle would be acquired through a lease purchase or similar financing arrangement. Based on the current apparatus replacement schedule and capital reserve funding contributions now scheduled, a reduction is projected in capital reserve contributions offsetting a portion of the lease or debt service payments related to this apparatus acquisition.

To ensure a timely replacement of Ladder 1, the current schedule programming was developed. Ladder 1 was purchased in 1997 and was originally scheduled for replacement in 2017. This scheduled replacement allows for new safety technology, ergonomics, structural and mechanical integrity of the vehicle, compliance with NFPA standards, and new innovations to be incorporated into the apparatus. Regular replacement advances the reliability of apparatus service to the community and the safety of our personnel. Annual certification of the ladder continues and, without an unexpected major mechanical or functional issue, the truck is expected to meet the needs of the department until the time of scheduled replacement.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition					1,000,000			1,000,000
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,000,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,000,000</b>
<b>FUNDING</b>								
Current Revenue								\$0
Capital Reserve								0
Debt Funded					1,000,000			1,000,000
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,000,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,000,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Reduce - will reduce operating costs Multi-year      **PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

**Project Name:** Defibrillator Replacement  
**Department:** Fire Department  
**Physical Location:** 31 Vernon Street  
**Federal Mandate:** N/A  
**State Regulation or Law:** Saf-C 5900 Emergency Medical Services  
**Master Plan (CMP) Focus Area:** Healthy Community  
**CMP Vision/Strategy:** Maintaining a Safe Community  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Establish Priorities  
**Departmental Objective:** Ensure Safety and Reliability to Staff and Community



## PROJECT DESCRIPTION/JUSTIFICATION

This project is entering year two of the two year replacement program that started in FY16. Four (4) Life Pak 12 Defibrillators are being replaced. The units will continue provide us a tool to provide advanced life support and cardiac care in the field. The new units are tested to meet today's standards and have an upgradeable platform to provide years of service. The original units were purchased in July of 1998. Upgrades and refurbishments to the software and equipment in 2008 and in 2010 has maintained performance in compliance with current medical protocols and technology. The units which are being replaced are now more than seventeen (17) years old and are at the end of serviceability.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition	66,205	66,205						132,410
<b>TOTAL</b>	<b>\$66,205</b>	<b>\$66,205</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$132,410</b>
<b>FUNDING</b>								
Current Revenue								\$0
Capital Reserve								0
Debt Funded	66,205	66,205						132,410
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$66,205</b>	<b>\$66,205</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$132,410</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Reduce - will reduce operating costs  
 N/A

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

**Project Name:** Fire Alarm System Infrastructure  
**Department:** Fire Department  
**Physical Location:** 32 Vernon Street  
**Federal Mandate:** N/A  
  
**State Regulation or Law:** N/A  
**Master Plan (CMP) Focus Area:** N/A  
  
**CMP Vision/Strategy:** Maintaining a Safe Community  
**Council Initiative:** Ordinance  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** Ensure safety and reliability of municipal fire alarm system serving the community



## PROJECT DESCRIPTION/JUSTIFICATION

The requested project funds would allow the replacement of equipment that operates our municipal fire alarm system that was last replaced in 1996. The project will allow us to update the infrastructure of our system and allow for future expansion of this system. The components to be replaced include: circuit entrance cabinet, terminal strips, fuses, dual battery charging system, and backup batteries. It also includes a new multinet 7705I UL Fire Receiver System.

The City of Keene Fire Department maintains and operates a municipal fire alarm system. This system currently has one hundred eighty two (182) master boxes located on buildings throughout the City and continues to grow annually. City Ordinance O-2011-03 requires specific occupancies be connected to the municipal fire alarm system for monitoring of fire alarms for public safety. The system was last updated with a major replacement of equipment in 1996. That work included replacement of the five (5) existing circuits and the addition of five (5) new circuits, along with replacement of approximately 150,000 feet of aerial wire and 15,000 feet of underground wire. At the same time the primary infrastructure internal to the station was replaced. This equipment replacement included the circuit entrance cabinet with terminal strips and fuses, the dual battery charging system with batteries, along with digitize form 4 and the digitize 3505 solid state transmitter equipment.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		50,000						50,000
<b>TOTAL</b>	<b>\$0</b>	<b>\$50,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$50,000</b>
<b>FUNDING</b>								
Current Revenue		50,000						\$50,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$50,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$50,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Create efficiencies  
Multi-year

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

**Project Name:** Mobile Radio Replacement  
**Department:** Fire Department  
**Physical Location:** 31 Vernon Street  
**Federal Mandate:** N/A  
**State Regulation or Law:** N/A  
**Master Plan (CMP) Focus Area:** N/A  
**CMP Vision/Strategy:** Emergency Preparedness  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Establish Priorities  
**Departmental Objective:** Emergency Preparedness and Personnel Safety



## PROJECT DESCRIPTION/JUSTIFICATION

The communications mobile radio project started in FY15 CIP and the FY17 funding will complete the project. These radios are used daily by Fire/EMS personnel during emergency and non-emergency operations to manage incidents, communicate with other City departments, request needed resources, and provide accountability and safety for our personnel and the public. As part of the New Hampshire Radio Interoperability Program, all mobile radios were replaced by grant funded radios in 2003. These radios have reached the end of their serviceability. The replacement program allows us to maintain emergency preparedness and personnel safety by having units that are reliable and serviceable as needed for at least the next ten years. The department currently operates and maintains twenty-two mobile radios.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition	23,500	23,000						46,500
<b>TOTAL</b>	<b>\$23,500</b>	<b>\$23,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$46,500</b>
<b>FUNDING</b>								
Current Revenue	23,500	23,000						\$46,500
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$23,500</b>	<b>\$23,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$46,500</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Create efficiencies  
Multi-year

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

Project Name: **Portable Radio Replacement**  
 Department: **Fire Department**  
 Physical Location: **31 Vernon Street**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Healthy Community**  
 CMP Vision/Strategy: **Emergency Preparedness**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Establish Priorities**  
 Departmental Objective: **Emergency Preparedness and Personnel Safety**



## PROJECT DESCRIPTION/JUSTIFICATION

This communications portable radio project will replace portable radios that are used daily by Fire/EMS personnel during emergency and non-emergency operations to manage incidents, communicate with other City departments, request needed resources, and provide accountability and safety for our personnel and the public. The project would occur over a four year period with the first year funding in FY17.

As part of the New Hampshire Radio Interoperability Program all portable radios were replaced by grant funded radios in 2006. The units for Keene were delivered in 2006. This replacement program would allow us to maintain emergency preparedness and personnel safety by having units that are reliable and serviceable as needed for at least the next ten years. The department currently operates and maintains sixty-six portable radios. The goal would be to replace all units over a four year period unless grants or other funding becomes available to accelerate replacement. This project would also cover associated costs for APX 6000 radio carrying cases.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		30,000	42,000	42,000	42,000			156,000
TOTAL	\$0	\$30,000	\$42,000	\$42,000	\$42,000	\$0	\$0	\$156,000
<b>FUNDING</b>								
Current Revenue		30,000	42,000	42,000	42,000			\$156,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$30,000	\$42,000	\$42,000	\$42,000	\$0	\$0	\$156,000

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Create efficiencies  
Multi-year

**PROJECT STATUS:** Ongoing CIP





# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **W Keene Fire Station Study**  
 Department: **Fire Department**  
 Physical Location: **110 Hastings Avenue**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Healthy Community**  
 CMP Vision/Strategy: **Emergency Preparedness**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Provide Emergency Response**



### PROJECT DESCRIPTION/JUSTIFICATION

The West Keene Fire Station is currently located at 110 Hastings Avenue. The building is owned by the State of NH and supports a National Guard unit operating from the same facility. The City currently has a two year agreement, commencing August 1, 2015, with one renewal term of two years remaining. The City of Keene and NH National Guard have continued to discuss the long term use of the facility by both parties along with the possibility of the City acquiring the facility. Acquisition would allow the Fire Department to remain at the facility providing opportunity for the possibility for co-location of a fire training facility. In the event the City were to acquire this facility some renovations to improve functionality would to be considered. Funds requested would support a study of the facility for future use.

In the event the City was no longer able to operate from this facility, evaluation of other locations would be required to maintain current Fire, EMS, and Rescue services responding from West Keene.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design				20,000				20,000
Construction/Implementation								0
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$20,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$20,000</b>
<b>FUNDING</b>								
Current Revenue				20,000				\$20,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$20,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$20,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:**

N/A

**PROJECT STATUS:**

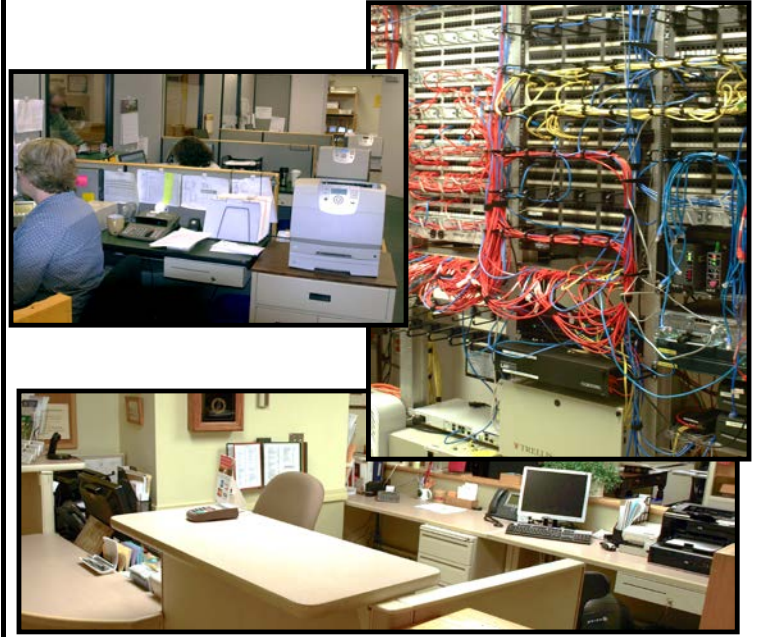
Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

**Project Name:** Network Equipment Replacement  
**Department:** IT  
**Physical Location:** Multiple Facilities  
**Federal Mandate:** N/A  
  
**State Regulation or Law:** N/A  
**Master Plan (CMP) Focus Area:** N/A  
  
**CMP Vision/Strategy:** Infrastructure  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** Required to provide network, phone, and computing services for all City departments.



## PROJECT DESCRIPTION/JUSTIFICATION

The network infrastructure presently enables City information systems to be centralized to maximize accessibility. This involves cabling and switches within each building, core equipment in the IT datacenter, and firewalls that manage traffic in and out of the City network. This equipment has a limited useful life. It is important that a plan be in place for the replacement of the equipment to ensure reliable operation and compliance with minimum security requirements. This plan calls for the replacement of the network equipment in the year the manufacturer will no longer provide service, which typically ranges from five to ten years after purchase.

The City computer information systems are a mission critical asset supporting essential business operations. The availability of these systems depends upon reliable network availability and performance. In addition, the network must be protected for the purposes of confidentiality and intrusion prevention. In order to meet the evolving requirements of the organizational use of information systems, the network equipment will require replacement when it reaches the manufacturer's end-of-service schedule. This will provide current security and control features that are necessary to keep up with minimum industry standards, and will minimize costly down-time in the case of equipment failure.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition			55,000	18,000	44,800			117,800
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$55,000</b>	<b>\$18,000</b>	<b>\$44,800</b>	<b>\$0</b>	<b>\$0</b>	<b>\$117,800</b>
<b>FUNDING</b>								
Current Revenue			55,000	18,000	44,800			\$117,800
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$55,000</b>	<b>\$18,000</b>	<b>\$44,800</b>	<b>\$0</b>	<b>\$0</b>	<b>\$117,800</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
N/A

**PROJECT STATUS:** Ongoing CIP

## Schedule of Network Equipment Replacement

Building	End of life(sale)	End of Maintenance	End of Support	Replacement Cost	<i>FY Subtotal</i>
Police	Jan-13	Jan-14	Jan-18	\$6,800	
Police	Jan-13	Jan-14	Jan-18	\$6,800	
Police	Jan-13	Jan-14	Jan-18	\$6,800	
Library	Jan-13	Jan-14	Jan-18	\$3,200	
Police	Jan-13	Jan-14	Jan-18	\$6,800	
Police	Jan-13	Jan-14	Jan-18	\$6,800	
City Hall 4th Floor	Jan-13	Jan-14	Jan-18	\$6,800	
City Hall	Jan-13	Jan-14	Jan-18	\$5,500	<i>FY18</i>
City Hall	Jan-13	Jan-14	Jan-18	\$5,500	<i>\$55,000</i>
City Hall	Sep-13	Sep-14	Sep-18	\$6,000	
City Hall	Sep-13	Sep-14	Sep-18	\$6,000	<i>FY19</i>
Police	Sep-13	Sep-14	Sep-18	\$6,000	<i>\$18,000</i>
Fire	Oct-12	Jul-15	Oct-19	\$3,200	
Public Works	Oct-12	Jul-15	Oct-19	\$4,000	
Public Works	Oct-12	Jul-15	Oct-19	\$3,200	
Public Works	Oct-12	Jul-15	Oct-19	\$3,200	
Library	Oct-12	Jul-15	Oct-19	\$4,000	
Library	Oct-12	Jul-15	Oct-19	\$4,000	
Public Works	Oct-12	Jul-15	Oct-19	\$4,000	
Public Works	Oct-12	Jul-15	Oct-19	\$4,000	
Airport	Oct-12	Jul-15	Oct-19	\$4,000	
Parks and Rec	Oct-12	Jul-15	Oct-19	\$4,000	
Fire Central	Oct-12	Jul-15	Oct-19	\$3,200	<i>FY20</i>
Library	Oct-12	Jul-15	Oct-19	\$4,000	<i>\$44,800</i>
City Hall	Jan-13	Oct-14	N/A	\$2,500	
Police	Jan-13	Oct-14	N/A	\$2,500	
Fire	Jan-13	Oct-14	N/A	\$2,000	
Public Works	Jan-13	Oct-14	N/A	\$2,000	
Parks and Rec	Jan-13	Oct-14	N/A	\$2,000	
Public Works	Jan-13	Oct-14	N/A	\$2,000	
Public Works	Jan-13	Oct-14	N/A	\$2,000	
Library	Jan-13	Oct-14	N/A	\$2,000	
Fire	Jan-13	Oct-14	N/A	\$2,000	
Airport	Jan-13	Oct-14	N/A	\$2,000	<i>TBD</i>
Public Works	Oct-12	Jul-15	N/A	\$4,000	<i>\$25,000</i>

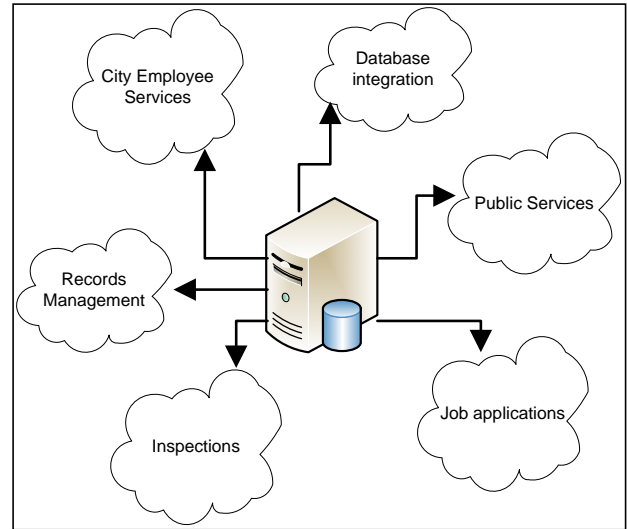
**\$142,800**



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

**Project Name:** Database Software  
**Department:** IT  
**Physical Location:** Data Center  
**Federal Mandate:** N/A  
**State Regulation or Law:** N/A  
**Master Plan (CMP) Focus Area:** N/A  
**CMP Vision/Strategy:** Infrastructure  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** Required to maintain database integration, integrity, and availability in accordance with department mission.



## PROJECT DESCRIPTION/JUSTIFICATION

Oracle Database, Business Intelligence and Web Logic products are presently installed in the City computing environment. These applications provide the tools necessary to serve both City employees and the public with critical services, such as dog licensing, inspections, online job applications, records management databases, project management and other user interfaces. They also provide a means for the integration of multiple City databases for data reliability and efficiency purposes. The tools provide the ability to accommodate database needs internally, thus avoiding what would otherwise be significant costs for independent software solutions. Oracle licenses these products based on server specifications. As the servers are replaced over time with systems that have more processing power, the products will require license upgrades or replacement with an alternative solution. This project synchronizes with the server replacement schedule.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		86,000						86,000
<b>TOTAL</b>	<b>\$0</b>	<b>\$86,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$86,000</b>
<b>FUNDING</b>								
Current Revenue		86,000						\$86,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$86,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$86,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
N/A

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

**Project Name:** Server Replacement  
**Department:** IT  
**Physical Location:** City Hall & Remote Data Center  
**Federal Mandate:** N/A  
  
**State Regulation or Law:** N/A  
**Master Plan (CMP) Focus Area:** N/A  
  
**CMP Vision/Strategy:** Infrastructure  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** Required to provide software and computing services for all departments.



## PROJECT DESCRIPTION/JUSTIFICATION

Information systems are utilized by every City department in the process of providing services to the public. From email and phone systems to database and GIS systems, all require that core server equipment run reliably. This project provides funding for the replacement of existing host servers every three years, an upgrade to the Microsoft Exchange Server platform, an upgrade of the Server operating system version and required Client Access License (CAL) upgrades as the server operating systems are upgraded. This replacement schedule ensures that the processing capabilities of the server hardware and software are sufficient to support City operations.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		12,000	3,000	54,343	30,000	12,000	3,000	114,343
<b>TOTAL</b>	<b>\$0</b>	<b>\$12,000</b>	<b>\$3,000</b>	<b>\$54,343</b>	<b>\$30,000</b>	<b>\$12,000</b>	<b>\$3,000</b>	<b>\$114,343</b>
<b>FUNDING</b>								
Current Revenue		12,000	3,000	54,343	30,000	12,000	3,000	\$114,343
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$12,000</b>	<b>\$3,000</b>	<b>\$54,343</b>	<b>\$30,000</b>	<b>\$12,000</b>	<b>\$3,000</b>	<b>\$114,343</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
Ongoing

**PROJECT STATUS:** Ongoing CIP

## Server Replacement Costs

Server Function	1st Replacement Date	Fiscal Year	Replacement Cost
Virtual Server	7/1/2016	FY17	\$9,000
Server OS & Client Licensing	7/1/2018	FY19	\$51,343
Virtual Server	7/1/2019	FY20	\$9,000
Virtual Server	7/1/2019	FY20	\$9,000
Virtual Server	7/1/2019	FY20	\$9,000
Virtual Server	10/1/2020	FY21	\$9,000

*(was FIS server)*

**\$96,343**

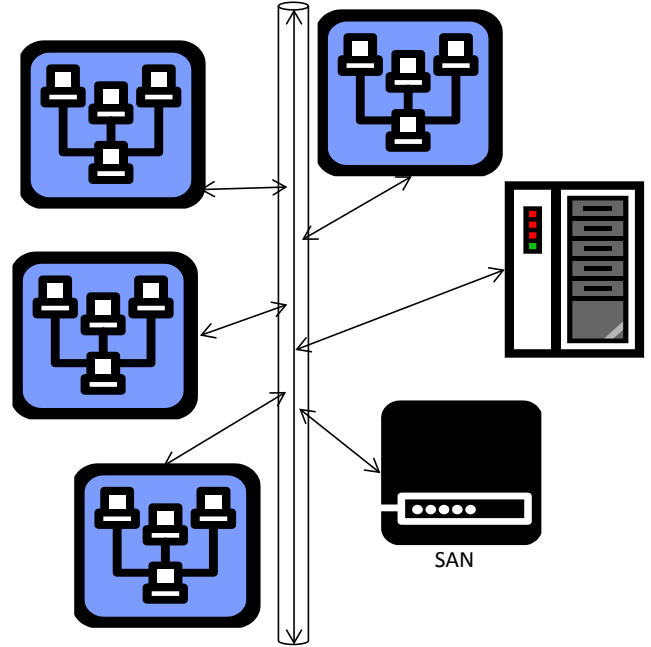
*\*Add \$3,000 annually to cover the cost of server OS upgrades.*



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

**Project Name:** Storage Area Network  
**Department:** IT  
**Physical Location:** IT Data Center  
**Federal Mandate:** N/A  
**State Regulation or Law:** N/A  
**Master Plan (CMP) Focus Area:** N/A  
**CMP Vision/Strategy:** Infrastructure  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** Provide reliable file storage solution for all City departments.



## PROJECT DESCRIPTION/JUSTIFICATION

The network utilized by City staff across all departments provides a path between the end users (computer users) and the databases on the servers. These databases and other electronic files such as documents, maps, and system backups are stored on storage area network (SAN) devices. The SANs enable more than one server to access a single system of physical disks, allowing allocation of space to each server as needed, thus reducing the total cost of server equipment. The typical life of a storage area network solution is about five years.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation			5,000					5,000
Property/Equip. Acquisition			75,000					75,000
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$80,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$80,000</b>
<b>FUNDING</b>								
Current Revenue			80,000					80,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$80,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$80,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible < \$5,001 Ongoing

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

Project Name: **Carpenter Field**  
 Department: **Parks & Recreation**  
 Physical Location: **Carpenter Street**  
 Federal Mandate: **N/A**

State Regulation or Law: **N/A**

Master Plan (CMP) Focus Area: **Quality Built Environment**

CMP Vision/Strategy: **Healthy Living**

Council Initiative: **N/A**

V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**

Departmental Objective: **Master Plan Recommendation #3 Determine the best and most appropriate uses of each park and whether they should be repurposed or reconfigured to maximize their service to the community**

## FINAL DESIGN: A DESTINATION FOR ALL

**FORMALIZING THE INFORMAL**  
A universally-accessible path connects to downtown. (For details see Sheet 16)

**PLAY AND FITNESS FOR ALL**  
Play structures, bocce court, workout zone, and pavilion serve a broader range of users. (For details see Sheet 13)

**VEGETATED RIPARIAN BUFFER**  
A densely vegetated brook edge provides ecological services and aesthetics. (For details see Sheet 15)

**MEANDERING STREAM**  
A new path for Beaver Brook is a place to explore, habitat for wildlife, and foodwater storage. (For details see Sheet 15)

**EXPANDING CONNECTIONS**  
A pedestrian bridge crosses Beaver Brook adding a new and exciting connection to Carpenter Street Field from downtown and beyond. (For details see Sheet 16)

**CLIENT (CITY OF KEENE) GOALS**

- Create additional uses while maintaining existing uses
- Develop multi-generational attractions and uses
- Improve access from downtown
- Improve the aesthetics of the field
- Create a more vibrant presence within the neighborhood
- Explore flood storage potential
- Improve drainage for the playing field

**PUBLIC GOALS**

- Create a walking circuit
- Provide easier and safer access from downtown and Cheshire Rail Trail
- Install bathrooms
- Improve the quality of the athletic field
- Improve seating
- Acquire adjacent vacant properties
- Provide for universal accessibility
- Provide lighting
- Increase vegetation
- Improve the playground
- Designate a parking area

**Sanctioned and Sustainable Parking**  
Designated parking spots provide clarity and reduce congestion on tree roots. (For details see Sheet 17)

**Athletic Field**  
The centerpiece of Carpenter Street Field is evenly graded for effective drainage and comfortable use. (For details see Sheet 14)

**Walking Circuit**  
A safe and universally accessible path loops around the field. (For details see Sheet 16)

## PROJECT DESCRIPTION/JUSTIFICATION

Carpenter Street Field is located outside the downtown footprint along Beaver Brook and the Cheshire Rail Trail and plays a significant part in restoring recreational opportunities to the east side of the City. Through a public process of meetings and online discussion boards with the Conway School of Landscape Design, a definitive statement from the community highlighted that the park needs to be developed for multi-generational use to create a safe place to recreate. Specific design elements were to include a playground, multiple seating opportunities, walking trail, parking, pavilion, vegetated buffer along the brook, connection to the rail trail and an athletic field. The field will remain the centerpiece of the park; it requires a delineated pitch to improve the storm drainage back to Beaver Brook. These enhancements to the field will provide a quality turf experience for the multiple user groups that currently utilize the field.

The vision for this project will create a valuable asset for the east side and the entire community, in addition to City support, funding through grants will be sought and utilizing the Building a Spirit of Place initiative to assist in reducing City financing.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation						1,500,000		1,500,000
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,500,000</b>	<b>\$0</b>	<b>\$1,500,000</b>
<b>FUNDING</b>								
Current Revenue								\$0
Capital Reserve								0
Debt Funded						1,500,000		1,500,000
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,500,000</b>	<b>\$0</b>	<b>\$1,500,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001 Ongoing

**PROJECT STATUS:** New Project



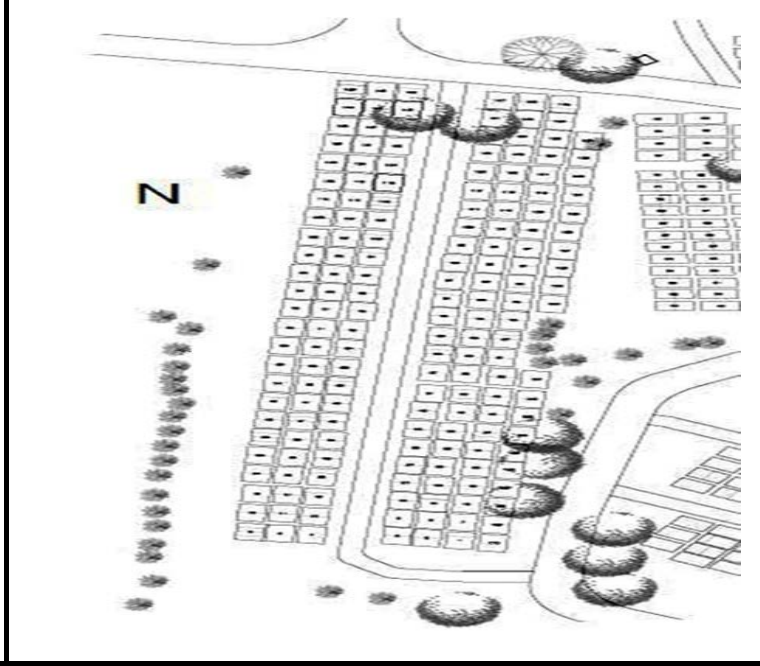


# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Cemetery Paving**  
 Department: **Parks & Recreation**  
 Physical Location: **Cemeteries**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Master Plan Recommendation # 4 - Develop a comprehensive capital equipment and park asset replacement plan**



### PROJECT DESCRIPTION/JUSTIFICATION

The project establishes a repaving program for cemetery roads in Greenlawn, Woodland, and Woodland Northeast Division Cemeteries in FY17. The FY17 program would involve an overcoat of chip seal and shimming of roads in these cemeteries, which have not received attention for over 20 years. The project includes 2,865 feet of road with 3,933 square yards of chip seal at \$8.00 per yard. These roads are plowed and used year round. In FY18, extension of paved surfaces at Monadnock View is planned. In FY 18, the improvements in Monadnock View Cemetery include paving 590 feet of road in Cemetery Section N (shown above) with grading, additional gravel (approximately 100 cubic yards), and 175 tons of pavement at \$95.00 per ton.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation		36,410	22,137					58,547
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$36,410</b>	<b>\$22,137</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$58,547</b>
<b>FUNDING</b>								
Current Revenue		36,410	22,137					58,547
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$36,410</b>	<b>\$22,137</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$58,547</b>

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

Project Name: **Robin Hood Splash Pad**  
 Department: **Parks & Recreation**  
 Physical Location: **Robin Hood Park**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Healthy Community**  
 CMP Vision/Strategy: **Maintaining Neighborhoods**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Master Plan Recommendation #11 Provide equal access and adequate mix of facilities, trails and open space throughout the City.**



## PROJECT DESCRIPTION/JUSTIFICATION

The City has two outdoor summer facilities: Robin Hood Park Pool, located on the east side, and Wheelock Park Pool on the west side of the City. Both pools were installed in 1967 as a gift from the Keene Lions Club. Through the years diving boards and slides were added for additional enjoyment by pool patrons. For insurance reasons, these devices were removed and the pools no longer have an interactive water play experience. In 2013, the City installed a Splash Pad at Wheelock Pool. The additional development of a splash pad to Robin Hood Park on the east side is a focus on social equity and facility improvements. The purpose of the splash pad is to introduce water play to younger children and individuals with special needs for an interactive experience. The splash pad area will be 20' x 30'. Our intent is to submit for a future Land Water and Conservation Fund (LWCF) grant with the Department of Resources and Economic Development for a 50 percent match, or seek alternative funding.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation				86,966				86,966
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$86,966</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$86,966</b>
<b>FUNDING</b>								
Current Revenue				43,483				\$43,483
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources				43,483				43,483
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$86,966</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$86,966</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
Ongoing

**PROJECT STATUS:** Re-introduced

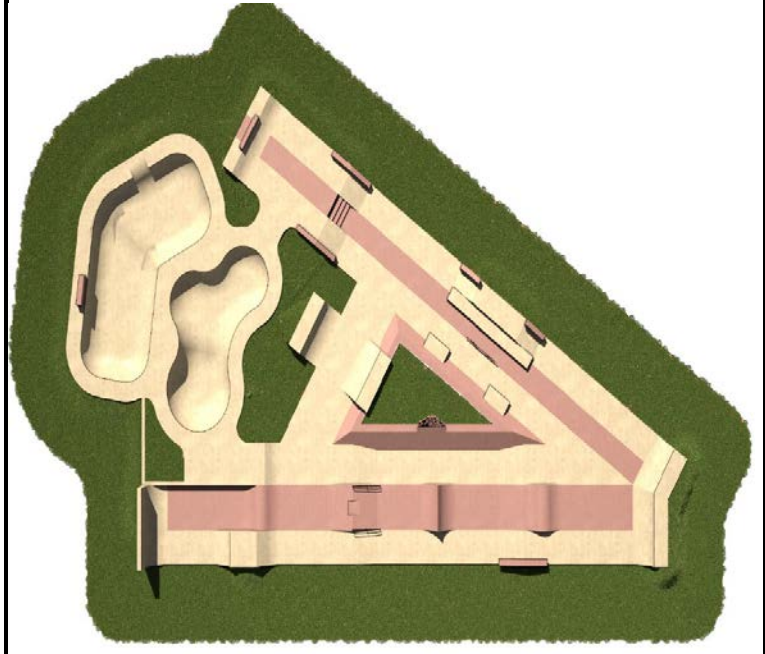


# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

**Project Name:** Skate Park  
**Department:** Parks & Recreation  
**Physical Location:** Wheelock Park  
**Federal Mandate:** N/A  
**State Regulation or Law:** N/A  
**Master Plan (CMP) Focus Area:** Healthy Community  
**CMP Vision/Strategy:** Collaborative Community Planning  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** Master Plan Recommendation # 4 - Develop a comprehensive capital equipment and park asset replacement plan



### PROJECT DESCRIPTION/JUSTIFICATION

In 2015, the City matched a community fundraising effort to hire a company for conceptual design and cost estimate for the proposed skate park in Wheelock Park. Spohn Ranch Skateparks delivered a proposal in collaboration with two public meetings and was able to design and refine the various elements of a successful park to meet the needs of our community. A 12,000 square foot concrete facility was developed as a park for users of every age and ability, and to create a destination for generations to come. The recommendations of the Ad-Hoc Skateboard Park Relocation Committee were considered in conjunction with those advanced by the Active and Passive Recreation Management Plan throughout the design process. Advocates for the new facility will begin a capital campaign with anticipation for construction in 2017.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation			350,000					350,000
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$350,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$350,000</b>
<b>FUNDING</b>								
Current Revenue								\$0
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources			350,000					350,000
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$350,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$350,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
Ongoing

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Wheelock Park Improvements**  
 Department: **Parks & Recreation**  
 Physical Location: **Wheelock Park**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Healthy Living**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Master Plan Recommendation #3 Determine the best and most appropriate uses of each park and whether they should be repurposed or reconfigured to maximize their service to the community**



### PROJECT DESCRIPTION/JUSTIFICATION

A concept plan for Wheelock Park was endorsed by City Council on September 18, 2014, and with the sale of a plot of land adjacent to the park, these improvements were started in FY16. The main park road and parking lots were paved, along with fencing and drainage improvements. In FY17, new ADA complaint restrooms will replace the existing facilities in the maintenance building, and near Durling Field. Field irrigation systems will be replaced and additional facility improvements (pool building, Cal Ripken Field bathrooms, and other small projects) will be made. Additional planning will be conducted to implement the ideas suggested in the concept plan. This project will be submitted for a future Land Water and Conservation Fund (LWCF) grant with the Department of Resources and Economic Development.

- ADA Complaint restrooms - \$180,000.00
- Irrigation System - \$70,000.00
- Concession Stand Improvements - \$20,000.00
- Bleachers - \$16,000.00
- Picnic Tables - \$3,000.00
- Benches - \$3,000.00
- Signage - \$3,000.00
- Trees - \$3,000.00

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation		314,013						314,013
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$314,013</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$314,013</b>
<b>FUNDING</b>								
Current Revenue								\$0
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		314,013						314,013
<b>TOTAL</b>	<b>\$0</b>	<b>\$314,013</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$314,013</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible < \$5,001 Ongoing

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

Project Name: **Robin Hood Tennis Courts**  
 Department: **Parks & Recreation**  
 Physical Location: **Robin Hood Park**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Healthy Community**  
 CMP Vision/Strategy: **Healthy Living**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Master Plan Recommendation #3 Determine the best and most appropriate uses of each park and whether they should be repurposed or reconfigured to maximize their service to the community**



## PROJECT DESCRIPTION/JUSTIFICATION

In FY16, Robin Hood tennis courts were scheduled to be crack sealed and painted. The current condition of the courts needed additional repairs beyond the standard maintenance and budget for the project. The funding shifted to Jonathan Daniels School for resurfacing. The City maintains four sets of courts in Wheelock Park, Ellis Harrison Park, Jonathan Daniels and Robin Hood Park. Through the CIP process, Robin Hood courts remain to be completed. In addition to the regulation tennis court lines, pickle ball lines would be added for additional recreational use.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation			28,390					28,390
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$28,390</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$28,390</b>
<b>FUNDING</b>								
Current Revenue			28,390					\$28,390
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$28,390</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$28,390</b>

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

**Project Name:** Climate Adaptation Vulnerability Assessment  
**Department:** Planning  
**Physical Location:** 3 Washington St  
**Federal Mandate:** N/A  
**State Regulation or Law:** N/A  
**Master Plan (CMP) Focus Area:** N/A  
**CMP Vision/Strategy:** Quality Built Environment  
**Council Initiative:** Adapting to Climate Change  
**V.O.I.C.E.:** N/A  
**Departmental Objective:** Establish Priorities  
 Establish Priorities for Climate Change Adaptation



### PROJECT DESCRIPTION/JUSTIFICATION

Recent precipitation patterns and flooding events have highlighted the need for better infrastructure planning, especially in locations where flooding and stormwater present significant threats. CIP and other projects managed through the Public Works Department have begun increasing our stormwater management system's capacity for handling large rain events, including culvert upsizing and replacements. What other improvements need to take place to protect our most valuable community assets? A vulnerability assessment should be completed, beginning with an assessment of the threats to these assets if no protective action is taken. Using available GIS and other spatial data and with the assistance of modeling software, a report will be generated and publicly presented to discuss the financial implications of taking no further adaptation action.

The second step is to evaluate possible adaptation actions with the community through facilitated public discussions, and, after identifying the key strategies for Keene, the modeling software would be restructured to report out which actions make the most financial sense over time. The two final products will be a cost benefit analysis of identified adaptation strategies and a final report describing what these results might suggest for policy and financial decisions for the City. As stated on pages 66-67 of the Comprehensive Master Plan, "Adapting to climate change is about making choices today to be prepared for the potential changes of tomorrow, and maintaining or improving the community's ability to withstand those changes. It includes making existing infrastructure and policies more resilient to climate impacts."

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design			20,000					20,000
Construction/Implementation			30,000					30,000
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$50,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$50,000</b>
<b>FUNDING</b>								
Current Revenue			50,000					\$50,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$50,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$50,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:**

N/A

**PROJECT STATUS:**

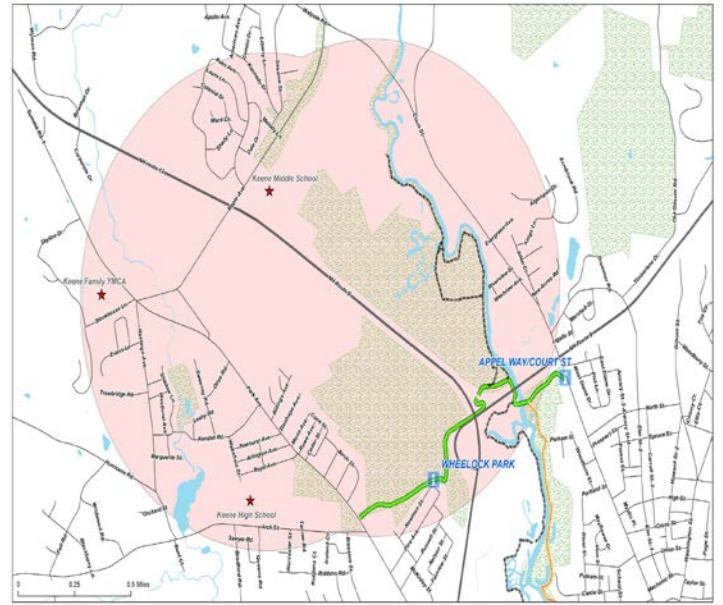


# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Jonathan Daniels Trail Study**  
 Department: **Planning**  
 Physical Location: **3 Washington Street**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area **Quality Built Environment**  
 CMP Vision/Strategy: **Trails & Bike Pathways**  
 Council Initiative: **Ordinance**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Bicycle Pedestrian Path Advisory Committee (BPPAC) high priority path**



### PROJECT DESCRIPTION/JUSTIFICATION

This project advances a feasibility study analyzing the best route for a bicycle and pedestrian infrastructure connection between Wheelock Park and the Appel Way Trail (shown in green) to Maple Avenue/Summit Road. Due to the recent development of community services, such as the YMCA and new Keene Middle School (marked by red stars) in West Keene, a safe and delineated connection to the existing bicycle/pedestrian pathway system is necessary. This project will determine a preferred route out of three alternatives. The three main corridors to be studied are a) an existing walking trail along the west shore of the Ashuelot River b) along State Route 12 and c) along Park Avenue. The study phase will include a public input session. A Capital Improvements Program Design/Construction project, based on the study's findings, is anticipated.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design		20,000						20,000
Construction/Implementation								0
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$20,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$20,000</b>
<b>FUNDING</b>								
Current Revenue								\$0
Capital Reserve		20,000						20,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$20,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$20,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001 Ongoing

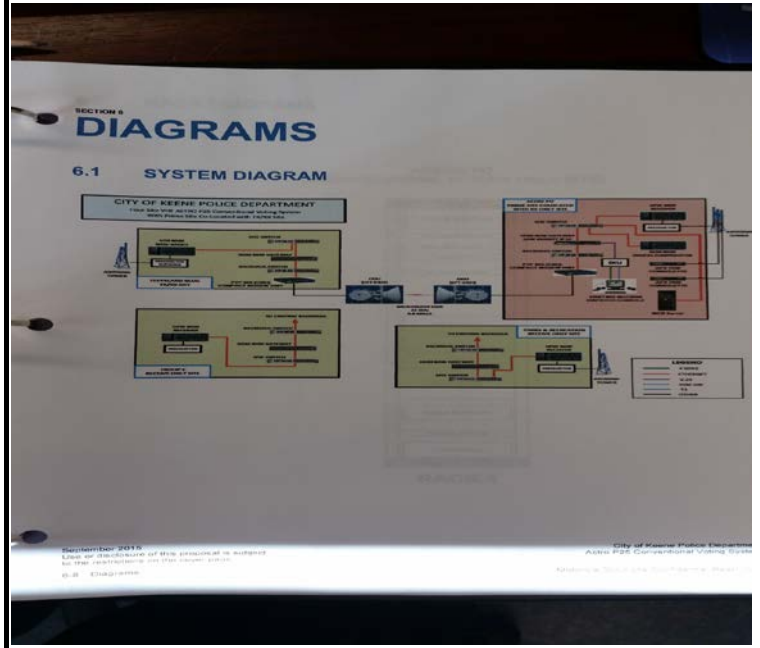
**PROJECT STATUS:** Re-introduced



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

**Project Name:** Communications System Replacement  
**Department:** Police  
**Physical Location:** 400 Marlboro Street (Main site)  
**Federal Mandate:** N/A  
**State Regulation or Law:** N/A  
**Master Plan (CMP) Focus Area:** Strong Citizenship and Proactive Leadership  
**CMP Vision/Strategy:** Emergency Preparedness  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** To upgrade the Police Department's entire fixed network communications system to current technology, and to provide appropriate backup communications systems; while meeting present and future FCC requirements.



## PROJECT DESCRIPTION/JUSTIFICATION

The Police Department's current communications system was installed in 2005 and has reached the end of its natural expected life cycle. While still operational many parts needed for repair are no longer manufactured and, at times, are obtained from unorthodox sources such as Ebay. Reliable communications are both an essential and foundational component to any emergency management operation. This project will bring the Police Department's communication technology to the latest in public safety communications, meeting present and future FCC requirements. It also provides a new "hot-standby" microwave link between police headquarters and our prime transmitter site that will be located at the Cleveland building. Additional sub-station sites will be located at the Troop 'C' New Hampshire State Police barracks and the Parks and Recreational building located at Monadnock View Cemetery.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition					352,932			352,932
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$352,932</b>	<b>\$0</b>	<b>\$0</b>	<b>\$352,932</b>
<b>FUNDING</b>								
Current Revenue								\$0
Capital Reserve								0
Debt Funded					352,932			352,932
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$352,932</b>	<b>\$0</b>	<b>\$0</b>	<b>\$352,932</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Create efficiencies  
Ongoing

**PROJECT STATUS:** New Project





# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

Project Name: **Portable Radios**  
 Department: **Police**  
 Physical Location: **400 Marlboro Street**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Strong Citizenship and Proactive Leadership**  
 CMP Vision/Strategy: **Emergency Preparedness**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **This communications portable radio project would replace portable radios that are used daily by Police personnel during emergency and non-emergency operations to manage incidents, request needed resources, and provide accountability and safety for our first responders.**



## PROJECT DESCRIPTION/JUSTIFICATION

As part of the New Hampshire Radio Interoperability Program all portable radios were replaced by grant funded radios in 2006. The units for Keene were delivered in 2006. This replacement program would allow us to maintain emergency preparedness and personnel safety by having units that are reliable and serviceable as needed for at least the next ten years. The Department currently operates and maintains sixty-three (63) portable radios. The goal would be to replace all units over a three year period unless grants or other funding becomes available to accelerate replacement.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition				53,144	79,716	79,716		212,576
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$53,144</b>	<b>\$79,716</b>	<b>\$79,716</b>	<b>\$0</b>	<b>\$212,576</b>
<b>FUNDING</b>								
Current Revenue				53,144	53,144	53,144		\$159,432
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$53,144</b>	<b>\$53,144</b>	<b>\$53,144</b>	<b>\$0</b>	<b>\$159,432</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:**

N/A

**PROJECT STATUS:**

New Project

CONSOLIDATED INFRASTRUCTURE REPORT								FY17	
STREET	Year	Rehab	Reconstruct	Sewer	Water	Drainage	Sidewalk	Curbing	Total
<b>FY 17 Detail</b>									
East Surry Road	2017	323,475							323,475
Meadow Road	2017	72,725							72,725
Mill Road	2017	15,478							15,478
Roxbury Road	2017	292,650							292,650
Water Street (Grove to Roxbury)	2017	265,000							265,000
Wood Street	2017	33,800							33,800
General Drainage Improvements	2017					41,200			41,200
General Sidewalk Improvements	2017						41,200		41,200
General Curbing Improvements	2017							41,200	41,200
Emerald Street Sidewalk	2017						143,650		143,650
Water- Glen Rd Pumps & Check Valves	2017				101,000				101,000
Perham Street Sewer Replacement	2017			685,341					685,341
<b>Detail: FY 2017 Projects</b>		1,003,128	0	685,341	101,000	41,200	184,850	41,200	2,056,719
<b>Contingency: - 10%</b>		100,313	0	68,534	10,100	4,120	18,485	4,120	205,672
<b>Subtotal</b>		<b>\$ 1,103,441</b>	<b>\$ -</b>	<b>\$ 753,876</b>	<b>\$ 111,100</b>	<b>\$ 45,320</b>	<b>\$ 203,335</b>	<b>\$ 45,320</b>	<b>\$ 2,262,391</b>
<b>Design: - 10%</b>			\$ -	\$ 75,388	\$ 11,110	\$ 4,532	\$ 20,334	\$ 4,532	\$ 115,895
<b>Construction Administration: - 10%</b>			\$ -	\$ 75,388	\$ 11,110	\$ 4,532	\$ 20,334	\$ 4,532	\$ 115,895
<b>SUPV. &amp; Overhead: - 1%</b>		\$ 11,034	\$ -	\$ 7,539	\$ 1,111	\$ 453	\$ 2,033	\$ 453	\$ 22,624
<b>Subtotal</b>		<b>\$ 11,034</b>	<b>\$ -</b>	<b>\$ 158,314</b>	<b>\$ 23,331</b>	<b>\$ 9,517</b>	<b>\$ 42,700</b>	<b>\$ 9,517</b>	<b>\$ 254,414</b>
<b>Project Total</b>		<b>\$ 1,114,475</b>	<b>\$ -</b>	<b>\$ 912,189</b>	<b>\$ 134,431</b>	<b>\$ 54,837</b>	<b>\$ 246,035</b>	<b>\$ 54,837</b>	<b>\$ 2,516,805</b>
<b>Inflation Adjustment 3 yrs x 3%/yr proj total</b>		<b>\$ 67,872</b>	<b>\$ -</b>	<b>\$ 55,552</b>	<b>\$ 12,465</b>	<b>\$ 5,085</b>	<b>\$ 22,814</b>	<b>\$ 5,085</b>	<b>\$ 168,873</b>
<b>Not Programmed (use of project balance)</b>									
<b>Program Funding Request: 2017</b>		<b>\$ 1,182,347</b>	<b>\$ -</b>	<b>\$ 967,741</b>	<b>\$ 146,896</b>	<b>\$ 59,922</b>	<b>\$ 268,849</b>	<b>\$ 59,922</b>	<b>\$ 2,685,678</b>

CONSOLIDATED INFRASTRUCTURE REPORT								FY18	
STREET	Year	Rehab	Reconstruct	Sewer	Water	Drainage	Sidewalk	Curbing	Total
<b>FY 18 Detail</b>									
Armory Street (North to end)	2018	61,700							61,700
Baker Street	2018	144,000							144,000
Crossfield Street	2018	20,000							20,000
Dunbar Street	2018	72,000							72,000
Harrison Street	2018	61,500							61,500
Jordan Road	2018	277,000							277,000
Wyman Road	2018	281,150							281,150
Willow Court	2018	17,000							17,000
Willow Street	2018	50,500							50,500
General Drainage Improvements	2018					41,200			41,200
General Sidewalk Improvements	2018						41,200		41,200
General Curbing Improvements-Granite	2018							41,200	41,200
To Be Determined	2018				261,941				261,941
To Be Determined	2018			97,260					97,260
<b>Detail: FY 2018 Projects</b>		984,850	-	97,260	261,941	41,200	41,200	41,200	1,467,651
<b>Contingency: - 10%</b>		98,485	-	9,726	26,194	4,120	4,120	4,120	146,765
<b>Subtotal</b>		<b>\$ 1,083,335</b>	<b>\$ -</b>	<b>\$ 106,986</b>	<b>\$ 288,135</b>	<b>\$ 45,320</b>	<b>\$ 45,320</b>	<b>\$ 45,320</b>	<b>\$ 1,614,416</b>
<b>Design: - 10%</b>		-	-	10,699	28,814	4,532	4,532	4,532	53,108
<b>Construction Administration: - 10%</b>		-	-	10,699	28,814	4,532	4,532	4,532	53,108
<b>SUPV. &amp; Overhead: - 1%</b>		10,833	-	1,070	2,881	453	453	453	16,144
<b>Subtotal</b>		<b>\$ 10,833</b>	<b>\$ -</b>	<b>\$ 22,467</b>	<b>\$ 60,508</b>	<b>\$ 9,517</b>	<b>\$ 9,517</b>	<b>\$ 9,517</b>	<b>\$ 122,360</b>
<b>Project Total</b>		<b>\$ 1,094,168</b>	<b>\$ -</b>	<b>\$ 129,453</b>	<b>\$ 348,643</b>	<b>\$ 54,837</b>	<b>\$ 54,837</b>	<b>\$ 54,837</b>	<b>\$ 1,736,776</b>
<b>Inflation Adjustment 3%/yr x 4 yrs</b>		101,459	-	16,247	43,758	6,883	6,883	6,883	182,112
<b>Not Programmed (use of project balance)</b>									
<b>Program Funding Request: 2018</b>		<b>\$ 1,195,627</b>	<b>\$ -</b>	<b>\$ 145,700</b>	<b>\$ 392,401</b>	<b>\$ 61,720</b>	<b>\$ 61,720</b>	<b>\$ 61,720</b>	<b>\$ 1,918,888</b>

CONSOLIDATED INFRASTRUCTURE REPORT								FY19	
STREET	Year	Rehab	Reconstruct	Sewer	Water	Drainage	Sidewalk	Curbing	Total
<b>FY 19 Detail</b>									
Bridge Court	2019	\$ 10,146							\$ 10,146
Carpenter Street	2019	44,054							44,054
Ellis Court (Wright to Woodbury)	2019	27,000							27,000
Fowler Street	2019	23,789							23,789
Gilsum Street (North to end)	2019	125,000							125,000
Gunn Road	2019	193,854							193,854
Harmony Lane	2019	13,752							13,752
Kingsbury Street	2019	20,250							20,250
North Street (Elm to Gilsum)	2019	93,000							93,000
Perham Street	2019	11,200							11,200
Red Oak Drive	2019	83,000							83,000
Richardson Court	2019	10,986							10,986
Valley Street	2019	48,459							48,459
Village Drive	2019	56,121							56,121
Woodburn Street	2019	27,918							27,918
Woodbury Street	2019	164,000							164,000
Wright Street	2019	28,000							28,000
General Drainage Improvements	2019					41,200			41,200
General Sidewalk Improvements	2019						41,200		41,200
General Curbing Improvements	2019							41,200	41,200
Sewer Replacement - To Be Determined	2019			94,141					94,141
Water Replacement - To Be determined	2019				257,500				257,500
<b>Detail: FY 2019 Projects</b>		980,529	-	94,141	257,500	41,200	41,200	41,200	1,455,770
<b>Contingency: - 10%</b>		98,053	-	9,414	25,750	4,120	4,120	4,120	145,577
<b>Subtotal</b>		<b>\$ 1,078,582</b>	<b>\$ -</b>	<b>\$ 103,555</b>	<b>\$ 283,250</b>	<b>\$ 45,320</b>	<b>\$ 45,320</b>	<b>\$ 45,320</b>	<b>\$ 1,601,347</b>
<b>Design: - 10%</b>		-	-	10,356	28,325	4,532	4,532	4,532	52,277
<b>Construction Administration: - 10%</b>		-	-	10,356	28,325	4,532	4,532	4,532	52,277
<b>SUPV. &amp; Overhead: - 1%</b>		10,786	-	1,036	2,833	453	453	453	16,013
<b>Subtotal</b>		<b>\$ 10,786</b>	<b>\$ -</b>	<b>\$ 21,747</b>	<b>\$ 59,483</b>	<b>\$ 9,517</b>	<b>\$ 9,517</b>	<b>\$ 9,517</b>	<b>\$ 120,566</b>
<b>Project Total</b>		<b>\$ 1,089,367</b>	<b>\$ -</b>	<b>\$ 125,302</b>	<b>\$ 342,733</b>	<b>\$ 54,837</b>	<b>\$ 54,837</b>	<b>\$ 54,837</b>	<b>\$ 1,721,913</b>
<b>Inflation Adjustment 3%/yr x 5 yrs</b>		173,508	-	19,957	54,588	8,734	8,734	8,734	274,256
<b>Not Programmed (use of project balance)</b>									
<b>Program Funding Request: 2019</b>		<b>\$ 1,262,875</b>	<b>\$ -</b>	<b>\$ 145,259</b>	<b>\$ 397,321</b>	<b>\$ 63,571</b>	<b>\$ 63,571</b>	<b>\$ 63,571</b>	<b>\$ 1,996,169</b>

CONSOLIDATED INFRASTRUCTURE REPORT								FY20	
STREET	Year	Rehab	Reconstruct	Sewer	Water	Drainage	Sidewalk	Curbing	Total
<b>FY 20 Detail</b>									
Adams Court	2020	\$ 9,321							\$ 9,321
Adams Street	2020	68,492							68,492
Avalon Place	2020	15,450							15,450
Elliot Street	2020	29,307							29,307
Gates Street	2020	21,946							21,946
Main Street (Rte 101 to Marlborough St)	2020	412,000							412,000
Moore Farm Road	2020	30,900							30,900
No Name Road	2020	15,450							15,450
Proctor Court	2020	20,600							20,600
South Street	2020	25,103							25,103
Arch Street - (Park to Hurricane)	2020	257,500							257,500
Sullivan Road (Rte 9 to town line)	2020	89,237							89,237
River Street	2020	66,893							66,893
General Drainage Improvements	2020					41,200			41,200
General Sidewalk Improvements	2020						41,200		41,200
General Curbing	2020							41,200	41,200
Sewer Replacement - Blossom Street	2020			416,100					416,100
Water Replacement - To Be Determined	2020				257,500				257,500
<b>Detail: FY 2020 Projects</b>		1,062,199	-	416,100	257,500	41,200	41,200	41,200	1,859,399
<b>Contingency: - 10%</b>		106,220	-	41,610	25,750	4,120	4,120	4,120	185,940
<b>Subtotal</b>		<b>\$ 1,168,419</b>	<b>\$ -</b>	<b>\$ 457,710</b>	<b>\$ 283,250</b>	<b>\$ 45,320</b>	<b>\$ 45,320</b>	<b>\$ 45,320</b>	<b>\$ 2,045,339</b>
<b>Design: - 10%</b>		-	-	45,771	28,325	4,532	4,532	4,532	87,692
<b>Construction Administration: - 10%</b>		-	-	45,771	28,325	4,532	4,532	4,532	87,692
<b>SUPV. &amp; Overhead: - 1%</b>		11,684	-	4,577	2,833	453	453	453	20,453
<b>Subtotal</b>		<b>\$ 11,684</b>	<b>\$ -</b>	<b>\$ 96,119</b>	<b>\$ 59,483</b>	<b>\$ 9,517</b>	<b>\$ 9,517</b>	<b>\$ 9,517</b>	<b>\$ 195,837</b>
<b>Project Total</b>		<b>\$ 1,180,103</b>	<b>\$ -</b>	<b>\$ 553,829</b>	<b>\$ 342,733</b>	<b>\$ 54,837</b>	<b>\$ 54,837</b>	<b>\$ 54,837</b>	<b>\$ 2,241,176</b>
<b>Inflation Adjustment 3%/yr x 6 yrs</b>		229,002	-	107,472	66,508	10,641	10,641	10,641	434,905
<b>Not Programmed (use of project balance)</b>									
<b>Program Funding Request: 2020</b>		<b>\$ 1,409,105</b>	<b>\$ -</b>	<b>\$ 661,301</b>	<b>\$ 409,241</b>	<b>\$ 65,478</b>	<b>\$ 65,478</b>	<b>\$ 65,478</b>	<b>\$ 2,676,082</b>

CONSOLIDATED INFRASTRUCTURE REPORT								FY21	
STREET	Year	Rehab	Reconstruct	Sewer	Water	Drainage	Sidewalk	Curbing	Total
<b>FY 21 Detail</b>									
Cady Street	2021	\$ 25,750							\$ 25,750
Cobb Street	2021	15,450							15,450.00
Concord Road	2021	258,530							258,530.00
Hooper Street	2021	26,533							26,532.80
Lamson Street	2021	26,790							26,790.30
Martin Street	2021	33,086							33,085.66
Park Avenue	2021	389,340							389,340.00
Salsbury Road	2021	54,739							54,739.35
School Street (West to Emerald)	2021	46,350							46,350.00
Speaker Street	2021	20,600							20,600.00
St. James Street	2021	46,350							46,350.00
General Drainage Improvements	2021					42,000			42,000.00
General Sidewalk Improvements	2021						42,000		42,000.00
General Curbing Improvements	2021							42,000	42,000.00
Sewer Replacement - Colony Court	2021			889,155					889,154.65
Water Replacement - To Be Determined	2021				257,500				257,500.00
<b>Detail: FY 2021 Projects</b>		943,518	-	889,155	257,500	42,000	42,000	42,000	2,216,173
<b>Contingency: - 10%</b>		94,352	-	88,915	25,750	4,200	4,200	4,200	221,617
<b>Subtotal</b>		<b>\$ 1,037,870</b>	<b>\$ -</b>	<b>\$ 978,070</b>	<b>\$ 283,250</b>	<b>\$ 46,200</b>	<b>\$ 46,200</b>	<b>\$ 46,200</b>	<b>\$ 2,437,790</b>
<b>Design: - 10%</b>			-	97,807	28,325	4,620	4,620	4,620	139,992
<b>Construction Administration: - 10%</b>			-	97,807	28,325	4,620	4,620	4,620	139,992
<b>SUPV. &amp; Overhead: - 1%</b>		10,379	-	9,781	2,833	462	462	462	24,378
<b>Subtotal</b>		<b>\$ 10,379</b>	<b>\$ -</b>	<b>\$ 205,395</b>	<b>\$ 59,483</b>	<b>\$ 9,702</b>	<b>\$ 9,702</b>	<b>\$ 9,702</b>	<b>\$ 304,362</b>
<b>Project Total</b>		<b>\$ 1,048,249</b>	<b>\$ -</b>	<b>\$ 1,183,465</b>	<b>\$ 342,733</b>	<b>\$ 55,902</b>	<b>\$ 55,902</b>	<b>\$ 55,902</b>	<b>\$ 2,742,152</b>
<b>Inflation adjustment 3%/yr x 7 yrs</b>		240,965	-	272,048	78,785	12,850	12,850	12,850	630,349
<b>Not Programmed (use of project balance)</b>									
<b>Program Funding Request: 2021</b>		<b>\$ 1,289,214</b>	<b>\$ -</b>	<b>\$ 1,455,512</b>	<b>\$ 421,518</b>	<b>\$ 68,752</b>	<b>\$ 68,752</b>	<b>\$ 68,752</b>	<b>\$ 3,372,501</b>

CONSOLIDATED INFRASTRUCTURE REPORT								FY22	
STREET	Year	Rehab	Reconstruct	Sewer	Water	Drainage	Sidewalk	Curbing	Total
<b>FY 22 Detail</b>									
Chapman Road	2022	\$ 97,462							\$ 97,462
Old Walpole Road	2022	92,416							92,416
Darling Road	2022	151,128							151,128
Dickinson Road	2022	124,137							124,137
Meetinghouse Road	2022	91,473							91,473
Timberlane Drive	2022	130,865							130,865
TBD	2022	350,000							350,000
General Drainage Improvements	2022					42,000			42,000
General Sidewalk Improvements	2022						42,000		42,000
General Curbing Improvements	2022							42,000	42,000
Sewer Replacement	2022			250,000					250,000
Water Replacement - To Be Determined	2022				265,225				265,225
<b>Detail: FY 2022 Projects</b>		1,037,480	-	250,000	265,225	42,000	42,000	42,000	1,678,705
<b>Contingency: - 10%</b>		103,748	-	25,000	26,523	4,200	4,200	4,200	167,870
<b>Subtotal</b>		<b>\$ 1,141,228</b>	<b>\$ -</b>	<b>\$ 275,000</b>	<b>\$ 291,748</b>	<b>\$ 46,200</b>	<b>\$ 46,200</b>	<b>\$ 46,200</b>	<b>\$ 1,846,575</b>
<b>Design: - 10%</b>			-	27,500	29,175	4,620	4,620	4,620	70,535
<b>Construction Administration: - 10%</b>			-	27,500	29,175	4,620	4,620	4,620	70,535
<b>SUPV. &amp; Overhead: - 1%</b>		11,412	-	2,750	2,917	462	462	462	18,466
<b>Subtotal</b>		<b>\$ 11,412</b>	<b>\$ -</b>	<b>\$ 57,750</b>	<b>\$ 61,267</b>	<b>\$ 9,702</b>	<b>\$ 9,702</b>	<b>\$ 9,702</b>	<b>\$ 159,535</b>
<b>Project Total</b>		<b>\$ 1,152,640</b>	<b>\$ -</b>	<b>\$ 332,750</b>	<b>\$ 353,014</b>	<b>\$ 55,902</b>	<b>\$ 55,902</b>	<b>\$ 55,902</b>	<b>\$ 2,006,110</b>
<b>Inflation adjustment 3%/yr x 7 yrs</b>		264,962	-	76,491	81,149	14,913	14,913	14,913	535,170
<b>Not Programmed (use of project balance)</b>									
<b>Program Funding Request: 2022</b>		<b>\$ 1,417,602</b>	<b>\$ -</b>	<b>\$ 409,241</b>	<b>\$ 434,163</b>	<b>\$ 70,815</b>	<b>\$ 70,815</b>	<b>\$ 70,815</b>	<b>\$ 2,473,450</b>



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

**Project Name:** Capital Reserve Transportation Improvements  
**Department:** Public Works - General Fund  
**Physical Location:** Various  
**Federal Mandate:** NO  
**State Regulation or Law:**  
**Master Plan (CMP) Focus Area:** Vibrant Economy  
**CMP Vision/Strategy:** Municipal Governance & Financial Stability  
**Council Initiative:** Resolution  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:**



## PROJECT DESCRIPTION/JUSTIFICATION

This Capital Reserve was established by City Council on December 18, 2014, by way of Resolution R-2014-34 based on RSA 261:153, VI. The Capital Reserve allows the City to fund, wholly or in part improvements in the City's transportation system. Improvements to the system will included roads, bridges, bicycle and pedestrain facilities, and intermodal facilities. This Capital Reserve will be funded in part by the \$5 surcharge on motor vehicle registrations. The funds may also be used for engineering, right of way acquisition, and construction costs of transportation facilities. It may also be used as a source for matching funds for state and federal funds allocated for transportation projects.

- FY17 - Emerald Street Sidewalk, Marlboro Street Design, and Jonathan Daniels Trail Study
- FY19 - Marlboro Street Improvements
- FY22 - State By Pass Projects, Victoria Street Extension Design

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design		45,000					72,773	117,773
Construction/Implementation		130,000		171,017			222,000	523,017
Property/Equip. Acquisition								
<b>TOTAL</b>	<b>\$0</b>	<b>\$175,000</b>	<b>\$0</b>	<b>\$171,017</b>	<b>\$0</b>	<b>\$0</b>	<b>\$294,773</b>	<b>\$640,790</b>
<b>FUNDING</b>								
Current Revenue	75,313	100,000	100,000	100,000	100,000	100,000	100,000	675,313
Capital Reserve								
Debt Funded								
Federal or State Grants								
Other Sources		438	252	503	326	577	92	2,188
<b>TOTAL</b>	<b>\$75,313</b>	<b>\$100,438</b>	<b>\$100,252</b>	<b>\$100,503</b>	<b>\$100,326</b>	<b>\$100,577</b>	<b>\$100,092</b>	<b>\$677,501</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Reduce - will generate revenue

**PROJECT STATUS:** New Project



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **560 Main Street Assessment**  
 Department: **Public Works - General Fund**  
 Physical Location: **560 Main Street**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **N/A**  
 CMP Vision/Strategy: **Economic Development**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective:



### PROJECT DESCRIPTION/JUSTIFICATION

Until about 1976 560 Main Street was the site of a number of waste disposal activities. The presence of polychlorinated biphenyl compounds (PCBs) and chlorinated solvents in the soil at the liquid disposal area defines this area as a hazardous waste site. Work performed in 2012 and 2013 helped delineate the three dimensional footprints of contamination. The prior year project funds provided for the creation of a remedial action plan (RAP) and the development of a preliminary cost estimate for the remediation of approximately 100,000 tons of material. The final cost of remediation will be determined after the RAP is complete and the City Council determines an ultimate goal for the site. Funds previously appropriated included funds for a thorough characterization of the limits and concentration of the soil contamination that can reduce the remediation area and its associated cost. The FY19 estimate is based on the treatment and removal of approximately 100,000 tons of soil.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design	65,000							65,000
Construction/Implementation				1,000,000				1,000,000
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$65,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,000,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,065,000</b>
<b>FUNDING</b>								
Current Revenue	65,000							65,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources				1,000,000				1,000,000
<b>TOTAL</b>	<b>\$65,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,000,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,065,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** No impact  
One time

**PROJECT STATUS:** Re-introduced

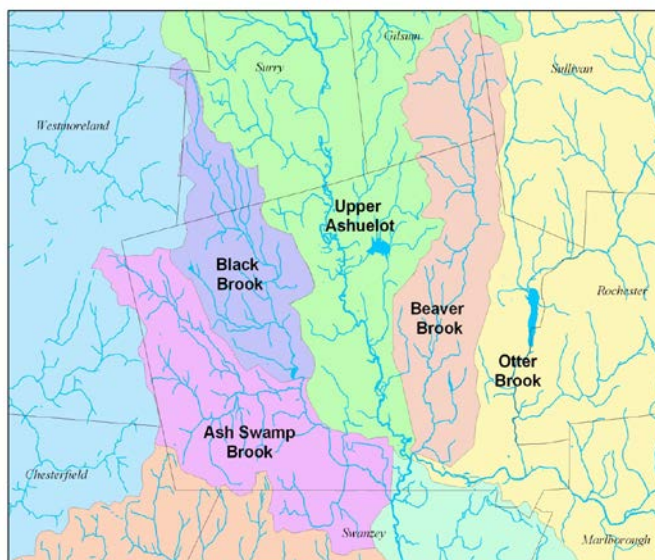


# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

**Project Name:** Flood Management - Beaver Brook  
**Department:** Hydrologic and Hydraulic Analysis  
**Physical Location:** Public Works - General Fund  
**Federal Mandate:** Various  
**State Regulation or Law:** N/A  
**Master Plan (CMP) Focus Area:** Quality Built Environment  
**CMP Vision/Strategy:** Infrastructure  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** Yes



### PROJECT DESCRIPTION/JUSTIFICATION

The Beaver Brook flows along the east side of the City through neighborhoods and then downtown to the Ashuelot River. This brook has a long history of leaving its banks and causing significant flood damage. In 2005, 2012, and 2013 significant areas of the City along the brook were impacted with flood waters. The City is also experiencing impacts from climate changes with more intense and more frequent rain events that are impacting the Beaver Brook watershed. This project would perform a hydrologic and hydraulic analysis of the Beaver Brook watershed for various storm events (5, 10, 50, 100, and 500 year). The City would use the latest rain data look forward to assist in mitigating climate change impacts. This project would allow the City to develop a master plan of longer strategies, including: the creation of flood water storage areas; identify obstructions that need to be removed; or upgrade properties that could be considered for flood proofing or removal to address flooding, along with supporting a number of "high priority projects" in the City's 2013 Hazard Mitigation Plan.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design			150,000					150,000
Construction/Implementation								0
Property/Equip. Acquisition								0
<b>TOTAL</b>	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$150,000
<b>FUNDING</b>								
Current Revenue			150,000					150,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$150,000

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** No impact Ongoing
 **PROJECT STATUS:** Ongoing CIP

## Bridge Rehabilitation and Replacement Program

The City is responsible for thirty-two (32) active bridges which provide critical transportation links through out the City. The bridges range in age from 2 to 93 years old. The New Hampshire Department of Transportation (NHDOT) inspects these bridges on a bi-annual basis. Bridges are broken down and each bridge subsystem (deck, superstructure, substructure, railing, approaches, etc.) are reviewed and their condition is rated. The ratings ranges from 9 – Excellent Condition to 1 – Imminent Failure. Bridges that are identified with significant deficiencies (ratings of 5 or less) are classified as “Red Listed” and inspected annually. The type of deficiencies on City bridges range from insufficient lane width to the deterioration of deck surfaces and supporting members. The City has 14 bridges that are on the State’s Red List and are listed below:

Baker Street over Beaver Brook	Harrison Street over Beaver Brook*
Main Street/Rte. 12 over Beaver Brook	Winchester Street/Rte.10 over Ash Swamp Brook
Roxbury Street over Beaver Brook	Maple Avenue over Black Brook
Island Street over Ashuelot River	Beaver Street over Beaver Brook
George Street over Beaver Brook	Church Street over Beaver Brook
Spring Street over Beaver Brook	Whitcomb Mills Road over White Brook
Summit Road over Black Brook	Ferry Brook Road over Ferry Brook

Note: \*City Council, on February 18, 2010, voted to close the Harrison Street Bridge when Railroad Street was discontinued.

City bridge projects are eligible to participate in the State’s Municipal Bridge Aid Program. This program shares the cost of bridge repair/replacement between the community and the State with 80% of the funding from the State and 20% from the City. To be considered for funding in the program the City must indicate that it has appropriated its 20% share.

To prioritize the City’s Red Listed Bridges the City Engineer uses the condition assessment, the type of deficiencies, the amount of traffic that uses the bridge, the impacts if weight restrictions or closure occurs, and if there is a reasonable way around the bridge. The Main Street/Rte. 12 and Winchester Street/Rte. 10 bridges both have over 20,000 vehicles per day crossing them with no easy detours and if weight restriction or closure occurred on either of these bridges there would be significant economic and social impacts to the City and the region. For these reason these two bridges are at the top for repair/replacement. The next priority bridges include the Island Street Bridge over the Ashuelot River; Roxbury Street and Beaver Street over Beaver Brook, and the Maple Avenue bridge .

The proposed plan to address the top priority bridges is as follows.

**Main Street/Rte. 12** The City had previously appropriated \$330K. In 2013, NHDOT approved the transfer of previously approved funds of \$61K for the Spring Street bridge over the Beaver Brook to the Main Street bridge for a total of \$391K. Preliminary assessment of this bridge indicates that the bridge cannot be rehabilitated because it cannot handle a 50-year storm event without surcharging/backing up water in the Beaver Brook. The estimated replacement cost is approximately \$1.9M. Design has started on this bridge replacement project with construction tentatively planned for calendar year 2016.

**Winchester Street/Rte. 10** This bridge’s rehabilitation cost, including bridge widening and a temporary construction phase bypass bridge, is \$580K. The City had previously appropriated \$213K. NHDOT has approved the transfer of previously approved state funding of \$360K from the Church Street bridge to the Winchester Street bridge. Design is scheduled to start in late calendar 2015. Construction is tentatively planned for calendar year 2017.-

**Roxbury Street** The estimated bridge replacement cost is \$920K requiring a local match of \$184K. The City has previously appropriated \$134K. This bridge is programmed in the States’ proposed 2017-2026 TIP for FY18. To have sufficient funds for the implementation available in FY18 funds designated for the East Surry Road Bridge will be reprogrammed. The East Surry Road Bridge was reconstructed as part of the City’s May 2012 flood response receiving FEMA funds. Design in FY18 with Construction in FY19.

**Maple Avenue** The estimated replacement cost is \$650K. The City Council authorized \$130K in FY15 for the City’s 20% match which will allow the City to request consideration for State Municipal Bridge Aid for this project in the 2019-2028 TIP.

**Beaver Street** The estimated replacement cost is \$460K. The City previously appropriated \$92K for the City’s 20% match which will allow the City to request consideration for State Municipal Bridge Aid for this project in the 2019-2028 TIP. .

**Island Street** The bridge is scheduled to be replaced as part of the Winchester Street Upgrade Project (10309B) programmed for construction in FY19 and FY20. Funding of the city’s share of this bridge replacement is included in the Keene-Swanzey Bypass CIP project.

**George Street** The State has accepted this bridge into the State Aid Program in FY2021 (proposed 2017-2026 Ten Year Plan, Draft, Aug 2015).





# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Bridge Repair/Replacement**  
 Department: **Public Works - General Fund**  
 Physical Location: **Various**  
 Federal Mandate: **NO**  
 State Regulation or Law: **NO**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **Policy**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **YES**



### PROJECT DESCRIPTION/JUSTIFICATION

This project provides funding for the City's bridge repair and replacement program. The City participates in the State's Municipal Bridge Aide Program through the New Hampshire Department of Transportation (NHDOT). The program provides 80% State funding with a local 20% match. For consideration in the program the City must indicate that it has appropriated the local match.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design			138,000			136,113		274,113
Construction/Implementation	617,660			1,362,000			646,537	2,626,197
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$617,660</b>	<b>\$0</b>	<b>\$138,000</b>	<b>\$1,362,000</b>	<b>\$0</b>	<b>\$136,113</b>	<b>\$646,537</b>	<b>\$2,900,310</b>
<b>FUNDING</b>								
Current Revenue	123,352							123,352
Capital Reserve								0
Debt Funded								0
Federal or State Grants	494,128		110,400	1,089,600	0	108,890	517,230	2,320,248
Other Sources			27,600	272,400	0	27,223	129,307	456,530
<b>TOTAL</b>	<b>\$617,480</b>	<b>\$0</b>	<b>\$138,000</b>	<b>\$1,362,000</b>	<b>\$0</b>	<b>\$136,113</b>	<b>\$646,537</b>	<b>\$2,900,130</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
Ongoing

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Castle Street Rehabilitation**  
 Department: **Public Works - General Fund**  
 Physical Location: **Castle Street**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **N/A**  
 CMP Vision/Strategy: **N/A**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective:



### PROJECT DESCRIPTION/JUSTIFICATION

Castle Street from Ashuelot Street is bordered by facilities owned by the Keene Housing Authority. Castle Street is in poor shape. Keene Housing Authority has funding available to upgrade sidewalk, curbing, and safety improvements to the Street. Keene Housing Authority has requested to partner with the City to perform the repairs with the City being responsible for street repairs.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation		224,390						224,390
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$224,390</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$224,390</b>
<b>FUNDING</b>								
Current Revenue								\$0
Capital Reserve								0
Debt Funded		114,390						114,390
Federal or State Grants								0
Other Sources		100,000						100,000
<b>TOTAL</b>	<b>\$0</b>	<b>\$214,390</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$214,390</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Minimal \$5,001 to \$25,000  
N/A

**PROJECT STATUS:** New Project



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Curb Installation**  
 Department: **Public Works - General Fund**  
 Physical Location: **Various**  
 Federal Mandate: **NO**  
 State Regulation or Law: **NO**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **Policy**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **YES**



### PROJECT DESCRIPTION/JUSTIFICATION

This project provides for the repair and or replacement of curbing in various locations throughout the City. It includes the installation of bituminous curbing or granite curbing as part of City roadway rehabilitation and reconstruction projects. Projects will be designed when appropriate, with in-house staff. Project construction costs have been set at \$41,200 for curbing plus 10% contingencies, 10% in engineering design, 10% in construction engineering, 1% overhead costs and annual 3% inflation adjustments.

Granite curbing will be installed on complete street reconstruction projects. The City has adopted granite as the standard material for all new curb installation (Section 70-126 of the City Code Granite type A curbs shall be required on the public ways of all new developments and in conjunction with the replacement of existing sidewalks and curbs in the commerce, central business, industrial and medium and high density residential zones.). Granite curb is more costly than alternatives (e.g. asphalt), however has a longer life expectancy. Bituminous curbing will be installed on roadway rehabilitation projects where existing bituminous curbing has deteriorated and requires replacement. FY 17 will provide for curbing repairs/replacement on Water Street.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation		59,922	61,720	63,571	65,478	68,752	70,815	390,258
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$59,922</b>	<b>\$61,720</b>	<b>\$63,571</b>	<b>\$65,478</b>	<b>\$68,752</b>	<b>\$70,815</b>	<b>\$390,258</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve								0
Debt Funded		59,922	61,720	63,571	65,478	68,752	70,815	390,258
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$59,922</b>	<b>\$61,720</b>	<b>\$63,571</b>	<b>\$65,478</b>	<b>\$68,752</b>	<b>\$70,815</b>	<b>\$390,258</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
N/A

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Downtown Revitalization**  
 Department: **Public Works - General Fund**  
 Physical Location: **560 Main Street**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Economic Development**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective:



### PROJECT DESCRIPTION/JUSTIFICATION

The last major downtown revitalization occurred in 1988. Since that revitalization, Keene's downtown has become an economic engine for the community and represents the spirit and place of Keene. To keep the downtown vibrant and relevant, it is important to continue investing in downtown. As downtown has expanded in the Railroad Square area and is projected to expand on Roxbury Street and Gilbo Avenue the "downtown treatment" needs to be considered in the expanding downtown. This project contemplates engaging a consultant to assess function, aesthetics, and infrastructure needs to provide community decision makers with options and alternatives to meet the needs of the citizens and visitors to Keene. The consultant will meet with key City staff as well as hold several public forums to obtain input on the myriad of issues that will need to be considered prior to moving toward a design phase.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design		45,000	30,000					75,000
Construction/Implementation								0
Property/Equip. Acquisition								0
TOTAL	\$0	\$45,000	\$30,000	\$0	\$0	\$0	\$0	\$75,000
<b>FUNDING</b>								
Current Revenue		45,000	30,000					75,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$45,000	\$30,000	\$0	\$0	\$0	\$0	\$75,000

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Moderate \$50,001 to \$100,000 Multi-year      **PROJECT STATUS:** New Project

**FLOOD MANAGEMENT PROJECTS**

<b>PROJECT</b>	<b>DESCRIPTION</b>	<b>OBJECTIVE</b>	<b>FY</b>	<b>CONSTRUCTION COST</b>
<b>Winchester Street-Madison-Ashcroft</b>	Replace existing drainlines starting at Winchester Street at Ralston Street, down.	Managed increase flow, replaced undersized mains, reducing localized flooding.	18	\$900,000.00
<b>Roxbury Street</b>	Construct 60" drain line from Beaver Brook to existing 48" drain. Construct 36" drain from existing 48" drain to Town Brook outlet. Replaces the existing 36" brick arch on Roxbury Street	Manage increased flow and reduce localized street flooding in the Vernon Street / Elm Street area Manage increased flow in system and reduce localized street flooding in the Church St., Roxbury St. area. Phase 1 of several phases in this area	20	\$861,380.00
<b>Church Street</b>	Construct 48" drain line from Church Street to Beaver Brook - Supplements existing 30" tile drain	Manage increased runoff and improve flows and reduce localized street flooding on Court Street and side Streets from Central Square to Mechanic Street.	22	\$259,325.00
<b>Central Square</b>	Construct 30" drain from Court Street thru Central Square, down Roxbury Street to the Town Brook outlet	Manage increased runoff and improve flows and reduce localized street flooding of Main Street	22	\$191,455.00
<b>Main Street</b>	Replaces existing 12" tile drain Construct 24" drain on Main Street from Eagle Court to Water Street Replaces existing 8" tile drain	Manage increased runoff, improve flows and to reduce localized street flooding in the Church Street, Roxbury Street area Phase 2 of several phases in this area	24	\$126,600.00
<b>Church Street / Probate Street</b>	Construct 36" drain line, Church Street from Carpenter Street to Probate Street, Probate Street to Roxbury Street Replaces existing 12" tile line	Manage increased runoff, improve flows and reduce localized street flooding in the Church Street, Roxbury Street area. Phase 3 of several phases in this area	26	\$712,500.00
<b>Edwards Street</b>	Construct 30" drain line form Church Street to Roxbury Street Replaces existing 12" tile drain	To reduce drainage issues to properties, west and down gradient, of Charles Street	26	\$300,000.00
<b>Charles Street</b>	Extend drainage line from George Street to low area on Charles Street	Replace existing deteriorated and failing pipe	26	\$100,000.00
<b>Key Road</b>	Replace existing 48" CMP drain pipe crossing Key Road			\$120,000.00
<b>CONSTRUCTION TOTAL</b>				<b>\$3,571,260.00</b>



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

Project Name: **Flood Management Projects**  
 Department: **Public Works - General Fund**  
 Physical Location: **Various**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Yes**



## PROJECT DESCRIPTION/JUSTIFICATION

The City has experienced a change in its weather patterns. Severe weather events are occurring on a higher frequency. In particular the City is experiencing rainfall events that are of short duration but very intense precipitations. The City's storm water system has been constructed over the last 100 years with different design standards. As a result of these more intense rain events, the City's storm water system is not effectively handling the resulting flows. This is causing localized repetitive street flooding which is impacting the community and individual properties. The City is addressing the changing climate and its impacts through a series of short term and long term goals. These include on-going maintenance and inspection of the storm water system, identification of small improvements, and watershed analysis. The City has identified areas that have repetitive localized flooding issues.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design			135,000		129,207		115,476	379,683
Construction/Implementation			765,000		732,173		461,904	1,959,077
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$900,000	\$0	\$861,380	\$0	\$577,380	\$2,338,760
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve								0
Debt Funded			900,000		861,380		577,380	2,338,760
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$900,000	\$0	\$861,380	\$0	\$577,380	\$2,338,760

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:**

Moderate \$50,001 to \$100,000  
Ongoing

**PROJECT STATUS:**

Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Goose Pond Dam**  
 Department: **Public Works - General Fund**  
 Physical Location: **Goose Pond**  
 Federal Mandate: **NO**  
 State Regulation or Law: **YES**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Healthy Living**  
 Council Initiative: **Policy**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **YES**



### PROJECT DESCRIPTION/JUSTIFICATION

This project began in FY11 with funds to complete a Dam Master Plan for all City dams including the 1868-era Goose Pond Dam and Berm. The Dam Master Plan addresses concerns expressed in Letters of Deficiencies (LOD) from NH Department of Environmental Services related to this dam's inoperable outlet drain and embankments (berm) requiring the City to submit a plan to address these deficiencies. The Goose Pond Dam structure, which includes its berm, are classified as "high hazard" indicating that their failure could result in the loss of life downstream. Because the dam and berm provide a significant recreation benefit, it is also in the City's interest to evaluate and strengthen them.

The project includes funding for additional evaluation, design, and permitting of improvements in FY17. Construction is proposed for FY19. The estimated cost of improvements recommended in the FY11 Dam Master Plan to respond to the LOD, were \$715,000 (2012 cost) and have been adjusted with a 3% per year inflation factor to the date projected for construction.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design		106,389						106,389
Construction/Implementation				879,400				879,400
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$106,389</b>	<b>\$0</b>	<b>\$879,400</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$985,789</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve								0
Debt Funded		106,389		879,400				985,789
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$106,389</b>	<b>\$0</b>	<b>\$879,400</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$985,789</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Minimal \$5,001 to \$50,000  
One time

**PROJECT STATUS:** Ongoing CIP

**ROAD OVERLAY & RECONSTRUCTION LIST**

2017		2018		2019	
OVERLAY	EST. COST	OVERLAY	EST. COST	OVERLAY	EST. COST
East Surry Road	\$ 323,475	Armory Street (North to end)	\$ 61,700	Bridge Court	\$ 10,146
Meadow Road	72,725	Baker Street	144,000	Carpenter Street	44,054
Mill Road	15,478	Crossfield Street	20,000	Ellis Court (Wright to Woodbury)	27,000
Roxbury Road	292,650	Dunbar Street	72,000	Fowler Street	23,789
Water Street (Grove to Roxbury)	265,000	Harrison Street	61,500	Gilsum Street (North to end)	125,000
Wood Street	33,800	Jordan Road	277,000	Gunn Road	193,854
		Wyman Road	281,150	Harmony Lane	13,752
		Willow Court	17,000	Kingsbury Street	20,250
		Willow Street	50,500	North Street (Elm to Gilsum)	93,000
				Perham Street	11,200
				Red Oak Drive	83,000
				Richardson Court	10,986
				Valley Street	48,459
				Village Drive	56,121
				Woodburn Street	27,918
				Woodbury Street	164,000
				Wright Street	28,000
Sub Total	\$ 1,003,128	Sub Total	\$ 984,850	Sub Total	\$ 980,529
Contingency - 10%	\$ 100,313	Contingency - 10%	\$ 98,485	Contingency - 10%	\$ 98,053
Construction Totals	\$ 1,103,441	Construction Totals	\$ 1,083,335	Construction Totals	\$ 1,078,582
Design, Const, S&OH	\$ 11,034	Design, Const, S&OH	\$ 10,833	Design, Const, S&OH	\$ 10,786
Inflation Factor: 3% / year	\$ 67,872	Inflation Factor: 3% / year	\$ 101,459	Inflation Factor: 3% / year	\$ 173,508
<b>Total Overlay</b>	<b>\$ 1,182,347</b>	<b>Total Overlay</b>	<b>\$ 1,195,627</b>	<b>Total Overlay</b>	<b>\$ 1,262,876</b>

2017		2018		2019	
RECONSTRUCT	EST. COST	RECONSTRUCT	EST. COST	RECONSTRUCT	EST. COST
Subtotal	\$0	Subtotal	\$0	Subtotal	\$0
Construction Contingency: 10%	\$0	Construction Contingency: 10%	\$0	Construction Contingency: 10%	\$0
Construction Totals	\$0	Construction Totals	\$0	Construction Totals	\$0
Design 10%, Const 10%, S&OH 1%	\$0	Design 10%, Const 10%, S&OH	\$0	Design 10%, Const 10%, S&OH 1%	\$0
Inflation Factor: 3 % / yr	\$0	Inflation Factor: 3 % / yr	\$0	Inflation Factor: 3 % / yr	\$0
<b>Total Reconstruction</b>	<b>\$0</b>	<b>Total Reconstruction</b>	<b>\$0</b>	<b>Total Reconstruction</b>	<b>\$0</b>



**ROAD OVERLAY & RECONSTRUCTION LIST**

<b>2020</b>		<b>2021</b>		<b>2022</b>	
<b>OVERLAY</b>	<b>EST. COST</b>	<b>OVERLAY</b>	<b>EST. COST</b>	<b>OVERLAY</b>	<b>EST. COST</b>
Adams Court	\$ 9,321	Cady Street	\$ 25,750	Chapman Road	\$ 97,462
Adams Street	68,492	Cobb Street	15,450	Old Walpole Road	92,416
Avalon Place	15,450	Concord Road	258,530	Darling Road	151,128
Elliot Street	29,307	Hooper Street	26,533	Dickinson Road	124,137
Gates Street	21,946	Lamson Street	26,790	Meetinghouse Road	91,473
Main Street (Rte 101 to Marlborough St)	412,000	Martin Street	33,086	Timberlane Drive	130,865
Moore Farm Road	30,900	Park Avenue	389,340	TBD	350,000
No Name Road	15,450	Salsbury Road	54,739		
Proctor Court	20,600	School Street (West to Emerald)	46,350		
South Street	25,103	Speaker Street	20,600		
Arch Street - (Park to Hurricane)	257,500	St. James Street	46,350		
Sullivan Road (Rte 9 to town line)	89,237				
River Street	66,893				
<b>Sub Total</b>	<b>\$ 1,062,199</b>	<b>Sub Total</b>	<b>\$ 943,518</b>	<b>Sub Total</b>	<b>\$ 1,037,481</b>
Contingency - 10%	\$ 106,220	Contingency - 10%	\$ 94,352	Contingency - 10%	\$ 103,748
Construction Totals	\$ 1,168,419	Construction Totals	\$ 1,037,870	Construction Totals	\$ 1,141,229
Design, Const, S&OH	\$ 11,684	Design, Const, S&OH	\$ 10,379	Design, Const, S&OH	\$ 11,412
Inflation Factor: 3% / year	\$ 229,002	Inflation Factor: 3% / year	\$ 240,965	Inflation Factor: 3% / year	\$ 264,962
<b>Total Overlay</b>	<b>\$ 1,409,105</b>	<b>Total Overlay</b>	<b>\$ 1,289,213</b>	<b>Total Overlay</b>	<b>\$ 1,417,603</b>

<b>2020</b>		<b>2021</b>		<b>2022</b>	
<b>RECONSTRUCT</b>	<b>EST. COST</b>	<b>RECONSTRUCT</b>	<b>EST. COST</b>	<b>RECONSTRUCT</b>	<b>EST. COST</b>
Subtotal	\$0	Subtotal	\$0	Subtotal	\$0
Construction Contingency: 10%	\$0	Construction Contingency: 10%	\$0	Construction Contingency: 10%	\$0
Construction Totals	\$0	Construction Totals	\$0	Construction Totals	\$0
Project Total	\$0	Project Total	\$0	Project Total	\$0
Design 10%, Const 10%, S&OH 1	\$0	Design 10%, Const 10%, S&OH 1%	\$0	Design 10%, Const 10%, S&OH 1%	\$0
Inflation Factor: 3 % / yr	\$0	Inflation Factor: 3 % / yr	\$0	Inflation Factor: 3 % / yr	\$0
<b>Total Reconstruction</b>	<b>\$0</b>	<b>Total Reconstruction</b>	<b>\$0</b>	<b>Total Reconstruction</b>	<b>\$0</b>



## CITY OF KEENE, NEW HAMPSHIRE

### 2017 - 2022 Capital Project Funding Request

#### GENERAL PROJECT DATA

Project Name: **Roadway Rehabilitation**  
 Department: **Public Works - General Fund**  
 Physical Location: **City Roadways**  
 Federal Mandate: **NO**  
 State Regulation or Law: **NO**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Maintaining a Safe Community**  
 Council Initiative: **Policy**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Yes**



#### PROJECT DESCRIPTION/JUSTIFICATION

The City maintains 126.8 miles of roads of which 125 miles is paved. These roads are in various states of repair. The City performed a roadway condition survey in 2013 and based upon an assessment of roadway condition and traffic volume the roadways were ranked on conditions from good to poor. Roadway conditions include roadway/pavement cracking, potholes, delamination of pavement, and roughness. Roadways scheduled for improvements are selected based upon roadway condition, other scheduled infrastructure improvements such as drainage, water, sewer improvements, and grouping of roadway in a general area to take advantage of a contractor mobilizing only once to perform work. The proposed road program for FY17-22 CIP cycle focuses on rehabilitation options including mill/shim/overlay and reclaim/pavement. Complete reconstruction of roadways, sidewalks, curbing and utilities, is not proposed during the FY17-22 CIP.

The average costs for road rehabilitation options (in 2014 dollars) are as follows: shim and stone chip seal \$188,000/mile, shim and 1" pavement overlay with adjustment of structures \$265,000/mile, and reclamation and 4" pavement with adjustment of structures \$615,000/mile, road reconstruction (gravels and 5" pavement) not including utilities, curbing, or concrete sidewalk is approximately \$2.15M per mile. Road reconstruction that includes granite curbing and sidewalks, on both sides of a road, is approximately \$3.2M per mile.

#### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation		1,182,347	1,195,627	1,262,876	1,409,105	1,289,214	1,417,603	7,756,772
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$1,182,347</b>	<b>\$1,195,627</b>	<b>\$1,262,876</b>	<b>\$1,409,105</b>	<b>\$1,289,214</b>	<b>\$1,417,603</b>	<b>\$7,756,772</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve								0
Debt Funded		1,182,347	1,195,627	1,262,876	1,409,105	1,289,214	1,417,603	7,756,772
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$1,182,347</b>	<b>\$1,195,627</b>	<b>\$1,262,876</b>	<b>\$1,409,105</b>	<b>\$1,289,214</b>	<b>\$1,417,603</b>	<b>\$7,756,772</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT** Negligible<\$5,001  
N/A

**PROJECT STATUS:** Ongoing CIP

## Criteria Used to Determine Priority of New Sidewalks

With the challenges of limited resources for new sidewalk construction the Department looked at a way to incorporate ideas of walkability, community generators and attractors to assist in prioritization. The following are the community criteria that were identified:

\*\*\*\*\*

**Schools Walking Zones** **½ mile**

(Includes public/private elementary, secondary, and post-secondary)

\*\*\*\*\*

**Major Community Generator/Attractor Zone** **½ mile**

(Includes Daycares/Cultural/Parks/Human Service/Municipal)

\*\*\*\*\*

**Commercial Clusters** **½ mile**

(Includes Downtown/Key Rd/West St/CVS Plaza/etc.)

\*\*\*\*\*

**Concentrated Housing Developments** **½ mile**

(Includes Bennett Block/CitySide Housing/Harmony Lane/etc.)

\*\*\*\*\*

Concentric circles were then plotted on a map of the City. The more the circles intersected, the higher probability of/or potential of pedestrian traffic. An investment in sidewalks in these areas would provide a higher impact. This information would impact the Pedestrian Traffic rating, the more concentric circles the higher the rating.

A matrix was developed with a number of criteria. These criteria were also weighted with higher emphasis on pedestrian traffic and safety. The matrix criteria are as follows.

Factor	Rating		Weight
Pedestrian Factor	1	Low	.30
	3	Medium	
	5	High	
Vehicle Traffic	1	Low/Local	.25
	3	Med/Collector	
	5	High/Arterial	
Existing Sidewalk	1	Yes	.15
	3	Partial	
	5	No	
Increase Safety	1	Low	.30
	3	Med	
	5	High	

## New Sidewalk Project List

LOCATION	PED TRAFFIC	VEHICLE TRAFFIC	EXISTING WALK ON STREET	INCREASE SAFETY	TOTAL	LENGTH	FISCAL YEAR	TOTAL COST					
EMERALD ST	5	2	5	1.3	3	0.5	3	1	4.1	1,300	17	\$208,927	
WEST SURRY RD - ROUTE 12A	1	0	5	1.3	5	0.8	5	2	3.8	2,708		\$449,068	
BRADFORD RD	1	0	3	0.8	5	0.8	5	2	3.3	3,400		\$563,822	
NORTH LINCOLN ST - Beaver St to George St	1	0	3	0.8	5	0.8	5	2	3.3	2,100		\$348,243	
PAKO AVE	3	1	3	0.8	5	0.8	3	1	3.3	3,520		\$583,722	
PAKO AVE	3	1	3	0.8	5	0.8	3	1	3.3	2,370		\$393,017	
ROXBURY ST - Reservoir St to Water St	3	1	3	0.8	5	0.8	3	1	3.3	900		\$149,247	
BLOSSOM ST - Robbins Rd to West St	3	1	3	0.8	3	0.5	3	1	3	1,900		\$315,077	
AMERICAN AVE - Kennedy Dr to Old Walpole Rd	3	1	1	0.3	5	0.8	3	1	2.8	1,400		\$232,162	
PERHAM ST	3	1	1	0.3	5	0.8	3	1	2.8	300		\$49,749	
RIVER ST - North of Mayflower	4	1	1	0.3	3	0.5	3	1	2.8	500		\$82,915	
ROYAL AVE	3	1	1	0.3	5	0.8	3	1	2.8	1,400		\$232,162	
WAKEFIELD ST	3	1	1	0.3	5	0.8	3	1	2.8	750		\$124,373	
WOODBURN ST - Portland to Linden St.	3	1	1	0.3	5	0.8	3	1	2.8	450		\$74,624	
PORTLAND ST	3	1	1	0.3	3	0.5	3	1	2.5	600		\$99,498	
ROBBINS RD	3	1	1	0.3	3	0.5	3	1	2.5	730		\$121,056	
KENDALL RD	1	0	1	0.3	5	0.8	3	1	2.2	1,700		\$281,911	
HARRISON ST	5	2	1	0.3	1	0.2	1	0	2.2	700		\$116,081	
WOODBURY ST	3	1	1	0.3	3	0.5	1	0	1.9	1,600		\$265,328	
												<b>TOTAL</b>	<b>\$4,482,053</b>

Factor	Weight
Pedestrian Traffic	30%
Vehicle Traffic	25%
Existing Sidewalk	15%
Increase Safety	30%

**Notes:**

Sidewalks listed for construction beyond FY 15 are projected using FY15 dollars plus 3% per year

**Unit costs (Installed) 2014**

C = concrete sidewalk per LF \$161.00  
 includes granite curbing, 10% contingencies, 10% eng design, 10% engineering const admin, 1% overhead costs and 3% inflation per year

# NEW SIDEWALK LIST

## 2017

LOCATION	LENGTH	TYPE WORK	EST. COST
Emerald Street	1,300	New	\$143,650
Subtotal			\$143,650
Construction Contingency: 10%			\$14,365
Construction Totals			\$158,015
Design: 10%			\$15,802
Construction Administration: 10%			\$15,802
SUPV. & Overhead: 1%			\$1,580
Project Total			\$191,198
Inflation Factor: 3% / yr x 3 yrs			\$17,729
<b>Total Sidewalks</b>			<b>\$208,927</b>

## 2018

LOCATION	LENGTH	TYPE WORK	EST. COST
Subtotal			\$0
Construction Contingency: 10%			\$0
Construction Totals			\$0
Design: 10%			\$0
Construction Administration: 10%			\$0
SUPV. & Overhead: 1%			\$0
Project Total			\$0
Inflation Factor: 3% / yr x 3 yrs			\$0
<b>Total Sidewalks</b>			<b>\$0</b>

## 2019

LOCATION	LENGTH	TYPE WORK	EST. COST
Subtotal			\$0
Construction Contingency: 10%			\$0
Construction Totals			\$0
Design: 10%			\$0
Construction Administration: 10%			\$0
SUPV. & Overhead: 1%			\$0
Project Total			\$0
Inflation Factor: 3% / yr x 4 yrs			\$0
<b>Total Sidewalks</b>			<b>\$0</b>

## 2020

LOCATION	LENGTH	TYPE WORK	EST. COST
Subtotal			\$0
Construction Contingency: 10%			\$0
Construction Totals			\$0
Design: 10%			\$0
Construction Administration: 10%			\$0
SUPV. & Overhead: 1%			\$0
Project Total			\$0
Inflation Factor: 3% / yr x 5 yrs			\$0
<b>Total Sidewalks</b>			<b>\$0</b>

## 2021

LOCATION	LENGTH	TYPE WORK	EST. COST
Subtotal			\$0
Construction Contingency: 10%			\$0
Construction Totals			\$0
Design: 10%			\$0
Construction Administration: 10%			\$0
SUPV. & Overhead: 1%			\$0
Project Total			\$0
Inflation Factor: 3% / yr x 6 yrs			\$0
<b>Total Sidewalks</b>			<b>\$0</b>

## 2022

LOCATION	LENGTH	TYPE WORK	EST. COST
Subtotal			\$0
Construction Contingency: 10%			\$0
Construction Totals			\$0
Design: 10%			\$0
Construction Administration: 10%			\$0
SUPV. & Overhead: 1%			\$0
Project Total			\$0
Inflation Factor: 3% / yr x 7 yrs			\$0
<b>Total Sidewalks</b>			<b>\$0</b>



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Sidewalks New**  
 Department: **Public Works - General Fund**  
 Physical Location: **Various**  
 Federal Mandate: **NO**  
 State Regulation or Law: **NO**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **Policy**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **YES**



### PROJECT DESCRIPTION/JUSTIFICATION

This project provides for new sidewalks in various locations throughout the City. The City has over 52 miles of sidewalks. The need for new sidewalks exceeds available resources. Using the 2012 criteria to determine the priority for new sidewalks, Emerald Street, which is located in the downtown, scored the highest (meaning the greatest priority) has been programmed for a new sidewalk in FY17.

There has not been a complete sidewalk evaluation of the City in many years. The majority of the proposed new sidewalk locations on the list are the results of request from individuals/neighborhoods. These request had the identified criteria applied to develop the priority listing.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation		208,927						208,927
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$208,927</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$208,927</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve		130,000						130,000
Debt Funded								0
Federal or State Grants								0
Other Sources		78,927						78,927
<b>TOTAL</b>	<b>\$0</b>	<b>\$208,927</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$208,927</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
Multi-year

**PROJECT STATUS:** Ongoing CIP

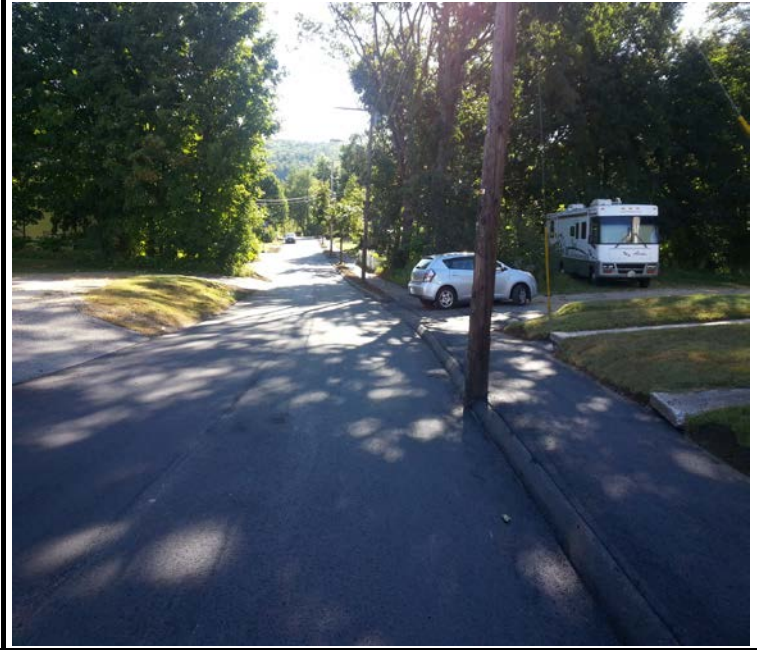


# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Sidewalk Replacement**  
 Department: **Public Works - General Fund**  
 Physical Location: **Various**  
 Federal Mandate: **NO**  
 State Regulation or Law: **NO**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **Policy**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **YES**



### PROJECT DESCRIPTION/JUSTIFICATION

This project provides for the repair and or replacement of sidewalks in various locations throughout the City. In addition, installation of bituminous sidewalk or concrete sidewalks will be made as part of City roadway rehabilitation and reconstruction projects. Projects will be designed when appropriate with in-house staff. Project construction costs have been set at \$40,000 for sidewalks plus 10% contingencies, 10% in engineering design, 10% in construction engineering, 1% overhead costs and annual 3% inflation adjustments. The City has over 52 miles of sidewalks. The need for maintaining and replacing existing sidewalks exceeds available resources. Sidewalks to be repaired will be prioritized using the 2005 sidewalk assessment. Sidewalks that scored the highest (meaning poorest condition) will be repaired and/or replaced based upon the assessment.

For repair projects, concrete sidewalks will be installed where there are existing concrete sidewalks and asphalt sidewalks will be installed where there are existing asphalt sidewalks. Projects will include milling the existing asphalt and providing an asphalt overlay or a complete replacement of the concrete sidewalk. Based on a 2013 unit price of \$40 per linear foot for concrete sidewalks and \$12.50 per linear foot for asphalt sidewalk repairs, it is estimated that the proposed \$40,000 in annual sidewalk repairs could complete approximately 1,000 LF of concrete sidewalk or 3,200 LF of bituminous paved sidewalks. FY17 includes sidewalk repair/replacement on Water Street.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation		59,922	61,720	63,571	65,478	68,752	70,815	390,258
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$59,922</b>	<b>\$61,720</b>	<b>\$63,571</b>	<b>\$65,478</b>	<b>\$68,752</b>	<b>\$70,815</b>	<b>\$390,258</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve								0
Debt Funded		59,922	61,720	63,571	65,478	68,752	70,815	390,258
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$59,922</b>	<b>\$61,720</b>	<b>\$63,571</b>	<b>\$65,478</b>	<b>\$68,752</b>	<b>\$70,815</b>	<b>\$390,258</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001 Multi-year      **PROJECT STATUS:** Ongoing CIP

**KEENE/SWANZEY BY-PASS IMPROVEMENT PROGRAM SCHEDULE**

During the FY2012 and 2013 State Budgeting process significant funding was cut from the State's Transportation budget. As a result New Hampshire Department of Transportation has made significant changes to the State's Ten Year Transportation Improvement Plan 2013 - 2022. The City has had several projects of interest that have remained within the State Transportation Plan. The projects have included the Reconstruction of Winchester Street (Keene 10309 B) from the Roundabout to the Winchester Street Bridge of the Ashuelot River. This project has included two key intersections and the replacement of the Red Listed Island Street Bridge. The City entered into an Local Public Agency project agreement with NHDOT in 2014 to begin the design process for these critical process. This project is in the States August 2015 proposed 2017-2026 Ten Year Plan is being slipped to FY19 and FY21 for construction funding. The other project of interest is the Multi-Use Trail Bridge over NH Rt 101 (South Bridge) has been moved up and will be constructed in calendar year 2016. A new City project, the Reconstruction of Lower Winchester Street from the NH Rt 101 Roundabout to the Swanzey Town line is in the States proposed August 2015 2017-2026 TIP for engineering in FY22, Right-of-Way FY24 and construction in FY25. This project has a 20% City Match.

Description		Previous Program Yr	Amount (\$000)	Program Year (FY)
<b>Construct Multi-Use Trail Bridge over NH 12/101 10309 P-6189</b>	C	2010	\$ 2,200	2016
<b>Winchester Street Reconstruction from NH Rt 101 Roundabout to Pearl St/Island St Intersection including the Key Rd Intersection - Keene 10309 B (1828) and the replacement of the Island Street Bridge. This is a Local Public Agency project and requires a 20% match project</b>	P	2013	\$ 261.8	2013
	C	2014 - 2015	\$ 5,645	2019-2020
	R	2014	\$ 368.5	2014
<b>Reconstruction of Winchester Street from NH Rt 101 to Swanzey Town Line This is a Local Public Agency project and requires a 20% match project</b>	P		\$ 363.8	2022
	R		\$ 193.7	2024
	C		\$ 3,399.0	2025

Phase: C = Construction P = Preliminary Engineering R = Right of Way





# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **State Bypass Improvement Program**  
 Department: **Public Works - General Fund**  
 Physical Location: **Various**  
 Federal Mandate: **NO**  
 State Regulation or Law: **NO**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Transportation**  
 Council Initiative: **Resolution**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Yes**



### PROJECT DESCRIPTION/JUSTIFICATION

A traffic analysis performed by the State identified the need to alleviate increased traffic congestion at key intersections along the by-pass. These projects would allow traffic to flow smoothly into and out of the City, minimizing the impacts of through traffic on the local street network. There were a number of projects identified to improve capacity and efficiency along the State by-pass network (NH 9/10/12/101). The State has completed a number of interim improvements including the widening of NH Rt 9 from the T-intersection to Base Hill Road, widening of NH Rt 9/10/12 at the T-intersection, and the construction of a multi-lane roundabout at Winchester Street and NH Rt 101.

In the State's August 2015 proposed 2017-2026 TIP, the Winchester Street Reconstruction and Rt. 101 Multi-Use Trail Bridge is being pushed out to FY19 and FY 20 for construction from FY17 and FY18. The Winchester Street Reconstruction Project picks up where the State NH Rt. 101 roundabout ended and extends up Winchester Street to the Winchester Street Bridge over the Ashuelot River. This project will involve the reconstruction of Winchester Street and two critical intersections; Key Road and Island St/Pearl Street. It will also replace the Red Listed Island Street Bridge. This will be a locally managed project through the Local Public Agency Program which has a 20% local match. Funding for design of this project was approved and appropriated in FY14 with funding for construction in FY19 and FY20. The other project in this program is the construction of a multi use bridge over NH Rt 101. This bridge would connect the completed multi-use trail sections that extends from Winchester Street adjacent to Keene State College to Rt. 101 and continues to the section of trail on the south side of Rt. 101 that extends into the Town of Swanzey. This project is 100% funded by the State and will be managed by the State. This project has received funding and will be constructed in FY16. A new project appearing in the FY17-FY26 TIP is the Reconstruction of Lower Winchester Street from NH Rt 101 Roundabout to the Swanzey Town Line. This project appears in FY22 for Engineering, FY24 for Right-of-Way, and Construction in FY25.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design	630,300							630,300
Construction/Implementation				3,016,680	2,628,399		363,884	6,008,963
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$630,300</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,016,680</b>	<b>\$2,628,399</b>	<b>\$0</b>	<b>\$363,884</b>	<b>\$6,639,263</b>
<b>FUNDING</b>								
Current Revenue	126,060							126,060
Capital Reserve							72,773	72,773
Debt Funded				621,336	525,680			1,147,016
Federal or State Grants	504,240			2,395,344	2,102,719		291,111	5,293,414
Other Sources								0
<b>TOTAL</b>	<b>\$630,300</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,016,680</b>	<b>\$2,628,399</b>	<b>\$0</b>	<b>\$363,884</b>	<b>\$6,639,263</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible < \$5,001 Multi-year     
 **PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2016 - 2021 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Marlboro Street Corridor Improvements**  
 Department: **Planning**  
 Physical Location: **Marlboro Street**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Maintaining Neighborhoods**  
 Council Initiative: **Policy**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective:



### PROJECT DESCRIPTION/JUSTIFICATION

In 2015 the City completed the Marlboro Street Zoning and Land Use Study which explores innovative approaches to encourage redevelopment along Marlboro Street and the Southeast Keene Neighborhood. The study recommends changes to zoning and other regulations that would promote reuse and redevelopment of underutilized properties, improve stormwater management practices, preserve residential neighborhoods, and strengthen the area as a vibrant, walkable, mixed-use district. It also identified improvements on Marlboro Street and in adjacent neighborhoods to improve connectivity, walkability, pedestrian use, traffic flow, and enhance the appearance of the street. The Study identified various improvements at different points along Marlboro Street. It is recognized that public investment will help encourage private investment in the area.

The proposed project is to construct the interim Complete Streets design concepts included in the Study. These concept level designs are tailored to three distinct segments of Marlboro Street which relate existing street width and to surrounding land uses. The interim design calls for changes that require painted lane markings and crosswalks and removable landscaping; permanent changes such as concrete splitter islands could also be proposed. The first segment from Main St to Grove St. is the widest segment. Here travel lanes would be reduced in width, parallel parking preserved, and a separate "cycle track" for bicycles installed where the street is wide enough. In the middle segment from Grove St. to Baker St. the road is less wide. In this segment, dedicated bike lanes and improved crosswalks are proposed, along with dedicated left turns lanes for vehicles at key intersections. One-sided, on-street parallel parking would be installed, periodically altering between the north and south sides of the street to help with traffic calming. The third segment is from Baker St. to Optical Ave. Here the street would not change significantly from existing conditions because of constrained width. Shared lane arrows "Sharrows" would be maintained for bicyclists. No on-street parking is proposed, and landscape trees should be planted in the existing grass buffer. In FY17 funds are included to develop design plans for the interim improvements including several public meetings. In FY 19 are funds for the installation of the proposed interim work. Once this work is completed the operating budget will need to be adjusted to cover the annual cost of maintaining the pavement markings and other improvements.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design		25,000		171,017				196,017
Construction/Implementation								0
Property/Equip. Acquisition								0
TOTAL	\$0	\$25,000	\$0	\$171,017	\$0	\$0	\$0	\$196,017
<b>FUNDING</b>								
Current Revenue								\$0
Capital Reserve		25,000		171,017				196,017
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$25,000	\$0	\$171,017	\$0	\$0	\$0	\$196,017

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** High \$50,001 or more  
Ongoing

**PROJECT STATUS:** Ongoing CIP

## Stormwater Management

The City of Keene sits on the valley floor at the bottom of a glacial lakebed. There are five (5) watersheds and numerous brooks and streams that flow through the City. These bodies of water are used by the community to receive stormwater from City streets and private properties. As the City developed, open ditches were first constructed to convey this stormwater. Over time these open ditches were enclosed and additional receptors and pipes were installed creating a complex network of pipes and open ditches that merge with streams to move stormwater through the City. The community has modified waterways to improve the drainage characteristics of streams to allow for additional use and development of land. Over the last 10 years, the City and State of New Hampshire have been subject to changing weather patterns. Intense wet weather events are occurring at higher frequency with higher amounts of precipitation. This has stressed the City's 150+ year old stormwater system.

The City outlined a multi-prong strategy with both short term and long term actions. Types of short term actions identified included continuing maintenance of the stormwater system, evaluation of and implementation of small improvements, and the identification and implementation of flood storage and mitigation projects. Long term actions included watershed wide analysis, identification of large storage and mitigation projects and the engagement of other partners and State and Federal agencies. The following series of projects implement short term actions while continuing to move forward with long term actions to address stormwater management concerns.

Storm Drain Cleaning and Inspection. Adequate maintenance is critical to ensure that the existing enclosed stormwater system is properly working. This project will perform maintenance cleaning and inspection of catch basins and lines. The removal of sediments will restore the capacity of the collection system reducing the effects of smaller events. If problems are encountered while cleaning a line, this project provides funds to televise the area to determine what is causing the blockage so a repair strategy can be developed. It is proposed that storm drain cleaning and inspection become a regular capital item each year.

Storm Drainage Spot Repairs. This is a companion project to the cleaning and inspection work described above. The project provides the funding to perform spot repairs to the stormwater system while also addressing blockages and failures to ensure the system is working at its capacity.

Stormwater System Management Analysis and Minor Improvements. This project provides funding to perform hydrologic and hydraulic analysis of the various watersheds and parts of the stormwater system. The analysis will update existing data and use this information to identify potential mitigation projects. Another component of this project is the support of technical resources to review areas of street flooding (Roxbury and Gurnsey Streets, Church and Carpenter Streets, Winchester and Ralston Streets, etc.) to determine if there are low impact/cost changes or improvements that may be accomplished to relieve flooding.



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Drainage Cleaning**  
 Department: **PUBLIC WORKS**  
 Physical Location: **Various**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Maintain transportation network, manage storm water to reduce potential for flooding.**



### PROJECT DESCRIPTION/JUSTIFICATION

The capturing, removal, and treatment of stormwater is critical to maintaining the condition of the City's streets and other impervious systems. The Highway Division oversees an ongoing drain cleaning program. The daily average for cleaning catch basin sumps (using a private contractor) is 30 per day. This ongoing program will maintain the 5,000 basins located in the City. Approximately 1,250 catch basin sumps are maintained per year. A private contractor will also provide services for drain line cleaning/flushing on the City's 80 mile network of drain lines. On average 1,500 feet of drain line can be cleaned in a day. Funding levels provide for approximately 16 miles of drain lines to be cleaned each year resulting in all drain lines being cleaned in approximately 5 years. In addition a private contractor will provide inspection of approximately 5,000 lineal feet of drain line per year via underground camera to identify areas where blockages are backing up the system or to identify areas needing spot repair (costs for spot repair are on a separate CIP page). Note: Costs have been inflated 3% per year.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design		15,914	16,390	16,883	17,389	17,911	18,448	102,935
Construction/Implementation		90,592	91,901	93,207	96,003	98,883	101,849	572,435
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$106,506</b>	<b>\$108,291</b>	<b>\$110,090</b>	<b>\$113,392</b>	<b>\$116,794</b>	<b>\$120,297</b>	<b>\$675,370</b>
<b>FUNDING</b>								
Current Revenue		106,506	108,291	110,090	113,392	116,794	120,297	675,370
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$106,506</b>	<b>\$108,291</b>	<b>\$110,090</b>	<b>\$113,392</b>	<b>\$116,794</b>	<b>\$120,297</b>	<b>\$675,370</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001 Ongoing

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Stormwater Spot Repairs**  
 Department: **PUBLIC WORKS**  
 Physical Location: **Various**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Maintain transportation network, manage storm water to reduce potential for flooding.**



### PROJECT DESCRIPTION/JUSTIFICATION

The Public Works Department uses a multi-pronged approach to sustaining the City's stormwater drainage system. The capturing, removal, and treatment of stormwater is critical to maintaining the condition of the City's streets and other impervious systems. The City maintains over 80 miles of storm drains and over 5,000 catch basins. This project sets aside funding for spot repairs to the storm water system based, in part, from the camera inspection program funded in the drainage cleaning CIP page. This includes removing blockages and addressing deficiencies to ensure the system works at capacity. This program will also be used to improve and address flood capacity issues which are encountered when coordinated with road maintenance work such as mill/shim/overlay.

FY17 includes drainage repairs on Water Street.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation		59,992	61,720	63,571	65,478	68,752	70,815	390,328
Property/Equip. Acquisition								0
TOTAL	\$0	\$59,992	\$61,720	\$63,571	\$65,478	\$68,752	\$70,815	\$390,328
<b>FUNDING</b>								
Current Revenue		30,000	30,000	63,571	65,478	68,752	70,815	328,616
Capital Reserve								0
Debt Funded		29,992	31,720					61,712
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$59,992	\$61,720	\$63,571	\$65,478	\$68,752	\$70,815	\$390,328

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
Multi-year

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

**Project Name:** Stormwater System Management Analysis and Minor Improvements  
**Department:** PUBLIC WORKS  
**Physical Location:** Various  
**Federal Mandate:** N/A  
**State Regulation or Law:** N/A  
**Master Plan (CMP) Focus Area:** Quality Built Environment  
**CMP Vision/Strategy:** Infrastructure  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:**



### PROJECT DESCRIPTION/JUSTIFICATION

This project provides funding to perform hydraulic analysis of the various watersheds within the City of Keene and for other technical assistance for flood prone/impacted areas. The analysis will update existing data providing information to assist with identifying potential mitigation projects. It is proposed to start reviews within the Beaver Brook watershed. A component of this project is to review areas that are prone to street flooding (Roxbury and Gurnsey Streets, Church and Carpenter Streets, Winchester and Ralston Streets, etc.) to determine if there are low impact, low cost changes or improvements that can be completed to relieve the flooding. Results from this work will be incorporated into future CIP requests of operating budgets depending on the scope of the improvement.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation		51,500	53,045	54,636	56,275	57,964	59,703	333,123
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$51,500</b>	<b>\$53,045</b>	<b>\$54,636</b>	<b>\$56,275</b>	<b>\$57,964</b>	<b>\$59,703</b>	<b>\$333,123</b>
<b>FUNDING</b>								
Current Revenue		51,500	53,045	54,636	56,275	57,964	59,703	333,123
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$51,500</b>	<b>\$53,045</b>	<b>\$54,636</b>	<b>\$56,275</b>	<b>\$57,964</b>	<b>\$59,703</b>	<b>\$333,123</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** High \$100,001 or more  
Multi-year

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Victoria Street Extension**  
 Department: **PUBLIC WORKS**  
 Physical Location: **Marlboro St/Victoria St**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Vibrant Economy**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **Policy**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective:



### PROJECT DESCRIPTION/JUSTIFICATION

Extend Victoria Street south to connect to Marlboro Street. Work to include the acquisition of necessary property, design, and construction of a approximately 1,200 LF . The 2004 Ad-Hoc Traffic Committee has been reviewing various traffic improvements. The extension of Victoria Street was identified as a critical piece of the Marlboro Street Zoning/Redevelopment initiatives that was completed in 2014. This extension would open up a large parcel for redevelopment along with improving access, particularly for truck traffic, to the businesses located on Victoria Street and reduce the amount of truck traffic on residential neighborhoods.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design							222,000	222,000
Construction/Implementation							1,481,000	1,481,000
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,703,000</b>	<b>\$1,703,000</b>
<b>FUNDING</b>								
Current Revenue								\$0
Capital Reserve							222,000	222,000
Debt Funded							1,481,000	1,481,000
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,703,000</b>	<b>\$1,703,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** High \$100,001 or more  
Multi-year

**PROJECT STATUS:** Re-introduced

**CITY OF KEENE, NEW HAMPSHIRE  
CAPITAL IMPROVEMENT PROGRAM FY17- FY22  
PARKING FUND MULTI-YEAR PROJECTIONS**

	ACTUAL FY13/14	ACTUAL FY 14/15	BUDGET FY 15/16	PROJECTED FY16/17	PROJECTED FY17/18	PROJECTED FY18/19	PROJECTED FY19/20	PROJECTED FY20/21	PROJECTED FY21/22
<b>REVENUES</b>									
Taxes	\$840,876	\$1,048,290	\$1,167,250	\$1,128,569	\$1,121,817	\$946,396	\$941,995	\$936,336	\$929,784
Parking Meter Fees / Space Rentals	531,709	526,661	548,962	736,500	740,183	828,764	832,908	837,072	921,029
Fines & Forfeits	240,752	226,202	258,400	266,233	270,983	275,818	280,739	285,748	290,847
Miscellaneous	16,313	13,650	13,780	12,451	12,224	12,400	12,578	12,759	12,943
Capital reserve / Project Balances	28,573	28,926	863,000		25,000		50,000		50,000
Use of (Addition to) surplus			234,919						
State courthouse payment		42,500	42,500	42,500	42,500	42,500	42,500	42,500	42,500
Bond issue									
<b>TOTAL REVENUES</b>	<b>\$1,683,014</b>	<b>\$1,886,228</b>	<b>\$3,128,811</b>	<b>\$2,186,253</b>	<b>\$2,212,706</b>	<b>\$2,105,878</b>	<b>\$2,160,720</b>	<b>\$2,114,416</b>	<b>\$2,247,103</b>
<b>EXPENDITURES</b>									
Lots & Meters	\$662,798	\$678,450	\$761,583	\$707,859	\$725,556	\$748,694	\$767,412	\$786,597	\$806,262
Outside Services	159,523	215,419	189,223	\$197,738	206,636	215,935	225,652	235,806	246,418
City Hall Parking Facility	13,643	12,956	40,103	\$13,021	13,086	13,152	13,217	13,284	13,350
Wells Street Parking Facility	26,024	19,093	57,652	\$19,189	19,285	19,381	19,478	19,576	19,674
Capital	150,000	179,090	1,013,000	255,209	175,000	268,708	200,000	150,000	250,000
Property Taxes: Courthouse		250,044	260,500	269,956	279,567	287,646	295,470	303,861	312,309
Debt Service-TAX INC. FIN. New	728,876	721,006	806,750	801,113	784,750	601,250	589,025	574,975	559,975
Debt Service-TAX INC. FIN. <i>existing</i>	\$1,740,864	\$2,076,059	\$3,128,811	\$2,264,085	\$2,203,880	\$2,154,766	\$2,110,254	\$2,084,099	\$2,207,987
<b>TOTAL EXPENDITURES</b>	<b>(\$57,851)</b>	<b>(\$189,831)</b>	<b>\$0</b>	<b>(\$77,832)</b>	<b>\$8,826</b>	<b>(\$48,889)</b>	<b>\$50,466</b>	<b>\$30,318</b>	<b>\$39,116</b>
<b>Addition to (use of) Surplus</b>									
<b>CAPITAL &amp; DEBT AS % OF BUDGET</b>			<b>66.5%</b>	<b>58.6%</b>	<b>56.2%</b>	<b>53.7%</b>	<b>51.4%</b>	<b>49.4%</b>	<b>50.8%</b>
<b>PARKING FUND INCREASE</b>				<b>-27.6%</b>	<b>-2.66%</b>	<b>-2.23%</b>	<b>-2.07%</b>	<b>-1.24%</b>	<b>5.94%</b>
<b>Projected fund balance at year end</b> 292,270 214,438 223,264 174,375 224,841 255,159 294,275									
<i>Projected fund balance as a % of operating budget (total-capital)</i> 13.81% 10.67% 11.00% 9.25% 11.77% 13.19% 15.03%									



# CITY OF KEENE, NEW HAMPSHIRE

## Parking Fund 2017 - 2022 Capital Improvement Program Summary

Dept.	Project Name	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	TOTAL
Public Works	Capital Reserve - City Hall Parking Facility	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 150,000
Public Works	Capital Reserve - Downtown Improvements	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Public Works	Capital Reserve - Wells Street Parking Facility	25,000	25,000	25,000	25,000	25,000	25,000	150,000
Public Works	Parking Structure Maintenance	-	25,000	-	50,000	-	50,000	125,000
Public Works	Surface Parking Lot Maintenance	105,209	-	118,708	-	-	50,000	273,917
Public Works	Wells St Parking Deck Rehabilitation	-	-	-	-	-	-	-
<b>TOTAL CAPITAL PROGRAM</b>		<b>\$ 255,209</b>	<b>\$ 175,000</b>	<b>\$ 268,708</b>	<b>\$ 200,000</b>	<b>\$ 150,000</b>	<b>\$ 250,000</b>	<b>\$ 1,298,917</b>

### PROJECT FUNDING DETAIL

#### Reserve Funded Projects

Public Works	Wells St Parking Deck Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Works	Parking Structure Maintenance	-	25,000	-	50,000	-	50,000	125,000
<b>Total: Reserve Funded Projects</b>		<b>\$ -</b>	<b>\$ 25,000</b>	<b>\$ -</b>	<b>\$ 50,000</b>	<b>\$ -</b>	<b>\$ 50,000</b>	<b>\$ 125,000</b>

#### Projects Funded with Debt

Public Works	N/A	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total: Projects Funded with Debt</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

#### Capital Reserve Appropriations

Public Works	Capital Reserve - City Hall Parking Facility	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 150,000
Public Works	Capital Reserve - Downtown Improvements	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Public Works	Capital Reserve - Wells Street Parking Facility	25,000	25,000	25,000	25,000	25,000	25,000	150,000
<b>Total: Capital Reserve Appropriations</b>		<b>\$ 150,000</b>	<b>\$ 150,000</b>	<b>\$ 150,000</b>	<b>\$ 150,000</b>	<b>\$ 150,000</b>	<b>\$ 150,000</b>	<b>\$ 900,000</b>

#### Projects Funded with Cash

Public Works	Wells St Parking Deck Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Works	Surface Parking Lot Maintenance	105,209	-	118,708	-	-	50,000	273,917
<b>Total: Projects Funded with Cash</b>		<b>\$ 105,209</b>	<b>\$ -</b>	<b>\$ 118,708</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 50,000</b>	<b>\$ 273,917</b>

#### **Subtotal: Uses of Cash**

(Capital Reserve Appropriations plus Projects Funded with Cash)

#### **TOTAL CAPITAL PROGRAM**

<b>\$ 255,209</b>	<b>\$ 175,000</b>	<b>\$ 268,708</b>	<b>\$ 200,000</b>	<b>\$ 150,000</b>	<b>\$ 250,000</b>	<b>\$ 1,298,917</b>
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#### New cash Requirement FY 17-22: reconciliation

Total: Uses of cash	\$255,209	\$150,000	\$268,708	\$150,000	\$150,000	\$200,000	\$1,173,917
							-
<b>New Funds needed</b>	<b>\$ 255,209</b>	<b>\$ 150,000</b>	<b>\$ 268,708</b>	<b>\$ 150,000</b>	<b>\$150,000</b>	<b>\$200,000</b>	<b>\$1,173,917</b>

**Parking Fund 2017 - 2022 Capital Improvement Program Debt Summary**

	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>
Existing and Authorized Debt	\$4,555,000	\$3,870,000	\$3,185,000	\$2,665,000	\$2,145,000	\$1,625,000
New Issues Proposed	-	-	-	-	-	-
Principal Paid	(685,000)	(685,000)	(520,000)	(520,000)	(520,000)	(520,000)
<b>Total Existing Debt &amp; Issues Proposed</b>	<b>\$3,870,000</b>	<b>\$3,185,000</b>	<b>\$2,665,000</b>	<b>\$2,145,000</b>	<b>\$1,625,000</b>	<b>\$1,105,000</b>

	<u>Issue</u>	<u>Term</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>
<b>Existing &amp; Authorized Debt Service (P &amp; I)</b>			\$801,113	\$784,750	\$601,250	\$589,025	\$574,975	\$559,975
<b><u>Proposed Debt Service CIP FY17</u></b>								
N/A								
<b><u>Proposed Debt Service CIP FY18</u></b>								
N/A								
<b><u>Proposed Debt Service CIP FY19</u></b>								
N/A								
<b><u>Proposed Debt Service CIP FY20</u></b>								
N/A								
<b><u>Proposed Debt Service CIP FY21</u></b>								
N/A								
<b><u>Proposed Debt Service CIP FY22</u></b>								
N/A								
<b>Total CIP17-22 Debt Service Proposed</b>			0	0	0	0	0	0
<b>Total Projected Debt Service: Parking Fund</b>			\$801,113	\$784,750	\$601,250	\$589,025	\$574,975	\$559,975

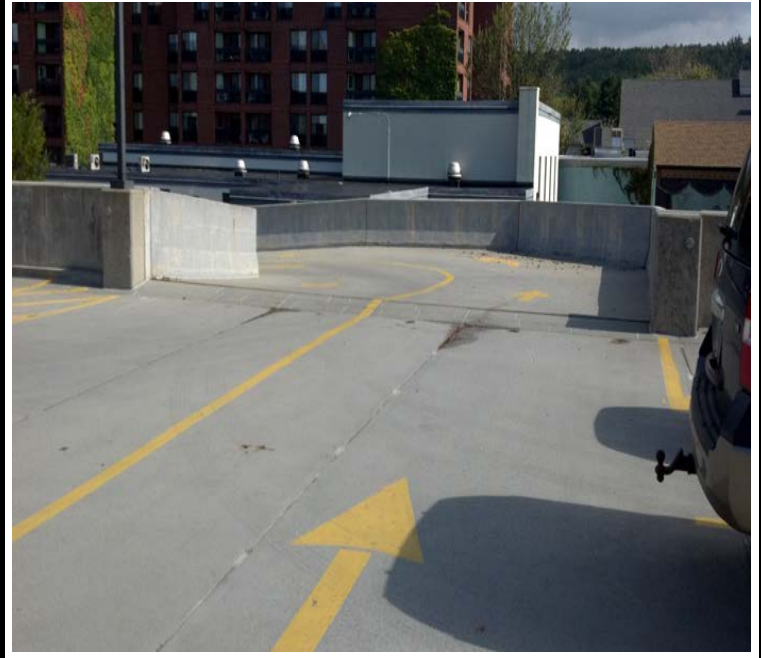


# CITY OF KEENE, NEW HAMPSHIRE

## 2017- 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Parking Facility Capital Reserve**  
 Department: **Public Works - Parking Fund**  
 Physical Location: **Various**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **N/A**  
 Departmental Objective: **Investing maintenance funds in City parking facilities**



### PROJECT DESCRIPTION/JUSTIFICATION

This project request worksheet details funding for the existing capital reserve funds established within the Parking Fund. Capital Reserve funding in the amount of \$25,000 annually for the Wells Street Parking Facility and \$25,000 annually for the City Hall Parking Facility is scheduled. In addition, annual contributions of \$100,000 supporting the Downtown Infrastructure Capital Reserve are included. Information regarding expenditures scheduled below, to be funded through these capital reserve accounts, are provided on the project request worksheet for parking structure maintenance. Additional expenditures from the Downtown Infrastructure are not currently scheduled.

The beginning balance in the capital reserves is net of a \$672,000 appropriation (2014) for the purpose of predesign and testing for a new parking structure in the downtown area. While this project has not yet begun, this presentation indicates that those funds have previously been appropriated.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation			25,000		50,000		50,000	125,000
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$25,000</b>	<b>\$0</b>	<b>\$50,000</b>	<b>\$0</b>	<b>\$50,000</b>	<b>\$125,000</b>
<b>FUNDING</b>								
Current Revenue	581,433	150,000	150,000	150,000	150,000	150,000	150,000	1,481,433
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		1,829	2,208	2,526	2,907	3,165	3,548	16,183
<b>TOTAL</b>	<b>\$581,433</b>	<b>\$151,829</b>	<b>\$152,208</b>	<b>\$152,526</b>	<b>\$152,907</b>	<b>\$153,165</b>	<b>\$153,548</b>	<b>\$1,497,616</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** No impact  
N/A

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

**Project Name:** Parking Structure Maintenance  
**Department:** Public Works - Parking Fund  
**Physical Location:** Various  
**Federal Mandate:** No  
**State Regulation or Law:** No  
**Master Plan (CMP) Focus Area:** Vibrant Economy  
**CMP Vision/Strategy:** Vibrant Downtown  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** Investing maintenance funds and providing adequate maintenance on City parking facilities



## PROJECT DESCRIPTION/JUSTIFICATION

Using a variety of repair and maintenance techniques best suited for the specific situation, provide nonroutine maintenance to extend the life of the parking structures owned by the City of Keene, including Wells St. parking structure and City Hall parking structure. A structural engineer will be retained in FY18 to assess both parking structures. The engineer will make recommendations for capital repair work (if any) and minor work needed to be completed on the City Hall parking structure. The scope of the work, depending on a condition assessment, may include any of the following: protective resurfacing, crack and joint repair. It is projected that the structural engineer will assess the parking structures every two years and that a similar scope of work would be anticipated in FY20 for the Wells St. parking structure. Experience has demonstrated capital expenditures beyond normal yearly maintenance are required approximately every 4-5 years to maintain the structures in good condition. Parking structures are continually assessed and adjustments to maintenance requirements are reflected in the capital budget. No specific project has been identified for FY 22 as of this writing, but it is anticipated that ongoing maintenance efforts will be ongoing.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation			25,000		50,000		50,000	125,000
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$25,000</b>	<b>\$0</b>	<b>\$50,000</b>	<b>\$0</b>	<b>\$50,000</b>	<b>\$125,000</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve			25,000		50,000		50,000	125,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$25,000</b>	<b>\$0</b>	<b>\$50,000</b>	<b>\$0</b>	<b>\$50,000</b>	<b>\$125,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
Multi-year

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Surface Parking Lot Maintenance**  
 Department: **Public Works - Parking Fund**  
 Physical Location: **Various**  
 Federal Mandate: **No**  
 State Regulation or Law: **No**  
 Master Plan (CMP) Focus Area: **Vibrant Economy**  
 CMP Vision/Strategy: **Vibrant Downtown**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Investing maintenance funds and providing adequate maintenance on City parking facilities.**



### PROJECT DESCRIPTION/JUSTIFICATION

Using a variety of repair and maintenance techniques best suited for the specific situation to extend the life of the parking facilities owned by the City of Keene. Parking facilities include Gilbo Avenue (East & West), Wells Street, Commercial Street, and Library Annex surface lots. Roxbury Plaza and Wells Street surface lot refurbishing is scheduled for FY17 (mill, shim, overlay, adjustment of drainage and manhole structures, and pavement markings). Included in both surface refurbishings will be the replacement of existing sidewalks in the Roxbury Plaza and Wells Street. Gilbo West and Elm Street surface lots are scheduled for crack sealing in FY17. Gilbo East surface lot refurbishing is scheduled for FY19. In addition to mill, shim overlay, pavement markings, and adjustment of drainage, and manholes, the refurbishing will remove existing meter posts and replace them with two Kiosk's, replacing existing asphalt curb with granite curb and replace existing sidewalk with concrete sidewalk. Concrete islands will separate parking lanes, and twelve trees framed with grates will be planted in the islands. This plan also includes adding four new parking spaces on Gilbo Avenue. Parking facilities are continually assessed and adjustments to maintenance requirements are reflected in the capital budget. Funding for projected surface lot maintenance is identified for FY22, however, a specific project has not been identified at this time.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation		105,209		118,708			50,000	273,917
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$105,209</b>	<b>\$0</b>	<b>\$118,708</b>	<b>\$0</b>	<b>\$0</b>	<b>\$50,000</b>	<b>\$273,917</b>
<b>FUNDING</b>								
Current Revenue		105,209		118,708			50,000	273,917
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$105,209</b>	<b>\$0</b>	<b>\$118,708</b>	<b>\$0</b>	<b>\$0</b>	<b>\$50,000</b>	<b>\$273,917</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible < \$5,001  
Multi-year

**PROJECT STATUS:** Ongoing CIP

**CITY OF KEENE, NEW HAMPSHIRE  
CAPITAL IMPROVEMENT PROGRAM FY17-FY22  
SOLID WASTE FUND MULTI-YEAR PROJECTIONS**

	ACTUAL FY 13-14	ACTUAL FY 14/15	BUDGET FY 15/16	PROJECTED FY16/17	PROJECTED FY17/18	PROJECTED FY18/19	PROJECTED FY19/20	PROJECTED FY20/21	PROJECTED FY21/22
<b>REVENUES</b>									
Charges for Services	\$ 4,541,780	\$ 4,574,238	\$ 4,505,907	\$ 4,611,650	\$ 4,661,062	\$ 4,711,017	\$ 4,761,523	\$ 4,812,584	\$ 4,864,208
Other Financing Sources	61,142	57,657	44,464	40,758	37,053	33,348	29,642	25,937	22,232
Use of Surplus			42,499						
Bond issue			105,000		77,244	166,750			560,000
Capital Reserve						250,000			
Miscellaneous		53,173							
<b>TOTAL REVENUES</b>	\$ 4,602,922	\$ 4,685,069	\$ 4,697,869	\$ 4,652,408	\$ 4,775,359	\$ 5,161,115	\$ 4,791,165	\$ 4,838,521	\$ 5,446,440
<b>EXPENDITURES</b>									
Landfill / Operations	\$ 3,048,038	\$ 2,989,784	\$ 2,917,612	2,958,384	3,000,265	3,043,305	3,087,560	3,133,084	3,179,939
Recycling	497,519	499,957	532,640	546,192	560,090	574,341	588,955	603,940	619,307
Transfer/Recycling Facility	91,039	75,334	89,769	90,344	90,923	91,505	92,090	92,680	93,273
Management/Admin.	596,703	613,956	585,015	620,635	637,333	654,488	672,112	690,218	708,819
Demolition Transfer/Disposal	116,806	121,982	150,937	153,396	155,895	158,436	161,019	163,645	166,315
Landfill Monitoring	21,293	26,877	61,449	62,063	62,684	63,311	63,944	64,584	65,229
Landfill Gas System	71,282	98,805	74,000	75,480	76,990	78,529	80,100	81,702	83,336
Household Hazardous Waste	20,269	24,994	91,561	41,000	41,205	41,411	41,618	41,826	42,035
Debt Service - CURRENT	49,563	46,468	44,886	59,811	57,505	40,256	38,764	37,271	35,779
Debt Service - PROJECTED						2,918	16,758	16,369	25,780
<b>SUBTOTAL</b>	\$ 4,512,512	\$ 4,498,158	\$ 4,547,869	\$ 4,607,305	\$ 4,682,889	\$ 4,748,501	\$ 4,842,921	\$ 4,925,320	\$ 5,019,814
<b>CAPITAL</b>	47,000	40,000	150,000	45,000	122,244	461,750	45,000	101,000	605,000
<b>TOTAL EXPENDITURES</b>	\$ 4,559,512	\$ 4,538,158	\$ 4,697,869	\$ 4,652,305	\$ 4,805,133	\$ 5,210,251	\$ 4,887,921	\$ 5,026,320	\$ 5,624,814
<b>NET REVENUE (EXPENSE)</b>	\$ 43,410	\$ 146,911	\$ 0	\$ 103	\$ (29,774)	\$ (49,136)	\$ (96,756)	\$ (187,799)	\$ (178,374)

**SOLID WASTE FUND INCREASE**      -0.97%      3.28%      8.43%      -6.19%      2.83%      11.91%

Principal repayment on interfund loan      \$ 86,170      \$ 86,170      \$ 86,170      \$ 86,170      \$ 86,170      \$ 86,170      \$ 86,170      \$ 86,170      \$ 86,170

Annual change in current resources(net rev + repmt)      \$ 86,273      \$ 56,396      \$ 37,034      \$ (10,586)      \$ (101,629)      \$ (92,204)

Projected current resources at fiscal year end      \$ 581,191      \$ 723,859      \$ 760,893      \$ 750,307      \$ 648,678      \$ 556,474

Current resources as a percentage of operating budget      12.78%      15.46%      16.02%      15.49%      13.17%      11.09%

**CITY OF KEENE, NEW HAMPSHIRE**  
**Solid Waste Fund 2017 - 2022 Capital Improvement Program Summary**

<u>Dept.</u>	<u>Project Name</u>	<u>2016/2017</u>	<u>2017/2018</u>	<u>2018/2019</u>	<u>2019/2020</u>	<u>2020/2021</u>	<u>2021/2022</u>	<u>TOTAL</u>
Public Works	Capital Reserve - Recycling/Transfer Facility	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 270,000
Public Works	Recycling Equipment Replacement	-	77,244	250,000	-	-	-	327,244
Public Works	Three-phase Power	-	-	-	-	56,000	560,000	616,000
Public Works	Transfer Station Roof Replacement	-	-	166,750	-	-	-	166,750
<b>TOTAL CAPITAL PROGRAM</b>		<b>\$ 45,000</b>	<b>\$ 122,244</b>	<b>\$ 461,750</b>	<b>\$ 45,000</b>	<b>\$ 101,000</b>	<b>\$ 605,000</b>	<b>\$ 1,379,994</b>

**PROJECT FUNDING DETAIL**

**Reserve Funded Projects**

Public Works	Recycling Equipment Replacement	\$ -	\$ 77,244	\$ 250,000	\$ -	\$ -	\$ -	\$ 327,244
<b>Total: Reserve Funded Projects</b>		<b>\$ -</b>	<b>\$ 77,244</b>	<b>\$ 250,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 327,244</b>

**Projects Funded with Debt**

Public Works	Three-phase Power	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 560,000	\$ 560,000
Public Works	Transfer Station Roof Replacement	-	-	166,750	-	-	-	166,750
<b>Total: Projects Funded with Debt</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ 166,750</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 560,000</b>	<b>\$ 726,750</b>

**Capital Reserve Appropriations**

Public Works	Capital Reserve - Recycling/Transfer Facility	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 270,000
<b>Total: Capital Reserve Appropriations</b>		<b>\$ 45,000</b>	<b>\$ 45,000</b>	<b>\$ 45,000</b>	<b>\$ 45,000</b>	<b>\$ 45,000</b>	<b>\$ 45,000</b>	<b>\$ 270,000</b>

**Projects Funded with State Grant**

Public Works	n/a	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total: Projects Funded with State Grant</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Projects Funded with Cash**

Public Works	Three-phase Power	\$ -	\$ -	\$ -	\$ -	\$ 56,000	\$ -	\$ 56,000
<b>Total: Projects Funded with Cash</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 56,000</b>	<b>\$ -</b>	<b>\$ 56,000</b>

**Subtotal: Uses of Cash**

(Capital Reserve Appropriations plus Projects Funded with Cash)

<b>TOTAL CAPITAL PROGRAM</b>		<b>\$ 45,000</b>	<b>\$ 122,244</b>	<b>\$ 461,750</b>	<b>\$ 45,000</b>	<b>\$ 101,000</b>	<b>\$ 605,000</b>	<b>\$ 1,379,994</b>
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## Solid Waste Fund 2017 - 2022 Capital Improvement Program Debt Summary

	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>
Existing and Authorized Debt	\$270,741	\$222,296	\$174,000	\$307,750	\$263,633	\$219,517
New Issues Proposed	-	-	166,750	-		560,000
Principal Paid	(48,444)	(48,296)	(33,000)	(44,117)	(44,117)	(44,117)
<b>Total Existing Debt &amp; Issues Proposed</b>	<b>\$222,296</b>	<b>\$174,000</b>	<b>\$307,750</b>	<b>\$263,633</b>	<b>\$219,517</b>	<b>\$735,400</b>

	<u>Issue</u>	<u>Term</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>
<b>Existing &amp; Authorized Debt Service (P &amp; I)</b>			\$59,811	\$57,504	\$40,256	\$38,764	\$37,271	\$35,779
<b><u>Proposed Debt Service CIP FY17</u></b>								
N/A								
<b><u>Proposed Debt Service CIP FY18</u></b>								
N/A								
<b><u>Proposed Debt Service CIP FY19</u></b>								
Transfer Station Roof Repair	166,750	15			2,918	16,758	16,369	15,980
<b><u>Proposed Debt Service CIP FY20</u></b>								
<b><u>Proposed Debt Service CIP FY21</u></b>								
N/A								
<b><u>Proposed Debt Service CIP FY22</u></b>								
Three Phase Power	560,000	15						9,800
<b>Total CIP17-22 Debt Service Proposed</b>			0	0	2,918	16,758	16,369	25,780
<b>Total Projected Debt Service: Solid Waste Fund</b>			<b>\$59,811</b>	<b>\$57,504</b>	<b>\$43,174</b>	<b>\$55,522</b>	<b>\$53,641</b>	<b>\$61,559</b>





# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Capital Reserve- Recycle/Transfer**  
 Department: **Public Works**  
 Physical Location: **55 Old Summit Road**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Renewable Energy and Efficient Use of Resources**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Allow for continued diversion of waste stream through recycling**



### PROJECT DESCRIPTION/JUSTIFICATION

In 1996 the City developed a reserve in the Solid Waste fund to provide funding to repair or replace major pieces of equipment or facility components.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition			77,224	250,000				327,224
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$77,224</b>	<b>\$250,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$327,224</b>
<b>FUNDING</b>								
Current Revenue	197,441	45,000	45,000	45,000	45,000	45,000	45,000	467,441
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		606	720	641	130	243	356	2,696
<b>TOTAL</b>	<b>\$197,441</b>	<b>\$45,606</b>	<b>\$45,720</b>	<b>\$45,641</b>	<b>\$45,130</b>	<b>\$45,243</b>	<b>\$45,356</b>	<b>\$470,137</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001 Ongoing

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Recycling Equipment Replacement**  
 Department: **Public Works**  
 Physical Location: **55 Old Summit Road**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Renewable Energy and Efficient Use of Resources**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Allows for continued diversion of waste stream through recycling**



### PROJECT DESCRIPTION/JUSTIFICATION

In 2016 the Keene Recycling Center will be 22 years old and each piece of original equipment will have over 24,516 hours of use. All of the original equipment has a manufacturer expected life of 10 years. The Solid Waste Division currently contracts scheduled/preventative maintenance on all equipment to extend the life of the equipment where possible. Only equipment that no longer functions properly, affects facility efficiency, or represents a safety hazard would be replaced. Equipment expected to be replaced over the next several years includes the eddy current separator (for aluminum cans) and cross belt magnet (for steel cans), and horizontal baler.

Equipment to be replaced in 2018: eddy current separator \$34,873 (includes installation cost), cross belt magnet \$42,351 (includes installation cost). The Solid Waste Division will conduct an annual assessment of equipment to determine if the replacement can be delayed. Equipment to be replaced in 2019: horizontal baler \$250,000 (includes installation cost). An established capital reserve account funds the repair/replacement of major pieces of equipment at the Recycling Center.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition			77,224	250,000				327,224
TOTAL	\$0	\$0	\$77,224	\$250,000	\$0	\$0	\$0	\$327,224
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve			77,224	250,000				327,224
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$77,224	\$250,000	\$0	\$0	\$0	\$327,224

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible < \$5,001  
Multi-year

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Three Phase Power**  
 Department: **Public Works**  
 Physical Location: **55 Old Summit Road**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Renewable Energy and Efficient Use of Resources**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Allows for continued diversion of waste stream through recycling, processing solid waste**



### PROJECT DESCRIPTION/JUSTIFICATION

The Solid Waste facility currently runs on landfill gas generated power. It is expected that as the decomposition of refuse diminishes the gas generation will eventually be insufficient to provide a reliable power source for the Solid Waste facility. In the interim, the Solid Waste Division is performing repair and maintenance functions to the existing landfill gas wellfield in hopes that sufficient gas can continue to be extracted to provide power to the facility. In the event that there is insufficient gas to power the facility three phase power lines will be needed to provide electrical power. The closest three phase power lines end at Black Brook North. The lines would be extended north on Route 12 and down Old Summit Road to the Solid Waste facility. Recent negotiations with regards to the KEAP project suggest that this project may not be required, but the current plan remains as a place mark.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design						56,000	560,000	616,000
Construction/Implementation								0
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$56,000</b>	<b>\$560,000</b>	<b>\$616,000</b>
<b>FUNDING</b>								
Current Revenue						56,000		56,000
Capital Reserve								0
Debt Funded							560,000	560,000
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$56,000</b>	<b>\$560,000</b>	<b>\$616,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Moderate \$50,001 to \$100,000 Multi-year      **PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Transfer Station Roof Repair**  
 Department: **PUBLIC WORKS**  
 Physical Location: **55 Old Summit Road**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Maintain recycling facility to enable continued processing of recyclables**



### PROJECT DESCRIPTION/JUSTIFICATION

The Solid Waste Facility was built in 1994. The Solid Waste Division, through CMA Engineers, the original designers of the facility, conducted an evaluation of the site in 2013 to review drainage systems, building condition, and road systems. The evaluation resulted in recommendations for short and long term capital needs to maintain the facility. The facility has undergone some short term improvements recommended including reinforcement of the upper portion of the push wall at the Transfer Station to prevent damage to the siding and replacement of damaged siding. One of the pressing long term capital needs is a replacement of the roof on the solid waste facility building. Small leaks are beginning to appear in the roof which are patched as necessary, but the overall integrity of the roof, which was designed to last 20 years, is starting to become compromised in the 22 year old facility. The roof will be evaluated every year to determine if the project needs to be accelerated or can be deferred.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY12	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation				166,750				166,750
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$166,750</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$166,750</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve								0
Debt Funded				166,750				166,750
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$166,750</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$166,750</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
One time

**PROJECT STATUS:** Ongoing CIP

**CITY OF KEENE, NEW HAMPSHIRE  
CAPITAL IMPROVEMENT PROGRAM FY17-FY22  
Sewer Fund Multi-Year Projections**

	ACTUAL FY 13/14	ACTUAL FY 14/15	BUDGET FY 15/16	PROJECTED FY16/17	PROJECTED FY17/18	PROJECTED FY18/19	PROJECTED FY19/20	PROJECTED FY20/21	PROJECTED FY21/22
<b>REVENUES</b>									
Taxes	\$43,473	\$41,777	\$40,194	\$38,841	\$36,518	110,641	111,471	112,307	113,150
Intergovernmental	1,501,143	137,450	108,189	109,000	109,818	6,719,007	6,875,050	6,872,444	7,049,426
Charges for Services	5,911,507	6,186,268	6,688,667	6,708,540	6,475,659	9,643	9,715	9,788	9,862
Miscellaneous	18,025	27,321	4,000	9,500	9,571				
Use of Surplus			(1,424,395)						
<b>TOTAL REVENUES</b>	\$7,474,148	\$6,392,816	\$5,416,655	\$6,865,881	\$6,631,566	\$6,839,291	\$6,996,236	\$6,994,539	\$7,172,438
<b>EXPENSES</b>									
Sewer Administration	\$708,279	\$669,876	\$671,129	\$670,156	\$681,214	\$692,454	\$705,957	\$719,723	\$733,757
Mains & Manholes	342,057	278,855	340,862	333,614	\$339,119	\$344,714	\$351,436	\$358,289	\$365,276
Services	5,594	16,424	7,779	7,907	\$8,038	\$8,170	\$8,330	\$8,492	\$8,658
Martell Court pump stn	117,024	123,236	144,098	146,476	\$148,892	\$151,349	\$154,300	\$157,309	\$160,377
Laboratory	198,315	194,775	214,094	215,683	\$219,242	\$222,859	\$227,205	\$231,636	\$236,152
Maintenance	100,643	97,346	137,298	139,563	\$141,866	\$144,207	\$147,019	\$149,886	\$152,809
WWTP	2,602,190	2,597,508	2,572,159	2,604,099	2,647,067	2,690,743	2,743,213	\$2,796,706	\$2,851,241
Depreciation Expense	899,701	814,858	964,700	964,700	964,700	1,064,700	1,064,700	\$1,064,700	\$1,064,700
Debt Service - CURRENT	185,796	321,652	364,537	300,907	267,966	238,104	208,982	\$180,388	\$151,935
Debt Service - PROJECTED						19,995	38,657	61,457	82,559
<b>SUBTOTAL</b>	5,159,599	5,114,529	5,416,655	\$5,383,105	5,418,104	5,577,295	5,649,799	5,728,586	5,807,464
MINOR CAPITAL	299,175	166,335	0	\$0	0	0	0	0	0
<b>TOTAL EXPENSE</b>	\$5,458,774	\$5,280,865	5,416,655	5,383,105	\$5,418,104	\$5,577,295	\$5,649,799	\$5,728,586	\$5,807,464
<b>NET REVENUE (EXPENSE)</b>	\$2,015,373	\$1,111,951	(\$0)	\$1,482,776	\$1,213,462	\$1,261,996	\$1,346,437	\$1,265,953	\$1,364,974

**SEWER FUND INCREASE**      7.71%      -0.77%      -0.62%      0.65%      2.94%      1.30%      1.39%      1.38%

**This section adjusts Net Revenue (Expense) to include uses of cash not recorded as expense, and to exclude expenses that do not require the use of cash. The purpose of the adjustment is to reflect the projected uses of cash from FY 17 thru FY 22:**

	<u>FY 16/17</u>	<u>FY 17/18</u>	<u>FY 18/19</u>	<u>FY 19/20</u>	<u>FY 20/21</u>	<u>FY 21/22</u>
Add Back: Depreciation	\$964,700	\$964,700	\$1,064,700	\$1,064,700	\$1,064,700	\$1,064,700
State Aid Grant Principal Receipts	118,591	116,488	57,078	\$55,628	\$54,257	\$52,784
Subtract: Debt Svc Principal Current Debt (Note 3)	(1,652,158)	(1,375,824)	(1,334,883)	(1,336,486)	(1,324,258)	(1,319,258)
Principal: New Debt (Note 3)				(76,171)	(76,171)	(173,185)
Tfrs to Capital Reserve (Note 2)	(750,000)	(750,000)	(875,000)	(875,000)	(800,000)	(800,000)
Capital Outlays Funded through Rates and Fund Resources (Note 2)	(163,909)	(168,826)	(173,891)	(179,108)	(184,481)	(190,015)
<b>Projected Annual Cash Surplus (Deficit)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

Note 1: Net Revenue (Expense) indicates the anticipated increase (decrease) in retained earnings at the end of the year.

Note 2: Net revenue is anticipated to pay for debt service and capital improvements.

Note 3: Debt Service principal, capital outlays, state aid grant principal receipts, and transfers to reserves are balance sheet transactions, and are not included in expenses.

Note 4: Budgeted revenues exclude Use of Surplus / Fund Balance.

Note 5: Additional revenue raised in FY 14-22 to cover capital outlays and debt service in FY 14-22 and future years.

Note 6: Intergovernmental Revenues in FY 2014 includes \$1,131,996 in NH Department of Environmental Services state aid grants for completed infrastructure projects. This amount was included as a receivable on the FY 2014 year end balance sheet and is receivable in annual installments through 2034.

**Billing Projections**

Combined Water and Sewer Utility Billing Projections: Residential property with a 5/8" connection and consumption of 27 HCF (hundred cubic feet) per quarter

quarterly bill increase	\$ 326.07	\$ 336.60	\$ 349.56	\$ 363.33	\$ 374.40	\$ 386.55
percent increase	11.85%	10.53%	12.96%	13.77%	11.07%	12.15%
	3.77%	3.23%	3.85%	3.94%	3.05%	3.25%

Sewer Utility Billing Projections: Residential property with a 5/8" connection and consumption of 27 HCF (hundred cubic feet) per quarter

quarterly bill increase	\$ 212.53	\$ 207.67	\$ 217.93	\$ 221.71	\$ 225.76	\$ 231.16
percent increase	3.75%	(4.86)%	10.26%	3.78%	4.05%	5.40%
	1.80%	-2.29%	4.94%	1.73%	1.83%	2.39%

**CITY OF KEENE, NEW HAMPSHIRE**  
**Sewer Fund 2017 - 2022 Capital Improvement Program Summary**

<u>Dept.</u>	<u>Project Name</u>	<u>2016/2017</u>	<u>2017/2018</u>	<u>2018/2019</u>	<u>2019/2020</u>	<u>2020/2021</u>	<u>2021/2022</u>	<u>TOTAL</u>
Public Works	Reserve: Martell Court	\$ -	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 200,000
Public Works	Reserve: Sewer Infrastructure	500,000	500,000	575,000	575,000	500,000	500,000	3,150,000
Public Works	Reserve: Wastewater Treatment Plant	250,000	250,000	250,000	250,000	250,000	250,000	1,500,000
Public Works	Laboratory Equipment Replacement	15,293	-	-	-	-	-	15,293
Public Works	Martell Court Force Main Emergency Plan	45,000	-	-	-	-	-	45,000
Public Works	Martell Court Headworks Treatment	-	-	1,142,560	-	-	-	1,142,560
Public Works	Martell Court Phase 2	-	10,925	58,667	-	130,810	-	200,402
Public Works	Sewer Main - State Bypass project	-	-	360,291	-	-	-	360,291
Public Works	Sewer Main Improvements	967,741	145,700	145,259	661,301	1,455,512	409,241	3,784,754
Public Works	Sewer Mains - Bridges Improvements	-	40,000	43,500	-	-	-	83,500
Public Works	Sewer Structural Repairs	163,909	168,826	173,891	179,108	184,481	190,015	1,060,230
Public Works	WWTP Aeration Basin Gate Replacement	197,260	-	-	-	-	-	197,260
Public Works	WWTP Blower Replacement	-	-	68,741	179,360	184,741	-	432,842
Public Works	WWTP Generator Replacement	-	-	21,131	-	123,636	-	144,767
Public Works	WWTP Non-Potable Water System	-	-	65,400	-	-	-	65,400
Public Works	WWTP Sludge Pump Replacement	52,000	-	-	-	-	-	52,000
<b>TOTAL CAPITAL PROGRAM</b>		<b>\$ 2,191,203</b>	<b>\$ 1,115,451</b>	<b>\$ 2,954,440</b>	<b>\$ 1,894,769</b>	<b>\$ 2,879,180</b>	<b>\$ 1,399,256</b>	<b>\$ 12,434,299</b>

**PROJECT FUNDING DETAIL**

**Reserve Funded Projects**

Public Works	Laboratory Equipment Replacement	\$ 15,293	-	-	-	-	-	\$ 15,293
Public Works	Martell Court Force Main Emergency Plan	45,000	-	-	-	-	-	45,000
Public Works	Martell Court Phase 2	-	10,925	58,667	-	130,810	-	200,402
Public Works	Sewer Main - State Bypass project	-	-	360,291	-	-	-	360,291
Public Works	Sewer Main Improvements	967,741	145,700	145,259	661,301	-	409,241	2,329,242
Public Works	Sewer Mains - Bridges Improvements	-	40,000	43,500	-	-	-	83,500
Public Works	WWTP Aeration Basin Gate Replacement	197,260	-	-	-	-	-	197,260
Public Works	WWTP Blower Replacement	-	-	7,665	179,360	184,741	-	371,766
Public Works	WWTP Generator Replacement	-	-	21,131	-	123,636	-	144,767
Public Works	WWTP Non-Potable Water System	-	-	65,400	-	-	-	65,400
Public Works	WWTP Sludge Pump Replacement	52,000	-	-	-	-	-	52,000
<b>Total: Reserve Funded Projects</b>		<b>\$ 1,277,294</b>	<b>\$ 196,625</b>	<b>\$ 701,913</b>	<b>\$ 840,661</b>	<b>\$ 439,187</b>	<b>\$ 409,241</b>	<b>\$ 3,864,921</b>

**Projects Funded with Debt**

Public Works	Martell Court Headworks Treatment	\$ -	\$ -	\$ 1,142,560	\$ -	\$ -	\$ -	\$ 1,142,560
Public Works	Sewer Main Improvements	-	-	-	-	1,455,512	-	1,455,512
<b>Total: Projects Funded with Debt</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,142,560</b>	<b>\$ -</b>	<b>\$ 1,455,512</b>	<b>\$ -</b>	<b>\$ 2,598,072</b>

**Projects Funded with Grants**

Public Works	N/A	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total: Projects Funded with State Grant</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Capital Reserve Appropriations**

Public Works	Reserve: Martell Court	\$ -	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 200,000
Public Works	Reserve: Sewer Infrastructure	500,000	500,000	575,000	575,000	500,000	500,000	3,150,000
Public Works	Reserve: Wastewater Treatment Plant	250,000	250,000	250,000	250,000	250,000	250,000	1,500,000
<b>Total: Capital Reserve Appropriations</b>		<b>\$ 750,000</b>	<b>\$ 750,000</b>	<b>\$ 875,000</b>	<b>\$ 875,000</b>	<b>\$ 800,000</b>	<b>\$ 800,000</b>	<b>\$ 4,850,000</b>

**CITY OF KEENE, NEW HAMPSHIRE**  
**Sewer Fund 2017 - 2022 Capital Improvement Program Summary**

<u>Dept.</u>	<u>Project Name</u>	<u>2016/2017</u>	<u>2017/2018</u>	<u>2018/2019</u>	<u>2019/2020</u>	<u>2020/2021</u>	<u>2021/2022</u>	<u>TOTAL</u>
<b><u>Projects Funded with Cash</u></b>								
Public Works	Sewer Structural Repairs	\$ 163,909	\$ 168,826	\$ 173,891	\$ 179,108	\$ 184,481	\$ 190,015	<b>1,060,230</b>
Public Works	WWTP Aeration Gate Replacement	-	-	-	-	-	-	-
Public Works	WWTP Blower Replacement	-	-	61,076	-	-	-	<b>61,076</b>
Public Works	WWTP NPDES Permitting	-	-	-	-	-	-	-
<b>Total: Projects Funded with Cash</b>		<b>\$ 163,909</b>	<b>\$ 168,826</b>	<b>\$ 234,967</b>	<b>\$ 179,108</b>	<b>\$ 184,481</b>	<b>\$ 190,015</b>	<b>\$ 1,121,306</b>
<b>Subtotal: Uses of Current Cash</b>		<b>\$ 913,909</b>	<b>\$ 918,826</b>	<b>\$ 1,109,967</b>	<b>\$ 1,054,108</b>	<b>\$ 984,481</b>	<b>\$ 990,015</b>	<b>\$ 5,971,306</b>
<i>(Capital Reserve Appropriations plus Projects Funded with Current Cash)</i>								
<b>TOTAL: CAPITAL PROGRAM</b>		<b>\$ 2,191,203</b>	<b>\$ 1,115,451</b>	<b>\$ 2,954,440</b>	<b>\$ 1,894,769</b>	<b>\$ 2,879,180</b>	<b>\$ 1,399,256</b>	<b>\$ 12,434,299</b>

*New cash Requirement FY 17-22: reconciliation*

<i>Total: Uses of cash</i>	\$913,909	\$918,826	\$1,109,967	\$1,054,108	\$984,481	\$990,015	\$5,971,306
<i>WWTP Blower Replace: FY 14 Authorization</i>			(61,076)				(61,076)
<i>New Funds needed</i>	\$ 913,909	\$ 918,826	\$ 1,048,891	\$ 1,054,108	\$984,481	\$990,015	\$5,910,230



## Sewer Fund 2017 - 2022 Capital Improvement Program Debt Summary

	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>
Existing and Authorized Debt	\$13,003,217	\$11,351,058	\$9,975,235	\$9,782,912	\$8,370,256	\$8,425,039
New Issues Proposed		-	1,142,560	-	1,455,212	-
Principal Paid	(1,652,158)	(1,375,824)	(1,334,883)	(1,412,657)	(1,400,428)	(1,492,442)
<b>Total Existing Debt &amp; Issues Proposed</b>	<b>\$11,351,058</b>	<b>\$9,975,235</b>	<b>\$9,782,912</b>	<b>\$8,370,256</b>	<b>\$8,425,039</b>	<b>\$6,932,597</b>

	<u>Issue</u>	<u>Term</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>
<b>Existing &amp; Authorized Debt Service (P &amp; I)</b>			\$1,953,065	\$1,643,790	\$1,572,987	\$1,545,468	\$1,504,646	\$1,471,192
<b><u>Proposed Debt Service CIP FY17</u></b>								
N/A								
<b><u>Proposed Debt Service CIP FY18</u></b>								
N/A								
<b><u>Proposed Debt Service CIP FY19</u></b>								
Martell Court Headworks Replacement	1,142,560	15			19,995	114,827	112,161	109,495
<b><u>Proposed Debt Service CIP FY20</u></b>								
<b><u>Proposed Debt Service CIP FY21</u></b>								
Colony Court -Bloomer Swamp Main	1,455,212	15					25,466	146,249
<b><u>Proposed Debt Service CIP FY22</u></b>								
<b>Total CIP17-22 Debt Service Proposed</b>			<b>0</b>	<b>0</b>	<b>19,995</b>	<b>114,827</b>	<b>137,628</b>	<b>255,744</b>
<b>Total Projected Debt Service: Sewer Fund</b>			<b>\$1,953,065</b>	<b>\$1,643,790</b>	<b>\$1,592,981</b>	<b>\$1,660,295</b>	<b>\$1,642,274</b>	<b>\$1,726,937</b>

## **CAPITAL RESERVE -- Martell Court Pump Station**

The projected balance of the capital reserve at the end of FY 22 is projected to be \$468,509, or 7.8% of the estimated replacement cost of covered assets.

<b>Major Equipment/Systems</b>	<b>Year Constructed</b>	<b>Expected Life (years)</b>	<b>Estimated Replace/Install Date</b>	<b>Present Replace/Install Cost</b>
Solids Grinder	1992	15	Replace in FY19	\$1,177,994
Generator/Transformer	1985	35	2021	\$187,515
Martel Court Roof	1985	30	Repaired in 2015 - replace in 2025	\$71,735
Building and Systems	1985	50	2035	\$2,959,487
7 Sewage Diversion Gates	2014	20	2034	\$120,000
4 Raw Sewage Pumps and Controls	2014	20	2034	\$1,500,000
<b>Total</b>				<b><u>\$6,016,731</u></b>

### Details of the appropriations from the Martell Court Capital Reserve Fund - FY17 through 22

<b>FY17</b>	\$ 45,000	Force Main Study
<b>FY18</b>	\$ 10,925	Design of New Transformer
<b>FY19</b>	\$ 58,667	Transformer Replacement and Design for New Generator
<b>FY20</b>	N/A	
<b>FY21</b>	\$ 130,810	Generator Replacement
<b>FY22</b>	N/A	
<b>Total</b>	\$ 245,402	



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Capital Reserve - Martell Court**  
 Department: **Public Works - Sewer Fund**  
 Physical Location:  
 Federal Mandate: **No**  
 State Regulation or Law: **No**  
 Master Plan (CMP) Focus Area: **Vibrant Economy**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **Policy**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Financial responsibility and sustainability.**



### PROJECT DESCRIPTION/JUSTIFICATION

This capital reserve account is for funding major planned and unplanned repairs and systems replacement at the Martell Court Pump Station. The *Municipal Wastewater Financial Management* handbook recommends that a reserve account be used to provide funds for the planned or unplanned replacement of major pieces of equipment or building components. The use of this type of account helps the municipality stabilize cash flows for project funding through regular deposits and acts as a rainy day fund to provide funding in the case of emergency expenditures that cannot be absorbed by the regular operating budget. The City of Keene works to maintain the Martell Court capital reserve fund balance at 3-5% of the approximate current replacement value of the Martell Court Pump Station assets.

The City Council's fiscal policy establishes Capital Reserves, under State of NH law invested by the Trustees of Trust Funds, for specific purposes, including construction, reconstruction, or acquisition of a capital improvement or capital equipment.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation		45,000	10,925	58,667		130,810		245,402
Property/Equip. Acquisition								
<b>TOTAL</b>	<b>\$0</b>	<b>\$45,000</b>	<b>\$10,925</b>	<b>\$58,667</b>	<b>\$0</b>	<b>\$130,810</b>	<b>\$0</b>	<b>\$245,402</b>
<b>FUNDING</b>								
Current Revenue	506,456			50,000	50,000	50,000	50,000	706,456
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		1,266	1,157	1,257	1,239	1,367	1,168	7,454
<b>TOTAL</b>	<b>\$506,456</b>	<b>\$1,266</b>	<b>\$1,157</b>	<b>\$51,257</b>	<b>\$51,239</b>	<b>\$51,367</b>	<b>\$51,168</b>	<b>\$713,910</b>

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

## CAPITAL RESERVE -- SEWER INFRASTRUCTURE

The projected balance of the capital reserve at the end of FY 22 is projected to be \$1,313,476, or 1.2% of the estimated replacement cost of covered assets.

Equipment	Year Constructed	Expected Life (years)	Estimated Replace/Install Date	Present Replace/Install Cost
Court Street Lift Station *	1976	50	2026	\$182,287
Bradco Lift Station *	1981	50	2031	\$187,561
Farmstead Common Lift Station *	1992	50	2042	\$219,977
Black Brook Lift Station *	1996	50	2046	\$189,122
subtotal				\$778,947
Wastewater Collection System**	1890-present	50-75	ongoing	\$74,357,000
<b>Total</b>				<b>\$75,135,947</b>

\* Expected life for buildings and infrastructure is 50 years. The various mechanical and equipment components have an expected life of 10-15 years.

\*\* There are more than 86 miles of sewer mains in Keene with ages ranging from 1 to 120 years. Replacement cost is estimated from the 2013 Infrastructure Report.

### Details of the appropriations from the Sewer Infrastructure Capital Reserve Fund - FY17 through 22

<b>FY17</b>	\$967,741	Sewer Main Improvements
<b>FY18</b>	\$145,700	Sewer Main Improvements
	\$40,000	Roxbury St Bridge utilities
<b>FY19</b>	\$145,259	Sewer Main Improvements
	\$43,500	Winchester St - Rte 10 Ash Swamp bridge utilities
	\$360,291	Winchester St. Sewer Main (Bypass project)
<b>FY20</b>	\$661,301	Sewer Main Improvements
<b>FY21</b>	N/A	
<b>FY22</b>	\$409,241	Sewer Main Improvements
<b>Total</b>	\$2,773,033	



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Capital Reserve-Sewer Infrastructure**  
 Department: **Public Works - Sewer Fund**  
 Physical Location: **Various**  
 Federal Mandate: **No**  
 State Regulation or Law: **No**  
 Master Plan (CMP) Focus Area: **Vibrant Economy**  
 CMP Vision/Strategy: **Municipal Governance & Financial Stability**  
 Council Initiative: **Policy**  
 V.O.I.C.E.: **Establish Priorities**  
 Departmental Objective: **Financial responsibility and sustainability**



### PROJECT DESCRIPTION/JUSTIFICATION

This capital reserve account is for funding major planned and unplanned repairs and systems replacement in the wastewater collection system. The *Municipal Wastewater Financial Management* handbook recommends that a reserve account be used to provide funds for the planned or unplanned replacement of major pieces of equipment or building components. The use of this type of account helps the municipality stabilize cash flows for project funding through regular deposits and acts as a rainy day fund to provide funding in the case of emergency expenditures that cannot be absorbed by the regular operating budget. The City of Keene works to maintain the infrastructure capital reserve fund balance at 3-5% of the approximate current replacement value of the infrastructure assets.

The City Council's fiscal policy establishes Capital Reserves under State of NH law, invested by the Trustees of Trust funds, for specific purposes including construction, reconstruction, or acquisition, or a capital improvement, or capital equipment.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation		967,741	185,700	549,050	661,301		409,241	2,773,033
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$967,741</b>	<b>\$185,700</b>	<b>\$549,050</b>	<b>\$661,301</b>	<b>\$0</b>	<b>\$409,241</b>	<b>\$2,773,033</b>
<b>FUNDING</b>								
Current Revenue	916,274	500,000	500,000	575,000	575,000	500,000	500,000	4,066,274
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		3,541	2,380	3,359	3,433	3,225	4,296	20,234
<b>TOTAL</b>	<b>\$916,274</b>	<b>\$503,541</b>	<b>\$502,380</b>	<b>\$578,359</b>	<b>\$578,433</b>	<b>\$503,225</b>	<b>\$504,296</b>	<b>\$4,086,508</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:**

Ongoing

**PROJECT STATUS:**

Ongoing CIP

## CAPITAL RESERVE -- WASTEWATER TREATMENT PLANT

The projected balance of the capital reserve at the end of FY 22 is projected to be \$920,485, or 3% of the estimated replacement cost of covered assets.

Equipment	Year Constructed	Expected Life (years)	Estimated Replace/Install Date	Present Replace/Install Cost
Grit Removal Rehab (rehabilitation FY18)	1985	25	2028	\$2,052,426
Dewatering Equipment	1985	15	2017	\$3,276,000
WWTP Blower Replacement	1985	25	2019-2021	\$420,236
Sludge Pump Replacement (rehabilitation FY17)	1985	20	2028	\$648,571
Aeration Basin Gate Mixer Replacement	1985	20	2017	\$185,340
Non-potable Service Water System	1985	25	2019	\$65,400
Building, Systems, and Equipment	1985	50	2035	\$24,474,961
<b>Total</b>				<b>\$31,122,934</b>

### Details of the appropriations from the WWTP Capital Reserve Fund - FY17 through 22

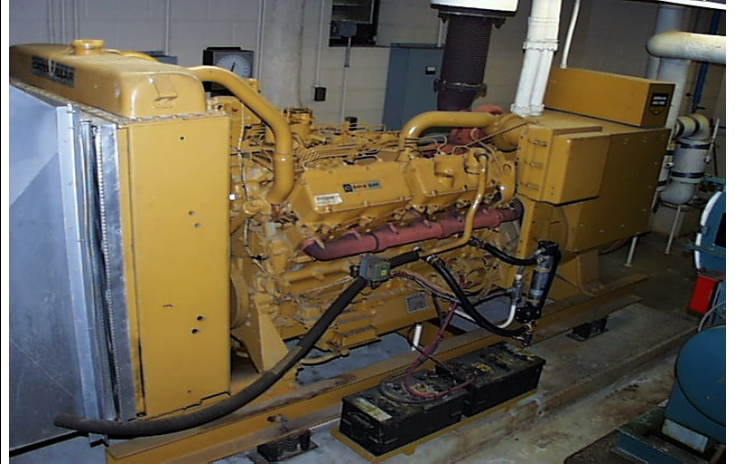
<b>FY17</b>	\$	197,260	WWTP Aeration Gate/Mixer Replacement
	\$	52,000	WWTP Sludge pump repair
	\$	15,293	Laboratory Equipment Replacement
<b>FY18</b>		N/A	
<b>FY19</b>	\$	65,400	WWTP Non-potable Service Water System
	\$	21,131	WWTP Generator replacement design
	\$	7,665	WWTP Blower Replacement
<b>FY20</b>	\$	179,360	WWTP Blower Replacement
<b>FY21</b>	\$	184,741	WWTP Blower Replacement
	\$	123,636	WWTP Generator replacement
<b>FY22</b>		N/A	
<b>Total</b>	\$	846,486	



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

Project Name: **Capital Reserve - WWTP**  
 Department: **Public Works - Sewer Fund**  
 Physical Location: **420 Airport Road**  
 Federal Mandate: **No**  
 State Regulation or Law: **No**  
 Master Plan (CMP) Focus Area: **Vibrant Economy**  
 CMP Vision/Strategy: **Municipal Governance & Financial Stability**  
 Council Initiative: **Policy**  
 V.O.I.C.E.: **Establish Priorities**  
 Departmental Objective: **Financial responsibility and sustainability.**



## PROJECT DESCRIPTION/JUSTIFICATION

This capital reserve account is for funding major planned and unplanned repairs and systems replacement at the Wastewater Treatment Plant. The *Municipal Wastewater Financial Management* handbook recommends that a reserve account be used to provide funds for the planned or unplanned replacement of major pieces of equipment or building components. The use of this type of account helps the municipality stabilize cash flows for project funding through regular deposits and acts as a rainy day fund to provide funding in the case of emergency expenditures that cannot be absorbed by the regular operating budget. The City of Keene works to maintain the infrastructure capital reserve fund balance at 3-5% of the approximate current replacement value of the infrastructure assets.

The City Council's fiscal policy establishes Capital Reserves, under State of NH law invested by the Trustees of Trust funds, for specific purposes including construction, reconstruction, or acquisition, or a capital improvement, or capital equipment.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		264,553		94,196	179,360	308,377		846,486
<b>TOTAL</b>	<b>\$0</b>	<b>\$264,553</b>	<b>\$0</b>	<b>\$94,196</b>	<b>\$179,360</b>	<b>\$308,377</b>	<b>\$0</b>	<b>\$846,486</b>
<b>FUNDING</b>								
Current Revenue	255,633	250,000	250,000	250,000	250,000	250,000	250,000	1,755,633
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		1,264	1,231	1,859	2,253	2,435	2,295	11,337
<b>TOTAL</b>	<b>\$255,633</b>	<b>\$251,264</b>	<b>\$251,231</b>	<b>\$251,859</b>	<b>\$252,253</b>	<b>\$252,435</b>	<b>\$252,295</b>	<b>\$1,766,970</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:**

Multi-year

**PROJECT STATUS:**

Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

Project Name: **Laboratory Equipment**  
 Department: **Public Works - Sewer Fund**  
 Physical Location: **420 Airport Road**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Accurate and timely lab results at the most affordable cost**



## PROJECT DESCRIPTION/JUSTIFICATION

This project funds the replacement of the 15-year old analytical grade solids drier that analyzes the percent of solids in raw wastewater sludge and dewatered sludge samples. The information generated by this instrument is used to optimize the dewatering process. The manufacturer's 2013 quote has been adjusted by 3% per year through FY17. No additional installation expenses are anticipated. This project is Year 2 of the lab equipment replacement project. Year 1 replacement of the atomic absorption spectrophotometer, was completed in FY16.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		15,293						15,293
<b>TOTAL</b>		<b>\$15,293</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$15,293</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve		15,293						15,293
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$15,293</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$15,293</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible < \$5,001  
 One time

**PROJECT STATUS:** Ongoing CIP





# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

**Project Name:** Martell Court Pump Station  
**Emergency Plan**  
**Department:** Public Works - Sewer Fund  
**Physical Location:** Martell Court to Wastewater Plant  
**Federal Mandate:** N/A  
**State Regulation or Law:** N/A  
**Master Plan (CMP) Focus Area:** Quality Built Environment  
**CMP Vision/Strategy:** Infrastructure  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Establish Priorities  
**Departmental Objective:** Emergency Response Planning



30 inch ductile iron force main

## PROJECT DESCRIPTION/JUSTIFICATION

The Martell Court Pump station and its force main, constructed in 1985, together convey all of the wastewater from the City to the Wastewater Treatment Plant in Swanzey. Carrying more than 3 million gallons of raw wastewater each day, this infrastructure is the weakest link in the City's 86 mile wastewater collection system. The length of the force main and the volume of water that passes through it make it challenging to effectively respond to a failure because of a lack of redundancy. Calculations made during the 2014 pump station upgrade identified that there are limited hours of response time to a station failure before sewage overflows into streets and/or basements. This project funds an analysis of the system's vulnerabilities and will make recommendations to prevent environmental contamination in the event of a catastrophic failure. The work will also include a recommendation on how best to investigate the condition of the force main and estimate its remaining useful life.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design		45,000						45,000
Construction/Implementation								0
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$45,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$45,000</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve		45,000						45,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$45,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$45,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
One time

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

**Project Name:** Head Works Treatment  
**Department:** Public Works - Sewer Fund  
**Physical Location:** 176 Martell Court  
**Federal Mandate:** N/A  
**State Regulation or Law:** N/A  
**Master Plan (CMP) Focus Area:** Quality Built Environment  
**CMP Vision/Strategy:** Infrastructure  
**Council Initiative:** N/A  
**V.O.I.C.E.:** N/A  
**Departmental Objective:** Protect downstream equipment from damage by removing rags, wipes, and plastics from the waste stream



Example of screening equipment

## PROJECT DESCRIPTION/JUSTIFICATION

More than 3 million gallons of raw wastewater are pumped through the Martell Court Pump Station every day. Solids, including plastics, wipes, and other non-degradable materials currently pass through a grinder. The existing grinding equipment will no longer be supported by the manufacturer after 2020 so replacement parts will not be available after that year, but it is expected that staff will be able to keep the existing equipment operational until then. The current grinding technology results in material that recombines at the WWTP and creates blockages, mats of trash, and winds around rotating equipment where it must be removed by hand. New screening technology is available that can screen, wash, and compact these solids at the pump station before they cause maintenance issues at the WWTP.

Technology selection and engineering design for replacement of the grinding equipment at the Martell Court Pump Station will be completed in FY16. Construction is funded in FY19.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design	200,000							200,000
Construction/Implementation				1,142,560				1,142,560
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$200,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,142,560</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,342,560</b>
<b>FUNDING</b>								
Current Revenue								
Capital Reserve	200,000							200,000
Debt Funded				1,142,560				1,142,560
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$200,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,142,560</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,342,560</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Create efficiencies  
One time

**PROJECT STATUS:** Re-introduced



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

**Project Name:** Martell Court Upgrade Phase 2  
**Department:** Public Works - Sewer Fund  
**Physical Location:** 176 Martell Court  
**Federal Mandate:** The City's NPDES permit requires the City to have back up power.  
**State Regulation or Law:** No  
**Master Plan (CMP) Focus Area:** Unique Natural Environment  
**CMP Vision/Strategy:** Infrastructure  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** Reliable operation of the City's main sewage pumping station during power outages



## PROJECT DESCRIPTION/JUSTIFICATION

Phase 2 of the Martell Court Pump Station upgrade consists of the replacement of the transformer and generator that were installed when the Station was built in 1985. The transformer converts high voltage power to secondary 480 volt power that is used to operate the station when line power is not available. The generator provides power to keep the station's four large raw sewage pumps operating when line power is interrupted. A generator failure would result in sewage backing up into buildings/basements and into City streets within several hours of losing line power.

In FY19, the transformer will be 34 years old and approaching the end of its reliable life. FY18 funds the design of the 15 KVA transformer replacement and FY19 funds the purchase and installation of a new transformer. FY19 also funds the design for the replacement of the station's generator. FY21 funds the purchase and installation of the generator equipment. By FY21, the generator will be 36 years old and replacement parts will be difficult to procure. Phase 1 of the Pump Station upgrade was completed in FY14 and included the replacement of four raw sewage pumps, seven gates, and their associated controls.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design			10,925	21,131				32,056
Construction/Implementation				37,536		130,810		168,346
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$10,925</b>	<b>\$58,667</b>	<b>\$0</b>	<b>\$130,810</b>	<b>\$0</b>	<b>\$200,402</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve			10,925	58,667		130,810		200,402
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$10,925</b>	<b>\$58,667</b>	<b>\$0</b>	<b>\$130,810</b>	<b>\$0</b>	<b>\$200,402</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
One time

**PROJECT STATUS:** Ongoing CIP

## Water and Sewer Improvements

The City's strategy for identifying and prioritizing water and sewer improvements in conjunction with roadwork for this Capital Improvement Program is a combination of the sewer condition and the Road Overlay Program. It has evolved from its "Dig the Road Once" philosophy as the City's obligation under the 2004 Administrative Order requiring the replacement of specific sewers is complete. Sewer improvements in FY16-19 reflect condition-driven projects and are not associated with road rehabilitation projects.

A 2012 assessment of the City's paved streets used the pavement condition and traffic volume to develop a numeric rating. This rating was used to prioritize streets for overlay and streets were grouped into neighborhoods to gain efficiency in construction services and to improve the overall aesthetics of an area.

Before a street is overlaid, its water, sewer, and drain infrastructure are evaluated and repairs/improvements are planned for the year before the overlay is scheduled to avoid digging up a freshly paved road. The water, sewer, and drain evaluations are performed in different ways.

- *Sewers are evaluated according to their condition and capacity.*
  - Condition ratings were generated as part of the Priority Inspection Program that was performed between FY06 and FY11. The results of these inspections have been cataloged and deficiencies that require spot repair, short length lining, or complete lining have been identified.
  - Capacity issues have been identified using the computer model of the collection system. Inflow and infiltration was evaluated in FY14 and is an additional factor in evaluations.
  
- *Water main evaluations are based on age, pressure/volume, and repair frequency.*
  - While no video is available that shows the condition of the water mains, the age and material are often used as clues to their conditions. As an example, mains that were constructed between 1930 and the 1970's were made of bituminous cast iron pipe (universal pipe) and are prone to leaks. Mains that do not have a cement lining can build up a hard layer of minerals that cannot be removed through the normal flushing programs.
  - The Department operational records are used to identify mains that have experienced a number of breaks.
  - The volume of water the main can transport, and what the relationship is of a given section of main to the rest of the system is evaluated using the water distribution model. If a section does not provide the anticipated volume or pressure, a piece can be cut out and visually inspected to determine the amount of material buildup.
  
- *The capacity of storm drains is evaluated by the contributing storm drainage area.*
  - If capacity is not adequate the drains are upsized by excavating and replacing the drain with a larger size pipe.
  - A storm drain model that will assist the evaluation of capacity is currently being developed.



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **State Bypass Utilities**  
 Department: **Public Works - Sewer Fund**  
 Physical Location: **Various**  
 Federal Mandate: **No**  
 State Regulation or Law: **No**  
 Master Plan (CMP) Focus Area: **Healthy Community**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **Policy**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Yes**



### PROJECT DESCRIPTION/JUSTIFICATION

This project funds the replacement of sewer mains that are affected by the NH Department of Transportation's construction on Winchester Street between Island Street and the roundabout. The NH Department of Transportation's project does not include funds for sewer utilities that are damaged or need to be replaced due to a state road project. This project funds the time and materials required for the sewer main replacement and does not include road or surface replacement because that work is covered by the corresponding State road project.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation				360,291				360,291
Property/Equip. Acquisition								0
<b>TOTAL</b>		\$0	\$0	\$360,291	\$0	\$0	\$0	\$360,291
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve				360,291				360,291
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>		\$0	\$0	\$360,291	\$0	\$0	\$0	\$360,291

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:**

N/A

**PROJECT STATUS:**

New Project

## SEWER IMPROVEMENT LIST

The following tables outline the sewer improvements planned for **2017 - 2022 Capital Project Funding Request** . The construction cost estimates are based on 2013 prices. A contingency has been added to each project including an allowance for design, construction administration, supplies and overhead costs. The project costs have been adjusted annually by 3% for inflation to give an approximate estimated cost for the year the work is planned.

### 2017

ROAD NAME	LENGTH	TYPE WORK	EST. COST
Perham Street sewer	1600'	Replacement	\$685,341
Subtotal			\$685,341
Construction Contingency: 10%			\$68,534
<b>Construction Totals</b>			<b>\$753,875</b>
Design: 10%			\$75,388
Construction Administration: 10%			\$75,388
SUPV. & Overhead: 1%			\$7,539
<b>Project Total</b>			<b>\$912,189</b>
Inflation Factor: 3% / yr x 2 years			\$55,552
<b>Total Sewer Replacement</b>			<b>\$967,741</b>

### 2018

ROAD NAME	LENGTH	TYPE WORK	EST. COST
TBD - based on 2016 Inflow and Infiltration study results			
Subtotal			\$0
Construction Contingency: 10%			\$0
<b>Construction Totals</b>			<b>\$0</b>
Design: 10%			\$0
Construction Administration: 10%			\$0
SUPV. & Overhead: 1%			\$0
<b>Project Total</b>			<b>\$0</b>
Inflation Factor: 3% / yr x 3 years			\$0
<b>Total Sewer Replacement</b>			<b>\$145,700</b>

### 2019

ROAD NAME	LENGTH	TYPE WORK	EST. COST
TBD - based on 2016 Inflow and Infiltration study results			
Subtotal			
Construction Contingency: 10%			
<b>Construction Totals</b>			
Design: 5%			
Construction Administration: 10%			
SUPV. & Overhead: 1%			
<b>Project Total</b>			
Inflation Factor: 3% / yr x 4 years			
<b>Total Sewer Replacement</b>			<b>\$145,259</b>

### 2020

ROAD NAME	LENGTH	TYPE WORK	EST. COST
Blossom Street			\$ 661,301
Subtotal			
Construction Contingency: 10%			
<b>Construction Totals</b>			
Design: 10%			
Construction Administration: 10%			
SUPV. & Overhead: 1%			
<b>Project Total</b>			
Inflation Factor: 3% / yr x 5 years			
<b>Total Sewer Replacement</b>			<b>\$661,301</b>

### 2021

ROAD NAME	LENGTH	TYPE WORK	EST. COST
Colony Court			\$1,455,512
Subtotal			
Construction Contingency: 10%			
<b>Construction Totals</b>			
Design: 10%			
Construction Administration: 10%			
SUPV. & Overhead: 1%			
<b>Project Total</b>			
Inflation Factor: 3% / yr x 6 years			
<b>Total Sewer Replacement</b>			<b>\$1,455,512</b>

### 2022

ROAD NAME	LENGTH	TYPE WORK	EST. COST
TBD			\$409,241
Subtotal			
Construction Contingency: 10%			
<b>Construction Totals</b>			
Design: 10%			
Construction Administration: 10%			
SUPV. & Overhead: 1%			
<b>Project Total</b>			
Inflation Factor: 3% / yr x 7 years			
<b>Total Sewer Replacement</b>			<b>\$409,241</b>



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

Project Name: **Sewer Improvements**  
 Department: **Public Works - Sewer Fund**  
 Physical Location: **Various**  
 Federal Mandate: **No**  
 State Regulation or Law: **No**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **Policy**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Improvement in collection system carrying capacity and reliable operation through upgrade of existing mains and elimination of infiltration**



## PROJECT DESCRIPTION/JUSTIFICATION

This project represents the ongoing repair or replacement of sewer mains as determined by an evaluation of their condition. Repairs are scheduled the year before a road is overlaid or reconstructed to streamline the paving project. Work in this project corrects substantial deficiencies that cannot be addressed using spot repair.

The work in FY17 and FY21 is scheduled for mains that are not associated with roads. FY17 corrects deficiencies that have led to sewer overflows in the Perham Street cross country sewer. FY 21 addresses issues related to the Colony Court-Bloomer Swamp line, and FY 20 work replaces the Blossom Street sewer main. Other years' projects will be identified through the ongoing sewer evaluation process.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design		75,388	22,467	21,747	45,771	205,395	57,750	428,518
Construction/Implementation		892,353	123,233	123,512	615,530	1,250,117	351,491	3,356,236
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$967,741</b>	<b>\$145,700</b>	<b>\$145,259</b>	<b>\$661,301</b>	<b>\$1,455,512</b>	<b>\$409,241</b>	<b>\$3,784,754</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve		967,741	145,700	145,259	661,301		409,241	2,329,242
Debt Funded						1,455,512		1,455,512
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$967,741</b>	<b>\$145,700</b>	<b>\$145,259</b>	<b>\$661,301</b>	<b>\$1,455,512</b>	<b>\$409,241</b>	<b>\$3,784,754</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:**

Multi-year

**PROJECT STATUS:**

Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Sewer Utility Work - Bridges**  
 Department: **Public Works - Sewer Fund**  
 Physical Location: **Various**  
 Federal Mandate: **No**  
 State Regulation or Law: **No**  
 Master Plan (CMP) Focus Area: **Healthy Community**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **Policy**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Yes**



### PROJECT DESCRIPTION/JUSTIFICATION

The work funded by this project includes the replacement of sewer mains that are affected by the City's Bridge Replacement program. The State of NH Department of Transportation's bridge program does not provide funds for sewer utilities that are damaged or need to be replaced due to a bridge project. This project funds the time and materials required for the sewer main replacement and does not include road or surface replacement because that portion is covered by the corresponding bridge project.

FY16: Main Street bridge over Beaver Brook. FY18: Roxbury Street bridge over Beaver Brook. FY19: Winchester Street Bridge over Ash Swamp Brook.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation			40,000	43,500				83,500
Property/Equip. Acquisition								0
<b>TOTAL</b>		<b>\$0</b>	<b>\$40,000</b>	<b>\$43,500</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$83,500</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve			40,000	43,500	0			83,500
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>		<b>\$0</b>	<b>\$40,000</b>	<b>\$43,500</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$83,500</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:**

N/A

**PROJECT STATUS:**

New Project





# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

**Project Name:** Sewer Structural Repair/Lining  
**Department:** Public Works - Sewer Fund  
**Physical Location:** Various  
**Federal Mandate:** Clean Water Act; NPDES permit  
**State Regulation or Law:** RSA 485-A:13  
**Master Plan (CMP) Focus Area:** Quality Built Environment  
**CMP Vision/Strategy:** Infrastructure  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** Improvement in collection system carrying capacity and reliable operation through small repairs to existing mains and elimination of infiltration and deferring the complete main replacement



### PROJECT DESCRIPTION/JUSTIFICATION

This project funds an outside contractor to make more than 200 spot repairs to sewer mains to correct deficiencies that were identified through the Priority Inspection Program. Each type of deficiency has been evaluated and a cost was estimated based on the 2011 repair bid. The cost to repair each deficiency ranges from \$2,500 to \$10,500 depending on the location, complexity and type of repair required. Engineering will be performed in-house and locations are based upon the Priority Inspection Program ranking system. The project includes funds for engineering, construction, and inspection of the construction. In addition to the spot repairs, this project also funds lining in location on roads that are scheduled to be overlaid which have very old sewers.

Hundreds of sewer main structural deficiencies have been identified through the Priority Inspection Program. The deficiencies found in these mains include offset joints, holes, or large cracks that can be corrected through a small spot repair, lining, or the replacement of a short portion of the main. This project funds the repair of deficiencies that were identified in sewer mains that do not require complete replacement, or where the street is scheduled for overlay instead of reconstruction and a smaller repair is appropriate. The program to perform spot sewer main repairs by an outside contractor will allow Public Works staff to prioritize other maintenance functions.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation		163,909	168,826	173,891	179,108	184,481	190,015	1,060,230
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$163,909</b>	<b>\$168,826</b>	<b>\$173,891</b>	<b>\$179,108</b>	<b>\$184,481</b>	<b>\$190,015</b>	<b>\$1,060,230</b>
<b>FUNDING</b>								
Current Revenue		163,909	168,826	173,891	179,108	184,481	190,015	1,060,230
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$163,909</b>	<b>\$168,826</b>	<b>\$173,891</b>	<b>\$179,108</b>	<b>\$184,481</b>	<b>\$190,015</b>	<b>\$1,060,230</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
Ongoing

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

**Project Name:** WWTP Gate & Mixer Replacement  
**Department:** Public Works - Sewer Fund  
**Physical Location:** 420 Airport Road  
**Federal Mandate:** No  
**State Regulation or Law:** No  
**Master Plan (CMP) Focus Area:** Quality Built Environment  
**CMP Vision/Strategy:** Infrastructure  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** Operational flexibility at the WWTP to maintain biological nutrient removal



Aeration basin gate moves up and down inside the frame



## PROJECT DESCRIPTION/JUSTIFICATION

This project replaces eight (8) manually operated gates at the Wastewater Treatment Plant that are used to divert wastewater into different units of the biological treatment process and two (2) mixers that are used to combine the active biomass with incoming waste and keep the mixture from settling. The gates are thirty (30) years old and the harsh operating environment has taken its toll. The metal is corroded, the rubber seals leak, and the gate operators are difficult to move. Two original 30 HP aerator motors and mixers will be replaced with smaller 3 HP gear reduction mixers.

When the fine bubble aeration was installed in 1998, eight of the mechanical aerators were removed and two of the motors and mixers remained to provide flexibility for future treatment scenarios. The mixers are used to maximize biological removal of phosphorus, but they are not energy efficient and replacement parts are no longer available. The gates and mixers replaced through this project will be automated and accessible through the WWTP's SCADA system. Initial evaluation of the gates and mixers was funded in FY16 with design and construction in FY17.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design	13,080	50,753						63,833
Construction/Implementation		146,507						146,507
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$13,080</b>	<b>\$197,260</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$210,340</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve	13,080	197,260						210,340
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$13,080</b>	<b>\$197,260</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$210,340</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible < \$5,001 Ongoing Energy efficiency
 **PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

**Project Name:** Blower Replacement  
**Department:** Public Works - Sewer Fund  
**Physical Location:** 420 Airport Road  
**Federal Mandate:** No  
**State Regulation or Law:** No  
**Master Plan (CMP) Focus Area:** Quality Built Environment  
**CMP Vision/Strategy:** Community Sustainability  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** Appropriately timed replacement of obsolete equipment with energy efficient models



## PROJECT DESCRIPTION/JUSTIFICATION

This project includes the replacement of six blowers that were originally installed in 1985 with more energy efficient equipment. The replacement of the two largest blowers was funded in FY13 and their installation was completed in FY15. The remaining four blowers include two 75 horse power (HP) blowers that aerate the septage holding tanks, grit chamber, and final effluent and two 40 HP blowers that aerate the sludge storage tank.

FY20 funds the replacement of the two 40HP blowers and FY21 funds the replacement of the two 75 HP blowers. The replacement blowers are expected to be more energy efficient than the existing equipment. Installing more efficient equipment is in line with the City's Vision Focus Areas, specifically Focus Area 1 "Fostering Renewable Energy and Efficient use of Resources". The blowers had been scheduled for replacement in FY15 and FY16, but were pushed out because they are in good repair and a recent energy audit showed the energy savings is not as great as had been expected. It is expected the blower condition will dictate their replacement in FY20 and FY21.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design				68,741				68,741
Construction/Implementation					179,360	184,741		364,101
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$68,741</b>	<b>\$179,360</b>	<b>\$184,741</b>	<b>\$0</b>	<b>\$432,842</b>
<b>FUNDING</b>								
Current Revenue							0	0
Capital Reserve	61,076			7,665	179,360	184,741		432,842
Debt Funded							0	0
Federal or State Grants							0	0
Other Sources							0	0
<b>TOTAL</b>	<b>\$61,076</b>	<b>\$0</b>	<b>\$0</b>	<b>\$7,665</b>	<b>\$179,360</b>	<b>\$184,741</b>	<b>\$0</b>	<b>\$432,842</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Reduce - will reduce operating costs Ongoing  
**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

**Project Name:** WWTP Generator Replacement  
**Department:** Public Works - Sewer Fund  
**Physical Location:** 420 Airport Road  
**Federal Mandate:** The City's NPDES permit requires back up power be available.  
**State Regulation or Law:** N/A  
**Master Plan (CMP) Focus Area:** Quality Built Environment  
**CMP Vision/Strategy:** Emergency Preparedness  
**Council Initiative:** N/A  
**V.O.I.C.E.:** N/A  
**Departmental Objective:** To have a reliable supply of emergency power that will allow the treatment process to remain in operation when there is a power outage. Backup power is required by the City's NPDES permit



## PROJECT DESCRIPTION/JUSTIFICATION

This project replaces the WWTP's standby generator that was installed in 1985. The generator was designed to provide backup power to the Plant's critical equipment so that treatment is able to continue when line power is interrupted. Replacement is recommended in FY20 when the system is 35 years old because its reliability may be compromised as replacement parts become harder to procure. FY19 funds the design and FY21 funds the purchase and installation of the new generator.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design				21,131				21,131
Construction/Implementation						123,636		123,636
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$21,131	\$0	\$123,636	\$0	\$144,767
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve				21,131		123,636		144,767
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$21,131	\$0	\$123,636	\$0	\$144,767

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
One time

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

**Project Name:** Service Water System  
**Department:** Public Works - Sewer Fund  
**Physical Location:** 420 Airport Road  
**Federal Mandate:** No  
**State Regulation or Law:** No  
**Master Plan (CMP) Focus Area:** Quality Built Environment  
**CMP Vision/Strategy:** Infrastructure  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** Refurbish old equipment to maintain current level of operation and defer replacement costs



## PROJECT DESCRIPTION/JUSTIFICATION

Non-potable service water is wastewater that has received complete treatment and is suitable for discharge into the river, but is not suitable for drinking. To conserve resources, treated water is filtered then recycled for use in applications when drinking quality water is not required. In addition, heat from the treated water is recovered through heat pumps that were installed as part of the 2014 WWTP Upgrade. The recovered energy is used to heat the UV disinfection and septage buildings. This project refurbishes the non-potable service water system at the Wastewater Treatment Plant and defers a \$131K replacement that had been scheduled for FY17. The pumps will require replacement after FY22 or when the replacement parts are no longer available.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation				65,400				65,400
Property/Equip. Acquisition								0
<b>TOTAL</b>	\$0	\$0	\$0	\$65,400	\$0	\$0	\$0	\$65,400
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve				65,400				65,400
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	\$0	\$0	\$0	\$65,400	\$0	\$0	\$0	\$65,400

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:**

N/A

**PROJECT STATUS:**

Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

**Project Name:** WWTP Sludge Pump Repair  
**Department:** Public Works - Sewer Fund  
**Physical Location:** 420 Airport Road  
**Federal Mandate:** No  
**State Regulation or Law:** No  
**Master Plan (CMP) Focus Area:** Quality Built Environment  
**CMP Vision/Strategy:** Infrastructure  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** Rehabilitation of existing equipment to extend its useful life and defer replacement costs



### PROJECT DESCRIPTION/JUSTIFICATION

This project funds a significant rehabilitation of six (6) positive displacement piston pumps at the Wastewater Treatment Plant. The pumps are used for moving wastewater sludge that has a solids content of 2-6 percent. They were installed in 1985 and are used daily as part of the treatment process. Well timed and careful maintenance has allowed these pumps to remain in service past the manufacturer's expected life of 20 years. These pumps had been scheduled for replacement in FY18, but this investment will extend their useful life through FY24 and defer the estimated replacement cost of \$649K.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation		52,000						52,000
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$52,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$52,000</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve		52,000						52,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$52,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$52,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible < \$5,001  
 One time

**PROJECT STATUS:** Ongoing CIP

**CITY OF KEENE, NEW HAMPSHIRE  
CAPITAL IMPROVEMENT PROGRAM FY17-FY22  
WATER FUND MULTI-YEAR PROJECTIONS**

	ACTUAL FY 13/14	ACTUAL FY 14/15	BUDGET FY 15/16	PROJECTED FY16/17	PROJECTED FY17/18	PROJECTED FY18/19	PROJECTED FY19/20	PROJECTED FY20/21	PROJECTED FY21/22
<b>REVENUES</b>									
Taxes	\$123,173	\$118,367	\$117,090	106,600	100,228				
Intergovernmental	49,349								
Charges for Services	3,622,938	3,864,510	3,815,889	3,639,828	4,062,390	4,137,086	4,350,801	4,508,452	4,598,180
Miscellaneous	24,642	19,304	15,733	16,641	16,784	16,927	17,072	17,219	17,367
Use of Surplus			(193,672)	225,000	100,000	100,000			
<b>TOTAL REVENUES</b>	<b>\$3,820,102</b>	<b>\$4,002,181</b>	<b>\$3,755,041</b>	<b>\$3,988,069</b>	<b>\$4,279,402</b>	<b>\$4,254,013</b>	<b>\$4,367,873</b>	<b>\$4,525,671</b>	<b>\$4,615,547</b>
<b>EXPENSES</b>									
Public Works Water	\$864,950	\$802,569	\$802,322	820,775	\$839,653	\$858,965	\$880,955	\$903,507	\$926,637
Water Main & Trench Repairs	171,659	174,701	211,641	216,509	221,488	226,583	232,383	238,332	244,434
Water Supply	146,827	145,421	163,078	166,829	170,666	174,591	179,061	183,645	188,346
Hydrants	98,788	153,862	117,106	119,799	122,555	125,374	128,583	131,875	135,251
Meters	316,150	362,245	377,831	386,521	395,411	404,506	414,861	425,481	436,374
Water Services	37,915	54,604	44,071	45,085	46,122	47,182	48,390	49,629	50,900
Water Treatment Facility	660,720	636,872	687,253	701,270	717,399	733,899	752,687	771,956	791,718
Laboratory	209,891	182,353	240,740	240,771	246,309	251,974	258,425	265,040	271,825
Maintenance	106,585	121,059	136,599	126,135	129,036	132,004	135,383	138,849	142,403
Depreciation Expense	867,705	884,797	888,000	895,000	908,425	929,319	953,109	977,509	\$1,002,533
Debt Service - CURRENT	92,725	47,198	30,910	23,533	16,709	11,829	9,262	6,647	3,985
Debt Service - PROJECTED				14,755	28,771	27,296	43,706	59,222	55,958
Subtotal	3,573,914	3,565,679	3,699,551	3,756,982	3,842,544	3,923,521	4,036,805	4,151,692	4,250,363
MINOR CAPITAL	538,741	147,173	0	0	0	0	0	0	0
<b>TOTAL EXPENSES</b>	<b>\$4,112,656</b>	<b>\$3,712,852</b>	<b>3,699,551</b>	<b>3,756,982</b>	<b>\$3,842,544</b>	<b>\$3,923,521</b>	<b>\$4,036,805</b>	<b>\$4,151,692</b>	<b>\$4,250,363</b>
<b>NET REVENUE (EXPENSE)</b>	<b>(292,553)</b>	<b>289,329</b>	<b>55,490</b>	<b>231,087</b>	<b>436,858</b>	<b>330,492</b>	<b>331,068</b>	<b>373,979</b>	<b>365,183</b>

**WATER FUND INCREASE**      1.55%      2.28%      2.11%      2.89%      2.85%      2.38%

**This section adjusts Net Revenue (Expense) to include uses of cash not recorded as expense, and to exclude expenses that do not require the use of cash. The purpose of the adjustment is to reflect the projected uses of cash from FY 17 thru FY 22:**

	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22
Add Back: Depreciation	\$895,000	\$908,425	\$929,319	\$953,110	\$977,509	\$1,002,534
State Aid Grant Principal Receipts						
Subtract: Debt Svc Principal (current debt) (Note 3)	(265,579)	(265,999)	(141,016)	(143,583)	(146,197)	(148,860)
Debt Svc Principal (new debt) (Note 3)		(42,156)	(42,156)	(42,156)	(93,257)	(93,257)
Tfirs to Capital Reserve (Note 2)	(550,000)	(650,000)	(675,000)	(675,000)	(675,000)	(675,000)
Capital Outlays Funded through Rates and Fund Resources (Note 2)	(310,508)	(387,128)	(401,639)	(423,439)	(437,033)	(450,600)
<b>Projected Annual Cash Surplus (Deficit)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

Note 1: Net Revenue (Expense) indicates the anticipated increase (decrease) in retained earnings at the end of the year.

Note 2: Net revenue is anticipated to pay for operations and capital improvements in future and current years.

Note 3: Debt Service principal, capital outlays, state aid grant principal receipts, and transfers to reserves are balance sheet transactions, and are not included in expenses.

Note 4: Budgeted revenues exclude Use of Surplus / Fund Balance.

Note 5: Additional revenue raised in FY 15-22 to cover capital outlays and debt service in FY 15-22 and future years.

**Billing Projections**

	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22
Combined Water and Sewer Utility Billing Projections: Residential property with a 5/8" connection and consumption of 27 HCF (hundred cubic feet) per quarter						
quarterly bill	\$ 326.07	\$ 336.60	\$ 349.56	\$ 363.33	\$ 374.40	\$ 386.55
increase	\$ 11.85	\$ 10.53	\$ 12.96	\$ 13.77	\$ 11.07	\$ 12.15
percent increase	3.77%	3.23%	3.85%	3.94%	3.05%	3.25%
Water Utility Billing Projections: Residential property with a 5/8" connection and consumption of 27 HCF (hundred cubic feet) per quarter						
quarterly bill	\$ 113.54	\$ 128.93	\$ 131.63	\$ 141.62	\$ 148.64	\$ 155.39
increase	\$ 8.10	\$ 15.39	\$ 2.70	\$ 9.99	\$ 7.02	\$ 6.75
percent increase	7.68%	13.55%	2.09%	7.59%	4.96%	4.54%



**CITY OF KEENE, NEW HAMPSHIRE**  
**Water Fund 2017 - 2022 Capital Improvement Program Summary**

Dept.	Project Name	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	TOTAL
Public Works	Capital Reserve: Water Treatment Facility	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 600,000
Public Works	Reserve: Water Infrastructure	450,000	550,000	575,000	575,000	575,000	575,000	3,300,000
Public Works	Black Brook Storage Tank Repairs	-	-	-	25,000	-	71,929	96,929
Public Works	Chapman Rd Water Tank Repairs	-	-	-	25,000	-	54,449	79,449
Public Works	Dam Improvements	1,743,119	-	-	1,022,025	-	-	2,765,144
Public Works	Drummer Hill Tank Replacement	-	-	-	25,000	-	208,959	233,959
Public Works	Fox Ave & Glenn Rd Pump Station Upgrade	-	40,430	-	-	-	-	40,430
Public Works	Water Distribution Improvements	146,896	392,401	397,321	409,241	421,518	434,164	2,201,541
Public Works	Water Main - Bridge Improvements	-	40,000	38,300	-	-	-	78,300
Public Works	Water Main - State Bypass Project	-	-	203,814	-	-	-	203,814
Public Works	Water Main Cleaning and Lining	225,102	231,855	238,810	245,975	244,495	242,535	1,428,772
Public Works	Water Valve Replacement	85,406	87,872	90,508	93,223	96,020	98,901	551,930
Public Works	Well Field Evaluation Plan	-	-	-	75,000	-	-	75,000
Public Works	WTF 1.5 MG Storage Tank repairs	-	-	-	90,041	-	278,226	368,267
Public Works	WTF 3 MG Storage Tank repairs study	-	-	-	35,000	-	-	35,000
Public Works	WTF Filter Media Replacement	-	-	-	191,466	-	203,126	394,592
Public Works	WTF Instrumentation Upgrade	-	-	49,522	-	-	-	49,522
Public Works	WTF Pressure Reduction Valve Upgrade	15,590	-	86,058	-	-	-	101,648
<b>TOTAL CAPITAL PROGRAM</b>		<b>\$ 2,766,113</b>	<b>\$ 1,442,558</b>	<b>\$ 1,779,333</b>	<b>\$ 2,911,971</b>	<b>\$ 1,437,033</b>	<b>\$ 2,267,289</b>	<b>\$ 12,604,297</b>

**PROJECT FUNDING DETAIL**

**Reserve Funded Projects**

Public Works	Dam Improvements	\$ 850,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 850,000
Public Works	Black Brook Storage Tank Repairs	-	-	-	25,000	-	71,929	96,929
Public Works	Chapman Rd Water Tank Repairs	-	-	-	25,000	-	54,449	79,449
Public Works	Drummer Hill Tank Replacement	-	-	-	25,000	-	208,959	233,959
Public Works	Fox Ave & Glenn Rd Pump Station Upgrade	-	40,430	-	-	-	-	40,430
Public Works	Water Distribution Improvements	146,896	325,000	325,000	325,000	325,000	325,000	1,771,896
Public Works	Water Main - Bridge Improvements	-	40,000	38,300	-	-	-	78,300
Public Works	Water Main - State Bypass Project	-	-	203,814	-	-	-	203,814
Public Works	Well Field Evaluation Plan	-	-	-	75,000	-	-	75,000
Public Works	WTF 1.5 MG Storage Tank repairs	-	-	-	90,041	-	278,226	368,267
Public Works	WTF 3 MG Storage Tank repairs study	-	-	-	35,000	-	-	35,000
Public Works	WTF Filter Media Replacement	-	-	-	191,466	-	203,126	394,592
Public Works	WTF Instrumentation Upgrade	-	-	49,522	-	-	-	49,522
Public Works	WTF Pressure Reduction Valve Upgrade	15,590	-	86,058	-	-	-	101,648
<b>Total: Reserve Funded Projects</b>		<b>\$ 1,012,486</b>	<b>\$ 405,430</b>	<b>\$ 702,694</b>	<b>\$ 791,507</b>	<b>\$ 325,000</b>	<b>\$ 1,141,689</b>	<b>\$ 4,378,806</b>

**Projects Funded with Debt**

Public Works	Dam Improvements	\$ 843,119	\$ -	\$ -	\$ 1,022,025	\$ -	\$ -	\$ 1,865,144
<b>Total: Projects Funded with Debt</b>		<b>\$ 843,119</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,022,025</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,865,144</b>

**Capital Reserve Appropriations**

Public Works	Capital Reserve: Water Treatment Facility	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 600,000
Public Works	Reserve: Water Infrastructure	450,000	550,000	575,000	575,000	575,000	575,000	3,300,000
<b>Total: Capital Reserve Appropriations</b>		<b>\$ 550,000</b>	<b>\$ 650,000</b>	<b>\$ 675,000</b>	<b>\$ 675,000</b>	<b>\$ 675,000</b>	<b>\$ 675,000</b>	<b>\$ 3,900,000</b>

**Projects Funded with State Grant**

Public Works	N/A	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total: Projects Funded with State Grant</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Projects Funded with Cash**

Public Works	Dam Improvements	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000
Public Works	Water Distribution Improvements	-	67,401	72,321	84,241	96,518	109,164	429,645
Public Works	Water Valve Replacement	85,406	87,872	90,508	93,223	96,020	98,901	551,930
Public Works	Water Main Cleaning and Lining	225,102	231,855	238,810	245,975	244,495	242,535	1,428,772
<b>Total: Projects Funded with Cash</b>		<b>\$ 360,508</b>	<b>\$ 387,128</b>	<b>\$ 401,639</b>	<b>\$ 423,439</b>	<b>\$ 437,033</b>	<b>\$ 450,600</b>	<b>\$ 2,460,347</b>

**Subtotal: Uses of Cash**

(Capital Reserve Appropriations plus Projects Funded with Cash)

**TOTAL CAPITAL PROGRAM**

<b>\$ 2,766,113</b>	<b>\$ 1,442,558</b>	<b>\$ 1,779,333</b>	<b>\$ 2,911,971</b>	<b>\$ 1,437,033</b>	<b>\$ 2,267,289</b>	<b>\$ 12,604,297</b>
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**New cash Requirement FY 17-22: reconciliation**

Total: Uses of cash	\$910,508	\$1,037,128	\$1,076,639	\$1,098,439	\$1,112,033	\$1,125,600	\$6,360,347
Dam Improvement: FY 13 reserve authorization	(50,000)						(50,000)
<b>New Funds needed</b>	<b>\$ 860,508</b>	<b>\$ 1,037,128</b>	<b>\$ 1,076,639</b>	<b>\$ 1,098,439</b>	<b>\$ 1,112,033</b>	<b>\$ 1,125,600</b>	<b>\$ 6,310,347</b>

## Water Fund 2017 - 2022 Capital Improvement Program Debt Summary

	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>
Existing and Authorized Debt	\$1,186,162	\$1,763,702	\$1,455,547	\$1,272,376	\$2,108,662	\$1,869,207
New Issues Proposed	843,119	-	-	1,022,025	-	-
Principal Paid	(265,579)	(308,155)	(183,172)	(185,739)	(239,455)	(242,117)
<b>Total Existing Debt &amp; Issues Proposed</b>	<b>\$1,763,702</b>	<b>\$1,455,547</b>	<b>\$1,272,376</b>	<b>\$2,108,662</b>	<b>\$1,869,207</b>	<b>\$1,627,090</b>

	<u>Issue</u>	<u>Term</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>
<b>Existing &amp; Authorized Debt Service (P &amp; I)</b>			\$289,112	\$282,708	\$152,845	\$152,845	\$152,845	\$152,845
<b><u>Proposed Debt Service CIP FY17</u></b>								
N/A	843,119	20	14,755	70,927	69,452	67,976	66,501	65,026
<b><u>Proposed Debt Service CIP FY18</u></b>								
N/A								
<b><u>Proposed Debt Service CIP FY19</u></b>								
N/A								
<b><u>Proposed Debt Service CIP FY20</u></b>	1,022,025	20				17,885	85,978	84,189
N/A								
<b><u>Proposed Debt Service CIP FY21</u></b>								
Dam Improvements								
<b><u>Proposed Debt Service CIP FY22</u></b>								
N/A								
<b>Total CIP17-22 Debt Service Proposed</b>			14,755	70,927	69,452	85,861	152,479	149,215
<b>Total Projected Debt Service: Water Fund</b>			\$303,866	\$353,635	\$222,297	\$238,706	\$305,323	\$302,060

## **CAPITAL RESERVE -- WATER TREATMENT FACILITY**

The projected balance of the Water Treatment Facility Capital Reserve at the end of FY 22 is \$652,155, or 4.8% of the value of covered infrastructure.

<b>Equipment</b>	<b>Year Constructed</b>	<b>Expected Life (years)</b>	<b>Estimated Replace/Install Date</b>	<b>Present Replace/Install Cost</b>
Blowers and Backwash Pumps *	1993	10-15	2025	\$303,288
Emergency Generator (2) **	1997	20	2023-2025	243,823
Liquefied Petroleum Tank	1993	20	2024	31,801
Liquefied Petroleum Tank	1993	20	2024	31,801
Turbidity Analyzers	2014	20	2034	28,386
Total Organic Carbon (TOC) Analyzer	2015	10	2025	34,714
HVAC Replacement	1993	10-15	2027	27,038
Compressors (2)	1992	30	2023	30,354
Ingersoll Rand Compressor	2013	30	2043	35,757
Powder Activated Carbon Feed Equipment	2013	30	2043	108,970
Electrical Systems Upgrade	1992	30	2024-2029	582,262
WTF Filter Media Replacement	1993	20	2022-2024	418,622
Processing Pipe	1992	30	2027	3,400,507
Buildings, Systems, and Equipment	1993	50	various	7,645,999
Hydropower Generators	2011	50	2061	575,706
<b>Total</b>				<b>\$ 13,499,028</b>

**NOTE:**

\* These pumps are not used often, so the replacement date is pushed out

\*\* This unit is in good running condition

**Details of the expenditures from the Water Treatment Facility Capital Reserve Fund - Years 17 through 22**

<b>FY17</b>	\$ 15,590	Pressure Reducing Valve Upgrade
<b>FY18</b>	N/A	
<b>FY19</b>	\$ 86,058	Pressure Reducing Valve Upgrade
	\$ 49,522	Replacement of Chlorine Analyzer and Level Transmitters at WTF
<b>FY20</b>	\$ 191,466	WTF Filter 1 Media Replacement
<b>FY21</b>	N/A	
<b>FY22</b>	\$ 203,126	WTF Filter 2 Media Replacement
<b>Total</b>	\$ 545,762	



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Capital Reserve - WTF**  
 Department: **Public Works - Water Fund**  
 Physical Location: **555 Roxbury Road**  
 Federal Mandate: **no**  
 State Regulation or Law: **no**  
 Master Plan (CMP) Focus Area: **Vibrant Economy**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **Policy**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Yes**



### PROJECT DESCRIPTION/JUSTIFICATION

This capital reserve account is for funding major (planned and unplanned) repairs and systems replacement at the Water Treatment Facility (WTF). *The Municipal Wastewater Financial Management* handbook recommends that a reserve account be used to provide funds for the planned or unplanned replacement of major pieces of equipment or building components. The use of this type of account helps the municipality stabilize cash flows for project funding through regular deposits and act as a rainy day fund to provide funding in the case of emergency expenditures that cannot be absorbed by the regular operating budget. The City of Keene works to maintain the WTF capital reserve fund balance at 3-5% of the approximate current replacement value of the WTF assets.

The City Council's fiscal policy establishes Capital Reserves, under State of NH law invested by the Trustees of Trust Funds, for specific purposes including construction, reconstruction, or acquisition of a capital improvement or capital equipment.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		15,590		135,580	191,466		203,126	545,762
<b>TOTAL</b>		<b>\$15,590</b>	<b>\$0</b>	<b>\$135,580</b>	<b>\$191,466</b>	<b>\$0</b>	<b>\$203,126</b>	<b>\$545,762</b>
<b>FUNDING</b>								
Current Revenue	585,974	100,000	100,000	100,000	100,000	100,000	100,000	1,185,974
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		1,715	1,930	2,185	2,102	1,878	2,133	11,943
<b>TOTAL</b>		<b>\$101,715</b>	<b>\$101,930</b>	<b>\$102,185</b>	<b>\$102,102</b>	<b>\$101,878</b>	<b>\$102,133</b>	<b>\$1,197,917</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:**

Ongoing

**PROJECT STATUS:**

Ongoing CIP

## CAPITAL RESERVE -- WATER INFRASTRUCTURE

The projected balance of the Water Infrastructure Capital Reserve at the end of FY 22 is \$868,168, or .9% of the value of covered infrastructure.

Facility	Year Constructed	Expected Life (years)	Estimated Replace/Install Date	Present Replace/Install Cost
Babbidge Dam	1931	100	Rehab in FY17	\$1,570,132
0.1 MG Concrete tank (Drummer Hill)	1988	34	2022-2024	823,723
0.2 MG Concrete tank (Chapman Road)	1993	100	2093	422,575
0.375 MG Concrete tank (Black Brook)	1996	100	2096	613,821
1.5 MG Concrete tank (Beech Hill)	1924	100	2024	2,032,406
3 MG Steel tank (Beech Hill)	1962	75	2037	4,064,811
Black Brook Booster Station	1996	50	2046	356,474
Branch Road Pressure Reducing Valve	1993	50	2043	36,409
Chapman Road Booster Station	1993	50	2043	415,559
Court Street Well #2	1964	40	2027-2030	802,055
Court Street Well #3	1965	40	2027-2030	802,055
Court Street Well #4	1977	40	2027-2030	802,055
Court Street Wells Complex	1977	40	2027-2030	225,765
Drummer Hill Booster Station	1988	50	2024-2027	970,961
Fox Circle Booster Station*	1983	50	2033	186,047
Glen Road Booster Station	1983	50	2033	205,873
Roxbury Pressure Reducing Valve	1993	50	2043	16,259
West Street Well #1	1991	40	2031	418,918
Woodward Dam	1910	100	Rehab in FY 20	1,022,025

**TOTAL FACILITIES** \$15,787,923

101 miles of water distribution system 1890 through present 50-75 ongoing \$85,971,000

**TOTAL SYSTEM VALUE** \$101,758,923

**NOTE:**

Expected life for structures is 50 years. The various equipment components have an expected life of 10-15 yrs. The expected life is the recommendation from the equipment manufacturer. The actual life of a piece of equipment can vary depending on use and maintenance.

See Water Distribution Improvements project for planned replacements. Replacement cost is estimated in the 2003 infrastructure report.

**Details of the expenditures from the Water Treatment Facility Capital Reserve Fund - Years 17 through 22**

<b>FY17</b>	\$	146,896	Water Distribution Improvements
	\$	850,000	Babbidge Dam Improvements
<b>FY18</b>	\$	325,000	Water Distribution Improvements
	\$	40,430	Fox Ave and Glen Rd Pump Station Instrumentation Replacement
	\$	40,000	Roxbury Street Bridge Water Main
<b>FY19</b>	\$	325,000	Water Distribution Improvements
	\$	38,300	Winchester St - Rte 10 Ash Swamp Bridge Water Main
	\$	203,814	Winchester Street Water Main (Bypass project)
<b>FY20</b>	\$	325,000	Water Distribution Improvements
	\$	75,000	Evaluation of West and Court Street Well Facilities
	\$	25,000	Black Brook Water Storage Tank Evaluation and Design
	\$	25,000	Chapman Road Water Tank Evaluation and Design
	\$	25,000	Drummer Hill Storage Tank Evaluation
	\$	90,041	1.5 MG Storage Tank Design of New Membrane
	\$	35,000	3 MG Water Tank Options Evaluation
<b>FY21</b>	\$	325,000	Water Distribution Improvements
<b>FY22</b>	\$	71,929	Black Brook Storage Tank Repairs
	\$	54,449	Chapman Road Water Tank Repairs
	\$	325,000	Water Distribution Improvements
	\$	208,959	Drummer Hill Storage Tank Repair Design
	\$	278,226	1.5 MG Storage Tank Membrane Replacement
<b>Total</b>	\$	3,833,044	



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Capital Reserve Water Infrastructure**  
 Department: **Public Works - Water Fund**  
 Physical Location: **Various**  
 Federal Mandate: **No**  
 State Regulation or Law: **No**  
 Master Plan (CMP) Focus Area: **Vibrant Economy**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **Policy**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Yes**



### PROJECT DESCRIPTION/JUSTIFICATION

This capital reserve account is for funding major (planned and unplanned) repairs and systems replacement in the Water Infrastructure. The *Municipal Wastewater Financial Management* handbook recommends that a reserve account be used to provide funds for the planned or unplanned replacement of major pieces of equipment or building components. The use of this type of account helps the municipality stabilize cash flows for project funding through regular deposits and act as a rainy day fund to provide funding in the case of emergency expenditures that cannot be absorbed by the regular operating budget. The City of Keene works to maintain the Infrastructure Capital Reserve Fund balance at 3-5% of the approximate current replacement value of the infrastructure assets.

The City Council's fiscal policy establishes Capital Reserves, under State of NH law invested by the Trustees of Trust Funds, for specific purposes including construction, reconstruction, or acquisition of a capital improvement or capital equipment.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation		996,896	405,430	567,114	600,041	325,000	938,563	3,833,044
Property/Equip. Acquisition								0
<b>TOTAL</b>		<b>\$996,896</b>	<b>\$405,430</b>	<b>\$567,114</b>	<b>\$600,041</b>	<b>\$325,000</b>	<b>\$938,563</b>	<b>\$3,833,044</b>
<b>FUNDING</b>								
Current Revenue	1,376,988	450,000	550,000	575,000	575,000	575,000	575,000	4,676,988
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		4,567	3,462	3,894	3,924	3,871	4,506	24,224
<b>TOTAL</b>		<b>\$454,567</b>	<b>\$553,462</b>	<b>\$578,894</b>	<b>\$578,924</b>	<b>\$578,871</b>	<b>\$579,506</b>	<b>\$4,701,212</b>

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

**Project Name:** Black Brook Storage Tank Repairs  
**Department:** Public Works - Water Fund  
**Physical Location:** Black Brook Storage Tank  
**Federal Mandate:** N/A  
**State Regulation or Law:** N/A  
**Master Plan (CMP) Focus Area:** Quality Built Environment  
**CMP Vision/Strategy:** Infrastructure  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** Make repairs and improvements in accordance with current standards for water storage tanks.



### PROJECT DESCRIPTION/JUSTIFICATION

This 380,000 gallon, pre-cast concrete water storage tank, constructed in 1996, provides water for fire suppression and helps maintain stable water pressure in the Black Brook pressure zone. FY20 funds a detailed evaluation and repair design. FY22 funds the repairs. This project includes tank repairs identified by the November 2013 "Water Facilities Evaluation" performed by Tighe and Bond including sealing the roof panel joints, repairing failed seals at tank penetrations, providing new above grade electrical equipment, pressure washing the tank, and sealing cracks.

This tank is equipped with a below grade, precast concrete vault that houses an electrical panel board and instrumentation to measure the level of water in the tank. Tighe and Bond's report notes leaks from failed seams and failed electrical conduit penetrations. It was recommended the below grade vault be discontinued and all underground utilities be re-located above ground in a small enclosure. In addition to providing a drier environment for the electrical and analytical equipment, an above ground station would allow a single staff member to check critical components without the assistance and equipment required for a regulated confined space entry.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design					25,000			25,000
Construction/Implementation							71,929	71,929
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$25,000</b>	<b>\$0</b>	<b>\$71,929</b>	<b>\$96,929</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve					25,000		71,929	96,929
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$25,000</b>	<b>\$0</b>	<b>\$71,929</b>	<b>\$96,929</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
One time

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Chapman Water Tank repairs**  
 Department: **Public Works - Water Fund**  
 Physical Location: **Chapman Water Tank**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Make repairs and improvements in accordance with current standards for water storage tanks..**



### PROJECT DESCRIPTION/JUSTIFICATION

This 200,000 gallon, pre-cast concrete water storage tank was constructed in 1993. FY20 funds a detailed evaluation and repair design. FY22 funds the repairs. This project includes tank repairs identified by the November 2013 " Water Facilities Evaluation" including pressure washing the tank roof, sealing the roof panel joints, installing sealant between the access hatch, and mounting flange and moving the electrical equipment above ground in a new building.

This tank is equipped with a below grade, precast concrete vault that houses an electrical panel board and level instrumentation for the tank. It is recommended the existing vault be discontinued and all underground utilities be re-located above ground in a small enclosure. In addition to providing a drier environment for the electrical and analytical equipment, an above ground station would allow a single staff member to check critical components without the assistance and equipment required for a regulated confined space entry.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design					25,000			25,000
Construction/Implementation							54,449	54,449
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$25,000</b>	<b>\$0</b>	<b>\$54,449</b>	<b>\$79,449</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve					25,000		54,449	79,449
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$25,000</b>	<b>\$0</b>	<b>\$54,449</b>	<b>\$79,449</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
One time

**PROJECT STATUS:** Ongoing CIP





# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Dam Improvements**  
 Department: **Public Works - Water Fund**  
 Physical Location: **Various**  
 Federal Mandate: **No**  
 State Regulation or Law: **Yes - letter of deficiency (admin rule)**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Protection of the City's main water supply and compliance with the DES letter of deficiency.**



### PROJECT DESCRIPTION/JUSTIFICATION

The Dam Master Plan for the 1910-era Woodward Dam and the 1931-era Babbidge Dam was completed in FY12. It addressed Letters of Deficiency (LOD) from NH Department of Environmental Services citing concerns for potential failure of the dams in a 100-year flood event. The Master Plan also included discussion about the importance of the dams as the City's primary water supplies. The LOD required the City to address deficiencies including stabilization of the dams and an increase in storage capacity. Both dams are classified as "high hazard" indicating that their failure could result in the loss of life downstream. Between them, the dams store more than 600 million gallons of water, equivalent to a 6-month supply for the City. The failure of one or both of these dams would cause a significant impact to the City's water supply because the existing wells cannot meet the City's entire water demand.

FY17 funds the construction of improvements to the 84 year old Babbidge Dam. The improvements armor the existing structure to withstand the impact of a breach of the upper dam at Woodward Pond. In FY16 the Council approved the use of interlocking blocks, similar to those used at Robin Hood Dam, to improve the Babbidge dam's physical structure and address the LOD deficiencies. FY17 also funds the design for the FY20 improvements at the 105 year old Woodward dam.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design		122,987						122,987
Construction/Implementation		1,620,132			1,022,025			2,642,157
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$1,743,119</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,022,025</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,765,144</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve	50,000	850,000						900,000
Debt Funded		843,119			1,022,025			1,865,144
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$50,000</b>	<b>\$1,693,119</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,022,025</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,765,144</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** High \$50,001 or more  
One time

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Drummer Hill Tank Replacement**  
 Department: **Public Works - Water Fund**  
 Physical Location: **Drummer Hill Tank**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Improve water quality and provide improved water pressure and volume for fire suppression**



### PROJECT DESCRIPTION/JUSTIFICATION

FY20 of this project funds an evaluation of the repair/replacement options for the Drummer Hill water tank with a new, above ground tank that meets current standards. This 100,000 gallon, pre-cast concrete water storage tank with an interior liner and aluminum dome roof was constructed in 1987 to provide fire suppression and potable water for residential customers. This tank was evaluated by Tighe and Bond in the November 2013 "Water Facilities Evaluation" and Underwood Engineers in the June 2013 "Low Pressure Zone Study". These studies indicate the tank should be upgraded to improve pressure and address the significant number of improvements needed to bring the tank into compliance with public health standards, including the 10 State Standards guidelines for water storage tanks.

The tank's deficiencies include: leaking seals, lack of intrusion protection, a gap of approximately 1 inch between the walls and the domed roof, the presence of seams, absence of a watertight gasketed cover, and lack of a sample site. In addition, the tank is partially buried, and it is recommended that seamed tanks be located above grade to allow regular sanitary inspections. The tank does not provide the recommended 35 psi minimum static pressure to existing customers because the tank overflow elevation is too low and the tank itself is smaller than recommended for fire suppression by the Insurance Services Office.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design					25,000		208,959	233,959
Construction/Implementation								0
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$25,000</b>	<b>\$0</b>	<b>\$208,959</b>	<b>\$233,959</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve					25,000		208,959	233,959
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$25,000</b>	<b>\$0</b>	<b>\$208,959</b>	<b>\$233,959</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
One time

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Water Booster Stations**  
 Department: **Public Works - Water Fund**  
 Physical Location: **Fox Ave & Glen Road**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **To maintain water quality monitoring capability and replace aging electrical components.**



### PROJECT DESCRIPTION/JUSTIFICATION

The Fox Avenue and Glen Road water booster stations were constructed in 1983 and are below grade, pre-cast concrete, water pumping stations. The stations are equipped with online monitoring instrumentation that continuously allows staff to monitor and trend water quality parameters and remotely control equipment using the plant's Supervisory Control and Data Acquisition System (SCADA). This project funds the FY18 replacement of the turbidity, chlorine, and pH online analyzers in both stations.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition			40,430					40,430
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$40,430</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$40,430</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve			40,430					40,430
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$40,430</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$40,430</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible < \$5,001  
One time

**PROJECT STATUS:** Ongoing CIP

## Water and Sewer Improvements

The City's strategy for identifying and prioritizing water and sewer improvements in conjunction with roadwork for this Capital Improvement Program is the Road Overlay Program. It has evolved from its "Dig the Road Once" philosophy as the City's obligation under the 2004 Administrative Order requiring the replacement of specific sewers is complete.

A 2012 assessment of the City's paved streets used the pavement condition and traffic volume to develop a numeric rating. This rating was used to prioritize streets for overlay and streets were grouped into neighborhoods to gain efficiency in construction services and to improve the overall aesthetics of an area.

Before a street is overlaid, its water, sewer, and drain infrastructure is evaluated and repairs/improvements are planned for the year before the overlay is scheduled to avoid digging up a freshly paved road. The water, sewer, and drain evaluations are performed in different ways.

- *Sewers are evaluated according to their condition and capacity.*
  - Condition ratings were generated as part of the Priority Inspection Program that was performed between FY06 and FY11. The results of these inspections have been cataloged and deficiencies that require spot repair, short length lining, or complete lining have been identified.
  - Capacity issues have been identified using the computer model of the collection system. Inflow and infiltration is being evaluated in FY14 and will become an additional factor in future evaluations.
  
- *Water main evaluations are based on age, pressure/volume, and repair frequency.*
  - While no video is available that shows the condition of the water mains, the age and material are often used as clues to their conditions. As an example, mains that were constructed between 1930 and the 1970's were made of bituminous cast iron pipe (universal pipe) and are prone to leaks. Mains that do not have a cement lining can build up a hard layer of minerals that cannot be removed through the normal flushing programs.
  - The Department operational records are used to identify mains that have experienced a number of breaks.
  - The volume of water the main can transport, and what the relationship is of a given section of main to the rest of the system is evaluated using the water distribution model. If a section does not provide the anticipated volume or pressure, a piece can be cut out and visually inspected to determine the amount of material buildup.
  
- *The capacity of storm drains is evaluated by the contributing storm drainage area.*
  - If capacity is not adequate the drains are upsized by excavating and replacing the drain with a larger size pipe.
  - A storm drain model that will assist the evaluation of capacity is currently being developed.

Separate programs for the replacement of mainline water valves and the repair of sewers that are not associated with other road work have been created to keep the focus on this catch-up repair work.

## WATER DISTRIBUTION IMPROVEMENTS

The 2013 Updated Water Capital Infrastructure Plan study recommended that a number of major water mains should be upgraded from their current 6-inch and 8-inch sizes to 10-inch and 12- inch. In addition, improvements will be made to Glen Road/Darling Rd/Mountainview Rd area to improve water pressure. These upgrades will provide additional water flow and assist in addressing pressure problems in the outlying areas of the City. In addition to the upgrades of the identified mains, funds from this project will be used for other unplanned improvements as required in the distribution system. and to replace 6" mains with a minimum of 8" diameter mains to improve water flow and water pressures

### 2017

<u>LOCATION</u>	<u>LENGTH</u>	<u>EST. COST**</u>
Glen Road/Darling Road/Mountain View Road. - combine into a single pressure zone with check valves.		\$146,896

\*\* All costs include 10% for construction contingencies, 10% for engineering design, 10% for construction administration, 1% for supervision and 3% inflation per year

<b>Project Total</b>	<b>\$146,896</b>
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### 2019

<u>LOCATION</u>	<u>LENGTH</u>	<u>EST. COST**</u>
Year 2 of Upsizing Hastings Avenue water main from Hurricane Road to Maple Avenue	3,400	\$397,321
total 2 year project cost:		\$789,722

\*\* All costs include 10% for construction contingencies, 10% for engineering design, 10% for construction administration, 1% for supervision and 3% inflation per year

<b>Project Total</b>	<b>\$397,321</b>
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### 2021

<u>LOCATION</u>	<u>LENGTH</u>	<u>EST. COST</u>
To be determined		\$421,518

\*\* All costs include 10% for construction contingencies, 10% for engineering design, 10% for construction administration, 1% for supervision and 3% inflation per year

<b>Project Total</b>	<b>\$421,518</b>
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### 2018

<u>LOCATION</u>	<u>LENGTH</u>	<u>EST. COST**</u>
Year 1 of 2 year project: Upsize Hastings Avenue water main from Hurricane Road to Maple Avenue	3,400	\$392,401

\*\* All costs include 10% for construction contingencies, 10% for engineering design, 10% for construction administration, 1% for supervision and 3% inflation per year

<b>Project Total</b>	<b>\$392,401</b>
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### 2020

<u>LOCATION</u>	<u>LENGTH</u>	<u>EST. COST**</u>
To be determined		\$409,241

\*\* All costs include 10% for construction contingencies, 10% for engineering design, 10% for construction administration, 1% for supervision and 3% inflation per year

<b>Project Total</b>	<b>\$409,241</b>
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### 2022

<u>LOCATION</u>	<u>LENGTH</u>	<u>EST. COST</u>
To be determined		\$434,164

\*\* All costs include 10% for construction contingencies, 10% for engineering design, 10% for construction administration, 1% for supervision and 3% inflation per year

<b>Project Total</b>	<b>\$434,164</b>
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# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

Project Name: **Water Distribution Improvements**  
 Department: **Public Works - Water Fund**  
 Physical Location: **Various**  
 Federal Mandate: **No**  
 State Regulation or Law: **No**  
 Master Plan (CMP) Focus Area: **Healthy Community**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **Policy**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Yes**



## PROJECT DESCRIPTION/JUSTIFICATION

The work funded by this project includes the replacement of water mains as part of the City's infrastructure program. Depending on their age, condition, and size, water mains may be replaced when a roadway is rehabilitated or reconstructed. This is done to minimize the disturbance of a newly reconstructed road in the near future due to a broken water main and to upsize inadequately sized mains. Mains are also replaced when work by any other utility project requires its relocation. As they are replaced, the mains are upsized to increase pressure and flow and to maintain good water quality.

FY17 includes water system improvements to address low water pressure issues in the Glen Road high service zone by relocating check valves in the Darling Rd/Mountain View Rd area. FY18 and 19 is a two year project to upsize 3,400' of the water main on Hastings Avenue between Hurricane Road and Maple Avenue to improve fire flow as recommended by the 2002 Water Infrastructure Report by CDM.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design		31,880	32,429	32,836	33,822	35,174	36,229	202,370
Construction/Implementation		115,016	359,972	364,485	375,419	386,344	397,934	1,999,170
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$146,896</b>	<b>\$392,401</b>	<b>\$397,321</b>	<b>\$409,241</b>	<b>\$421,518</b>	<b>\$434,164</b>	<b>\$2,201,541</b>
<b>FUNDING</b>								
Current Revenue			67,401	72,321	84,241	96,518	109,164.00	429,645
Capital Reserve		146,896	325,000	325,000	325,000	325,000	325,000	1,771,896
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>		<b>\$146,896</b>	<b>\$392,401</b>	<b>\$397,321</b>	<b>\$409,241</b>	<b>\$421,518</b>	<b>\$434,164</b>	<b>\$2,201,541</b>

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

Project Name: **Water Utility Work - Bridges**  
 Department: **Public Works - Water Fund**  
 Physical Location: **Various**  
 Federal Mandate: **No**  
 State Regulation or Law: **No**  
 Master Plan (CMP) Focus Area: **Healthy Community**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **Policy**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Yes**



## PROJECT DESCRIPTION/JUSTIFICATION

The work funded by this project includes the replacement of water mains that are affected by the City's Bridge Replacement program. The State of NH Department of Transportation's bridge program does not provide funds for water utilities that are damaged or need to be replaced due to a bridge project. This project funds the time and materials required for the water main replacement and does not include road or surface replacement because that portion is covered by the corresponding bridge project.

FY18: Roxbury Street bridge over Beaver Brook. FY19: Winchester Street bridge over Ash Swamp Brook.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation			40,000	38,300				78,300
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$40,100</b>	<b>\$0</b>	<b>\$40,000</b>	<b>\$38,300</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$78,300</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve			40,000	38,300				78,300
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>		<b>\$0</b>	<b>\$40,000</b>	<b>\$38,300</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$78,300</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:**

N/A

**PROJECT STATUS:**

Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE 2017 - 2022 Capital Project Funding Request

## GENERAL PROJECT DATA

Project Name: **State Bypass Utilities**  
 Department: **Public Works - Water Fund**  
 Physical Location: **Various**  
 Federal Mandate: **No**  
 State Regulation or Law: **No**  
 Master Plan (CMP) Focus Area: **Healthy Community**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **Policy**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Yes**



## PROJECT DESCRIPTION/JUSTIFICATION

This project funds the replacement of water mains that are affected by the NH Department of Transportation's construction on Winchester Street between Island Street and the roundabout. The NH Department of Transportation's project does not include funds for water utilities that are damaged or need to be replaced due to a state road project. This project funds the time and materials required for the water main replacement and does not include road or surface replacement because that work is covered by the corresponding State road project.

## FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation				203,814				203,814
Property/Equip. Acquisition								0
<b>TOTAL</b>		\$0	\$0	\$203,814	\$0	\$0	\$0	\$203,814
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve				203,814				203,814
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>		\$0	\$0	\$203,814	\$0	\$0	\$0	\$203,814

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:**

N/A

**PROJECT STATUS:**

Ongoing CIP





# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Water Main Cleaning and Lining**  
 Department: **Public Works - Water Fund**  
 Physical Location: **Various**  
 Federal Mandate: **No**  
 State Regulation or Law: **No**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Yes**



### PROJECT DESCRIPTION/JUSTIFICATION

This project includes renewing old water mains through mechanical cleaning and lining to extend their life and improve water quality. Lining is a rehabilitation process which may be more cost effective than traditional excavation and replacement. Cleaning restores the interior condition of the pipe and lining provides a protection against future deterioration and, depending on the lining technique, may also provide structural integrity. Lining allows improvements to the main while avoiding disruption to the street surfaces, traffic, and customer services which can lead to increased cost and inconvenience. Lining is planned for streets where the other utilities do not require replacement or where the road will receive surface rehabilitation instead of complete reconstruction. The City has a number of water mains that are sufficient in size for their location, but have reduced capacity because of mineral deposits. Advanced mineral deposits can result in a significant decrease in amount of water the main can transport.

This program compliments the Water Distribution Improvements Program and will occur in areas where water mains require attention, but the other utilities do not require replacement and generally where the roadway will be paved the following year. These projects will be designed with in-house staff and costs presented below are based on unit prices from 2014 bids and adjusted by 3% per year. **Projects may include but are not limited to:** FY17 Ellis Court (560 LF of 6" main), FY17 Woodbury St (1,810 LF of 6" main), FY18 Carpenter St (1130 LF of 6"main), FY18 Kingsbury St (525 LF of 6"main), FY19 West St (from Symonds Place to the railroad/Multi-Use trail crossing - 2,100 LF of 12"main), FY20 Roxbury St ( Reservoir St to Oak St - 1,000 LF of 12"main), FY20 Hooper St (315 LF of 6"main), FY20 Speaker St (220 LF of 6"main), FY20 Cady Lane (200 LF of 6"main), FY20 Cobb St (300 LF of 6"main) and FY21 and FY 22 Meadow Rd (1320 LF of 6" & 1320 LF of 12"main).

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation		225,102	231,855	238,810	245,975	244,495	242,535	1,428,772
Property/Equip. Acquisition								0
<b>TOTAL</b>		<b>\$225,102</b>	<b>\$231,855</b>	<b>\$238,810</b>	<b>\$245,975</b>	<b>\$244,495</b>	<b>\$242,535</b>	<b>\$1,428,772</b>
<b>FUNDING</b>								
Current Revenue		225,102	231,855	238,810	245,975	244,495	242,535	1,428,772
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>		<b>\$225,102</b>	<b>\$231,855</b>	<b>\$238,810</b>	<b>\$245,975</b>	<b>\$244,495</b>	<b>\$242,535</b>	<b>\$1,428,772</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
Ongoing

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Water Gate Valve Replacement**  
 Department: **Public Works - Water Fund**  
 Physical Location: **Various**  
 Federal Mandate: **No**  
 State Regulation or Law: **No**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Water system maintenance**



### PROJECT DESCRIPTION/JUSTIFICATION

This project replaces gate valves in water mains that are not scheduled for replacement through other infrastructure improvement projects. Properly functioning main line gate valves are required to isolate water mains in the event of a break, routine repair, or contamination. The 2003 infrastructure study cites the state of NH requirement for a routine valve turning program for system maintenance. More than one third of the City valves are sixty years old or older and are difficult to open, close, or cannot be operated at all and are maintenance problems. The deficiencies include leaky valve packing and/or complete valve failure. This project will be designed by in-house engineering staff and includes funds for an outside contractor to complete the work.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation		85,406	87,872	90,508	93,223	96,020	98,901	551,930
Property/Equip. Acquisition								0
<b>TOTAL</b>		<b>\$85,406</b>	<b>\$87,872</b>	<b>\$90,508</b>	<b>\$93,223</b>	<b>\$96,020</b>	<b>\$98,901</b>	<b>\$551,930</b>
<b>FUNDING</b>								
Current Revenue		85,406	87,872	90,508	93,223	96,020	98,901	551,930
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>		<b>\$85,406</b>	<b>\$87,872</b>	<b>\$90,508</b>	<b>\$93,223</b>	<b>\$96,020</b>	<b>\$98,901</b>	<b>\$551,930</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:**

Ongoing

**PROJECT STATUS:**

Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Well Field Evaluation Plan**  
 Department: **Public Works - Water Fund**  
 Physical Location: **West and Court St Well Facilities**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Continually support and maintain infrastructure.**



### PROJECT DESCRIPTION/JUSTIFICATION

The West Street and Court Street well facilities include three well buildings that were constructed in the mid 1960's, one well building that was constructed in 1977 and two corrosion control buildings that house chemical feed equipment that were constructed in 1988. The November 2013 "Water Facilities Evaluation" performed by Tighe and Bond included many action items for both facilities. This project funds a more in-depth detailed evaluation of these facilities in FY20. The proposed evaluation will provide recommendations for repair/replace/relocation of the City's groundwater facilities and will assist the City in determining the best approach to addressing the deficiencies identified in the Tighe and Bond report.

The City's surface water supply is supplemented by 4 groundwater wells located on West and Court Streets. This project will evaluate the City's current and future water demands and provide financially-based recommendations for the rehabilitation of current facilities compared to the development and construction of a new groundwater supply.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design					75,000			75,000
Construction/Implementation								0
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$75,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$75,000</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve					75,000			75,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$75,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$75,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
Multi-year

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **1.5 MG Storage Tank Repairs**  
 Department: **Public Works - Water Fund**  
 Physical Location: **Roxbury Street**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Continually support and maintain infrastructure.**



Tank is underground, inside the fence line

### PROJECT DESCRIPTION/JUSTIFICATION

The 1.5 million gallon water storage tank located on Roxbury Street is a buried, cast-in-place concrete tank that was built in 1924, and is in generally good condition. Improvements recommended by the November 2013 Tighe and Bond "Water Facilities Evaluation" report will extend its useful life and bring it up to current water storage tank standards. This project funds design to correct deficiencies including a new membrane roof cover, re-grading the soil over the tank, and installing a separate vent.

This tank is covered by approximately 6 inches of topsoil with several low areas that allow water to pond on the tank's flat roof. Tighe and Bond recommended that the buried tank should be equipped with an impermeable membrane roof cover and that the topsoil be graded to divert water away from the tank roof. The report also indicated the existing tank overflow currently acts as both an overflow and a vent for the tank, which does not conform with current standards for water storage tanks.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design					90,041			90,041
Construction/Implementation							278,226	278,226
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$90,041</b>	<b>\$0</b>	<b>\$278,226</b>	<b>\$368,267</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve					90,041		278,226	368,267
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$90,041</b>	<b>\$0</b>	<b>\$278,226</b>	<b>\$368,267</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
One time

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **3 MG Water Storage Tank Repairs**  
 Department: **Public Works - Water Fund**  
 Physical Location: **Roxbury Street**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Extend the useful life of the water storage tank through repairs and maintenance.**



### PROJECT DESCRIPTION/JUSTIFICATION

The City's 3.0 million gallon water storage tank is an above grade welded steel tank that was constructed in 1962. The November 2013 " Water Facilities Evaluation" performed by Tighe and Bond included an interior and exterior inspection that noted several deficiencies. FY20 funds a more detailed evaluation of current and future water storage requirements and will help the City determine whether it is more economical to construct a new tank or perform the necessary tank repairs.

The deficiencies noted by Tighe and Bond include failure of isolated areas of the interior and exterior coating systems and corrosion on the tank wall, interior rust nodules on the floor of the tank and holes and delamination on the roof of the tank, visible signs of corrosion on the ladder rails and replacement of the tank vent. Tighe and Bond also recommend installing cathodic protection and a guard rail at the top of the tank for safe walking along the dome. Structural concerns noted include the joint sealant between the tank flange and the top of the concrete is discontinuous and should be replaced with new sealant and exposed surfaces of concrete foundation should also be repaired. Preliminary costs for tank repairs and painting have been estimated at \$2.3 million and is currently scheduled for FY23.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design					35,000			35,000
Construction/Implementation								0
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$35,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$35,000</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve					35,000			35,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$35,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$35,000</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** No impact  
Ongoing

**PROJECT STATUS:** Ongoing CIP

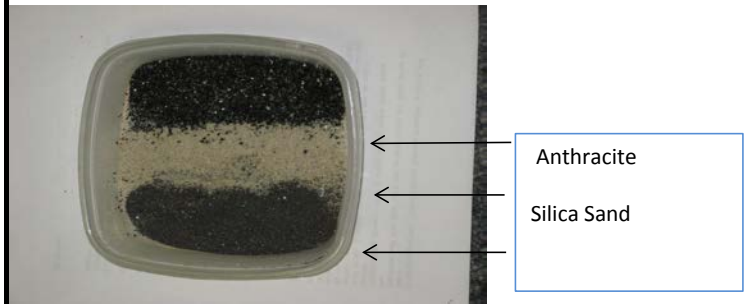


# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

**Project Name:** WTF Filter Media and Underdrain Replacement  
**Department:** Public Works - Water Fund  
**Physical Location:** WTF  
**Federal Mandate:** N/A  
**State Regulation or Law:** N/A  
**Master Plan (CMP) Focus Area:** Quality Built Environment  
**CMP Vision/Strategy:** Infrastructure  
**Council Initiative:** N/A  
**V.O.I.C.E.:** Continually Assess Facilities and Infrastructure  
**Departmental Objective:** Maintain compliance with drinking water standards through filter maintenance.



### PROJECT DESCRIPTION/JUSTIFICATION

The City's water treatment facility has three treatment units that each have three different layers of filter media that has been renewed, but not replaced since its installation in 1993. The City contracted with Tighe and Bond Consulting Engineers in 2013 to perform an evaluation of the filters and media. The visible parts of the filter units were found to be in good repair but the underdrain components cannot be inspected while the units are filled with media. The evaluation also found the anthracite media does not meet specifications and its replacement will improve filter performance and efficiency. Tighe and Bond recommend removing all three media layers to complete the underdrain evaluation and repair and to replace all 3 layers of media when the underdrain work is complete.

This project funds the final phase of the filter inspection and repair and/or replacement of the underdrain system and filter media for each unit -- one unit every two years. Work on the first filter unit is proposed for FY20; the remaining two units are funded in FY22 and FY24 respectively.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design/construction oversight					17,575			17,575
Construction/Implementation					173,891		203,126	377,017
Property/Equip. Acquisition								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$191,466</b>	<b>\$0</b>	<b>\$203,126</b>	<b>\$394,592</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve					191,466		203,126	394,592
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$191,466</b>	<b>\$0</b>	<b>\$203,126</b>	<b>\$394,592</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
One time

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Instrumentation Upgrade WTF**  
 Department: **Public Works - Water Fund**  
 Physical Location: **555 Roxbury Road**  
 Federal Mandate: **No**  
 State Regulation or Law: **No**  
 Master Plan (CMP) Focus Area: **Healthy Community**  
 CMP Vision/Strategy: **Infrastructure**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Monitor plant performance and make process changes to optimize water quality.**



### PROJECT DESCRIPTION/JUSTIFICATION

The Water Treatment Facility (WTF) is equipped with continuously online monitoring equipment that allows the operations staff the ability to monitor and trend the performance of the WTF through the plant's Supervisory Control and Data Acquisition System (SCADA). The analytical data generated allows staff the ability to make process changes and optimize the water treatment process. This project included the replacement of 8 online turbidity analyzers in FY14 and the replacement of an online total organic carbon (TOC) analyzer in FY15. FY20 includes the replacement of a chlorine analyzer and 6 level transmitters at the filter units, clearwell, and waste tanks. Installation of the equipment is performed by in-house personnel.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition				49,522				49,522
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$49,522</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$49,522</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve				49,522				49,522
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$49,522</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$49,522</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
 N/A

**PROJECT STATUS:** Ongoing CIP



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **WTF Pressure Reducing Valve**  
 Department: **Public Works - Water Fund**  
 Physical Location: **Water Treatment Facility**  
 Federal Mandate: **N/A**  
 State Regulation or Law: **N/A**  
 Master Plan (CMP) Focus Area: **N/A**  
 CMP Vision/Strategy: **Energy Efficiency**  
 Council Initiative: **Policy**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Improve flow balance between the hydro-turbines and the process filters.**



### PROJECT DESCRIPTION/JUSTIFICATION

The existing pressure reducing valve (PRV) was installed when the Water Treatment Facility was constructed in 1993 and is recommended for replacement in 2020 by the November 2013 "Water Facilities Evaluation" performed by Tighe and Bond. However, because of operational issues, staff recommends the project be moved to FY19. The PRV works in conjunction with the hydro turbine system by handling any water that does not pass through the turbines when there is flow fluctuation. Operational issues are created because the overflow volume is much smaller than the design point of the PRV. The resulting water surges created by the oversized PRV results in increased water turbidity and affects the operation of the turbines.

The proposed system would consist of two PRVs sized to match the turbines' design flows. They will operate in parallel, with a smaller valve to handle the transition for lower flows and a larger valve for higher flows. FY17 funds an evaluation and design for the new system with construction in FY19.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design		15,590						15,590
Construction/Implementation				17,100				17,100
Property/Equip. Acquisition				68,958				68,958
<b>TOTAL</b>	<b>\$0</b>	<b>\$15,590</b>	<b>\$0</b>	<b>\$86,058</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$101,648</b>
<b>FUNDING</b>								
Current Revenue								0
Capital Reserve		15,590		86,058				101,648
Debt Funded								0
Federal or State Grants								0
Other Sources								0
<b>TOTAL</b>	<b>\$0</b>	<b>\$15,590</b>	<b>\$0</b>	<b>\$86,058</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$101,648</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Create efficiencies  
One time

**PROJECT STATUS:** Ongoing CIP



**CITY OF KEENE, NEW HAMPSHIRE  
CAPITAL IMPROVEMENT PROGRAM FY17-FY22  
EQUIPMENT FUND MULTI-YEAR PROJECTIONS**

	ACTUAL FY 13/14	ACTUAL FY 14/15	BUDGET FY 15/16	PROJECTED FY16/17	PROJECTED FY17/18	PROJECTED FY18/19	PROJECTED FY19/20	PROJECTED FY20/21	PROJECTED FY21/22
<b>REVENUES</b>									
Charges for Services	\$2,219,535	\$2,244,641	\$2,218,027	\$2,341,377	\$2,442,588	\$2,548,270	\$2,658,624	\$2,767,650	\$2,874,762
Miscellaneous	10,209	8,891	6,000	9,935	10,034	10,135	10,236	10,339	10,442
Use of (Addition to) Surplus			(42,764)						
Equipment Sales	2,990		7,500	3,700	3,737	3,774	3,812	3,850	3,889
<b>TOTAL REVENUES</b>	<b>\$2,232,734</b>	<b>\$2,253,532</b>	<b>\$2,188,763</b>	<b>2,355,012</b>	<b>\$2,456,359</b>	<b>\$2,562,179</b>	<b>\$2,672,672</b>	<b>\$2,781,839</b>	<b>\$2,889,093</b>
<b>EXPENSES</b>									
Personnel & Benefits	\$494,633	\$520,997	\$545,629	\$574,275	\$604,424	\$636,156	\$656,831	\$678,178	\$700,219
Operating Costs	1,262,139	1,279,357	1,263,134	\$1,298,100	\$1,317,966	\$1,344,037	\$1,385,741	\$1,423,099	\$1,476,131
Depreciation	410,105	383,954	380,000	400,000	425,000	430,000	440,000	450,000	450,000
<b>SUBTOTAL</b>	<b>2,166,876</b>	<b>2,184,308</b>	<b>2,188,763</b>	<b>2,272,375</b>	<b>2,347,390</b>	<b>2,410,193</b>	<b>2,482,573</b>	<b>2,551,278</b>	<b>2,626,350</b>
MINOR CAPITAL	56,095	18,275	0	0	0	0	0	0	0
<b>TOTAL EXPENSE</b>	<b>\$2,222,972</b>	<b>\$2,202,583</b>	<b>\$2,188,763</b>	<b>\$2,272,375</b>	<b>\$2,347,390</b>	<b>\$2,410,193</b>	<b>\$2,482,573</b>	<b>\$2,551,278</b>	<b>\$2,626,350</b>
<b>NET REVENUE (EXPENSE)</b>	<b>\$9,762</b>	<b>\$50,949</b>	<b>\$0</b>	<b>\$82,637</b>	<b>\$108,969</b>	<b>\$151,986</b>	<b>\$190,099</b>	<b>\$230,561</b>	<b>\$262,743</b>
			<b>7.04%</b>	<b>3.82%</b>	<b>3.30%</b>	<b>2.68%</b>	<b>3.00%</b>	<b>2.77%</b>	<b>2.94%</b>

**EQUIPMENT FUND INCREASE (DEC)**

*This section adjusts Net Revenue (Expense) to include uses of cash not recorded as expense, and to exclude expenses that do not require the use of cash. The purpose of the adjustment is to reflect the projected uses of cash from FY 17 thru FY 22:*

Add: Depreciation	\$400,000	\$425,000	\$430,000	\$430,000	\$430,000	\$430,000	\$440,000	\$450,000	\$450,000
Subtract: Tfrs to Capital Reserve (see Note 2)	(575,000)	(625,000)	(650,000)	(650,000)	(650,000)	(650,000)	(675,000)	(700,000)	(700,000)
Debt Service Principal (see Note 2)									
Capital Outlays (see Note 2)									
<b>Projected Annual Cash Surplus (Deficit)</b>	<b>(\$92,363)</b>	<b>(\$91,031)</b>	<b>(\$68,014)</b>	<b>(\$68,014)</b>	<b>(\$44,901)</b>	<b>(\$44,901)</b>	<b>(\$44,901)</b>	<b>(\$19,439)</b>	<b>\$12,743</b>

Projected cash balance at year end \$ 401,828 309,465 218,434 150,420 105,519 86,081 98,824

Projected cash balance as a % of operations budget 13.62% 9.31% 6.24% 4.25% 4.25% 3.37% 3.76%

Projected percentage increase - internal fleet charges 4.35% 4.50% 4.50% 4.50% 4.50% 4.25% 4.00%

Note 1: Net Revenue (Expense) indicates the anticipated increase (decrease) in retained earnings at the end of the year.  
 Note 2: Debt Service principal, capital outlays, and transfers to reserves are balance sheet transactions, and are not included in expenses.  
 Note 3: Budgeted revenues exclude Use of Surplus / Fund Balance in FY 17-22.

## CITY OF KEENE, NEW HAMPSHIRE

### Equipment Fund 2017 - 2022 Capital Improvement Program Summary

<u>Dept.</u>	<u>Project Name</u>	<u>2016/2017</u>	<u>2017/2018</u>	<u>2018/2019</u>	<u>2019/2020</u>	<u>2020/2021</u>	<u>2021/2022</u>	<u>TOTAL</u>
Public Works	Capital Reserve - Equipment Replacement	\$ 575,000	\$ 625,000	\$ 650,000	\$ 675,000	\$ 700,000	\$ 700,000	\$ 3,925,000
Public Works	Equipment Replacement	893,451	731,752	708,302	840,783	747,836	702,159	4,624,283
<b>TOTAL CAPITAL PROGRAM</b>		<b>\$ 1,468,451</b>	<b>\$ 1,356,752</b>	<b>\$ 1,358,302</b>	<b>\$ 1,515,783</b>	<b>\$ 1,447,836</b>	<b>\$ 1,402,159</b>	<b>\$ 8,549,283</b>

#### PROJECT FUNDING DETAIL

		<b><u>Reserve Funded Projects</u></b>						
Public Works	Equipment Replacement	\$ 893,451	\$ 731,752	\$ 708,302	\$ 840,783	\$ 747,836	\$ 702,159	\$ 4,624,283
<b>Total: Reserve Funded Projects</b>		<b>\$ 893,451</b>	<b>\$ 731,752</b>	<b>\$ 708,302</b>	<b>\$ 840,783</b>	<b>\$ 747,836</b>	<b>\$ 702,159</b>	<b>\$ 4,624,283</b>
		<b><u>Projects Funded with Debt</u></b>						
Public Works	n/a	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total: Projects Funded with Debt</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
		<b><u>Capital Reserve Appropriations</u></b>						
Public Works	Capital Reserve - Equipment Replacement	\$ 575,000	\$ 625,000	\$ 650,000	\$ 675,000	\$ 700,000	\$ 700,000	\$ 3,925,000
<b>Total: Capital Reserve Appropriations</b>		<b>\$ 575,000</b>	<b>\$ 625,000</b>	<b>\$ 650,000</b>	<b>\$ 675,000</b>	<b>\$ 700,000</b>	<b>\$ 700,000</b>	<b>\$ 3,925,000</b>
		<b><u>Projects Funded with State Grant</u></b>						
Public Works	n/a	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total: Projects Funded with State Grant</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
		<b><u>Projects Funded with Cash</u></b>						
Public Works	n/a	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total: Projects Funded with Cash</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Subtotal: Uses of Cash</b>		<b>\$ 575,000</b>	<b>\$ 625,000</b>	<b>\$ 650,000</b>	<b>\$ 675,000</b>	<b>\$ 700,000</b>	<b>\$ 700,000</b>	<b>\$ 3,925,000</b>
(Capital Reserve Appropriations plus Projects Funded with Cash)								
<b>TOTAL CAPITAL PROGRAM</b>		<b>\$ 1,468,451</b>	<b>\$ 1,356,752</b>	<b>\$ 1,358,302</b>	<b>\$ 1,515,783</b>	<b>\$ 1,447,836</b>	<b>\$ 1,402,159</b>	<b>\$ 8,549,283</b>



# CITY OF KEENE, NEW HAMPSHIRE

## 2017 - 2022 Capital Project Funding Request

### GENERAL PROJECT DATA

Project Name: **Capital Reserve-Equipment Replace**  
 Department: **PUBLIC WORKS**  
 Physical Location: **330 Marlboro St.**  
 Federal Mandate: **No**  
 State Regulation or Law: **No**  
 Master Plan (CMP) Focus Area: **Quality Built Environment**  
 CMP Vision/Strategy: **Transportation**  
 Council Initiative: **N/A**  
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**  
 Departmental Objective: **Invest resources to maintain City fleet operations**



### PROJECT DESCRIPTION/JUSTIFICATION

The City of Keene Fleet has 137 vehicles and pieces of equipment in the replacement program. The age of the fleet ranges from one year to more than 15 years. This project sets aside funds for the orderly and timely replacement of vehicles and equipment when they reach the end of their useful life which is determined through a complete evaluation process. Operating vehicles beyond their service life results in increased maintenance costs, poor customer service, and lost production time due to a vehicle or equipment being out of service for extensive repairs. The replacement program is based on equipment age, condition, trade-in value, and operational needs of the user. When practical, emphasis is put on purchasing fuel efficient "green" vehicles as replacements are being evaluated. This replacement program list is reviewed extensively by the Fleet Services Administrative Review Committee before any piece of equipment is replaced. Vehicles are not replaced just because they are on the schedule.

### FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>EXPENDITURES</b>								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		893,451	731,752	708,302	840,783	747,836	702,159	4,624,283
<b>TOTAL</b>	<b>\$0</b>	<b>\$893,451</b>	<b>\$731,752</b>	<b>\$708,302</b>	<b>\$840,783</b>	<b>\$747,836</b>	<b>\$702,159</b>	<b>\$4,624,283</b>
<b>FUNDING</b>								
Current Revenue	760,915	575,000	625,000	650,000	675,000	700,000	700,000	\$4,685,915
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		752	504	418	170	98	95	2,037
<b>TOTAL</b>	<b>\$760,915</b>	<b>\$575,752</b>	<b>\$625,504</b>	<b>\$650,418</b>	<b>\$675,170</b>	<b>\$700,098</b>	<b>\$700,095</b>	<b>\$4,687,952</b>

**ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:** Negligible<\$5,001  
Ongoing

**PROJECT STATUS:** Ongoing CIP

# VEHICLE AND EQUIPMENT 6 YEAR REPLACEMENT SCHEDULE

VEHICLE NUMBER	MODEL YEAR	Purchase Price	DESCRIPTION	VEHICLE DEPT. NO	USING DEPT/DIV	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY 2019/2020	FY 2020/2021	FY 2021/2022
<b>STAFF CARS</b>											
			<b>REPLACE AT 60,000/7 YEARS</b>								
0901	2009	\$23,080	Honda Civic Hybrid	P3	Pool car				\$28,765		
0903	2009	\$23,080	Honda Civic Hybrid	P1	Pool Car				\$28,765		
0720	2007	\$23,080	Honda Civic Hybrid	P2	Pool car	\$24,780					
2110	2012	\$16,585	Ford Focus	110	Assessing						\$21,560
3118	2014	\$18,559	Ford Fusion	118							\$38,842
1001	2009	\$29,879	Ford Escape Hybrid	1	PW						
0902	2009	\$23,080	Honda Civic Hybrid	114	Code	\$27,927					
19C2	2009	\$37,336	Suburban	19C2	Fire	\$45,177					
19C1	2009	\$21,927	Explorer	19C1	Fire				\$28,000		
0606	2006	\$35,132	Suburban	19C3	Fire						
19U3	2012	\$34,970	Ford Interceptor		Fire						\$45,461
0973	2009	\$29,879	Ford Escape	57	Engineering						\$38,842
0014	2000	Rental	Ford Taurus		Fleet						
1144	2011	\$18,989	Ford Transit connect	1144	PD Parking				\$29,000		
1243	2012	\$22,374	Ford Transit Connect	1143	PD Parking						
<b>VANS</b>											
			<b>REPLACE AT 70,000/10 YEARS (8 YEARS/70,000 old)</b>								
0004	2000	\$18,151	Ford E150	7	Fleet						
1370	2013	\$16,353	Ford E150	70	Water Meter						\$22,610
1108	2011	\$17,392	Ford E150	8	Water Meter						\$30,000
1258	2012	\$16,491	Ford E150	58	Engineering						
0907	2009	\$22,232	Ford E-250	101	Parks & Rec				\$28,902		
1545	2015	\$16,807	GMC Savannah	1145	PD Parking						
0908	2009	\$22,232	Ford E-250	102	Parks & Rec			\$28,902			
1259	2012	\$16,491	Ford E-150	59	WWTP						
0313	2003	\$14,250	Ford E-250	125	Records						
<b>AMBULANCE</b>											
0707	2007		(Funding by separate Fire Department Capital Reserve Program)								
19A2	2013		C4500 Chevy International	19A1	Fire						
19A3	2009		C4500 Chevy	19A2	Fire						
				19A3	Fire						
<b>MARKED POLICE</b>											
			<b>REPLACE AT 60,000/3 YEARS</b>								
1436	2014	\$34,970	Ford Interceptor	1136	Cruiser	\$106,503	\$109,698	\$112,737	\$77,392	\$79,714	\$122,850
1137	2011	\$27,138	Crown Vic	1137	Cruiser						
1333	2013	\$34,970	Ford Interceptor	1133	Cruiser						
1334	2013	\$34,970	Ford Interceptor	1134	Cruiser						
1345	2014	\$34,970	Ford Interceptor	1135	Cruiser						
1140	2011	\$27,138	Crown Vic	1140	Cruiser						
1130	2011	\$21,994	Crown Vic	1130	Cruiser						
1138	2011	\$27,424	Crown Vic	1138	Cruiser						
1439	2014	\$34,970	Ford Interceptor	1139	Cruiser						
<b>PD UNMARKED/STAFF CARS</b>											
			<b>REPLACE AT 80,000/6 YEARS</b>								
4121	2014	\$20,595	Ford Fusion	1121	Unmarked						
2111	2012	\$27,570	Ford Interceptor Util.	1129	Unmarked			\$35,558			
0929	2010	\$41,000	Tahoe	1111	Shift Commander	\$33,393					
0037	2000	\$29,000	Lexus 300 ES	1120	PD Staff	\$24,096					
1110	2012	\$26,423	Ford Taurus	1110	PD Staff						
0923	2009	\$17,859	VW Jetta	1123	PD Staff			\$20,895			

# VEHICLE AND EQUIPMENT 6 YEAR REPLACEMENT SCHEDULE

VEHICLE NUMBER	MODEL YEAR	Purchase Price	DESCRIPTION	VEHICLE DEPT. NO	USING DEPT/DIV	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY 2019/2020	FY 2020/2021	FY 2021/2022
1222	2012	\$20,528	Dodge Caravan	1122	PD Staff						\$24,018
0924	2009	\$20,910	Dodge Caravan	1124	PD Staff			\$24,465			
<b>DUMP TRUCKS</b>											
<b>35/48/50 GVW</b>											
<b>REPLACE AT 17 YEARS</b>											
0202	2002	\$112,143	Freightliner	6	Highway				\$192,857		
0526	2005	\$133,600	Ford Dump (lrg)	26	Highway						
0527	2005	\$133,600	Freightliner	27	Water						
0965	2009	\$151,000	Freightliner	65	Highway						
9406	1994	\$80,463	Inter. Dump	3	Highway	\$153,000					
1405	2014	\$80,463	Inter. Dump	5	Highway						
9508	1995	\$80,463	Inter. Dump	AP5	Airport						
1412	2014	\$80,463	Inter. Dump	12	Highway						
9502	1995	\$80,463	Inter. Dump	7	Highway						
0312	2003	\$120,000	Freightliner	2	Highway					\$198,642	
9901	1999	\$88,000	Inter. Dump	4	Highway		\$187,240				
9906	1999	\$88,000	Inter. Dump	10	Highway				\$192,857		
0201	2002	\$112,143	Freightliner	22	Highway						
09AP8	2009	Grant	Freightliner	AP8	Airport						
0001	2001	\$76,644	Sterling	72	Highway			\$134,000			
<b>1 TON TRUCKS</b>											
<b>10,000 GVW</b>											
<b>REPLACE AT 60,000/10 YEARS</b>											
0611	2006	\$44,888	Ford Dump (sml)	11	Highway						
0724	2007	\$44,888	Ford F450	24	Highway	\$58,354					
1113	2011	\$23,967	Ford F350 Dump	13	Water						
0874	2008	\$44,888	Ford F450	74	Highway		\$58,354				
0823	2008	\$29,956	Ford F350	23	WWTP			\$38,943			
4134	2014	\$35,562	GMC K3500	134	Cemetery						\$43,631
0105	2001	\$25,000	Ford E350	54	Water						
1445	2013	\$37,806	Dodge 3500	45	Highway						
1275	2012	\$49,681	Ford F450	75	Highway			\$64,585			
4107	2014	\$26,411	Ford F350	107	Parks & Rec						
1214	2012	\$31,623	Ford F350	14	Water						\$41,110
0815	2008	\$29,956	Ford F350	15	Water		\$38,943				
9820	1998	\$52,000	Ford F350	20	Fleet						\$67,600
0205	2002	\$25,749	Ford F350	19B1	Fire						\$33,474
0308	2003	\$25,749	Ford F250	19B2	Fire						
1119	2011	\$27,659	Ford F 350	19	Fleet						\$31,200
<b>3/4 TON TRUCKS</b>											
<b>REPLACE AT 80,000/10 YEARS</b>											
9808	1998	\$21,805	Ford F250	130	Parks		\$30,000				
9821	1998	\$21,805	Ford F250	131	Parks						
1301	2000	\$22,232	GMC 2500	AP1	Airport	\$30,000					
0103	2001	\$23,597	Ford F250	19S1	Fire		\$16,000				
06AP3	2006	\$22,232	Ford F250	AP3	Airport					\$42,480	
0904	2009	\$22,232	Ford F250	104	Parks						\$33,902
1116	2011	\$20,483	Ford F250	16	Water						
<b>1/2 TON TRUCKS</b>											
<b>REPLACE AT 70,000/10 YEARS</b>											
4103	2014	\$31,548	GMC 1500 Crew	103	Parks						
0818	2008	\$36,000	Ford F150	18	Highway			\$24,000			
1425	2014	\$19,828	GMC 1500	25	Highway						

# VEHICLE AND EQUIPMENT 6 YEAR REPLACEMENT SCHEDULE

VEHICLE NUMBER	MODEL YEAR	Purchase Price	DESCRIPTION	VEHICLE DEPT. NO	USING DEPT/DIV	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY 2019/2020	FY 2020/2021	FY 2021/2022
<b>1/4 TON TRUCKS</b>											
0310	2003	\$14,985	REPLACE AT 70,000/10 YEARS Ford Ranger	21	WWTP	\$16,000					
0314	2003	\$15,496	Ford Ranger	112	Code						
0502	2005	\$14,707	Ford Ranger	120	inspections						
<b>SIDE WALK PLOWS</b>											
0411	2004	\$74,905	Holder (sidewalk plow)	50	Highway						
0412	2004	\$74,905	Holder (sidewalk plow)	51	Highway						
0553	2005	\$74,905	Holder (sidewalk plow)	53	Highway						
0752	2007	\$82,357	Trackless (sidewalk plow)	52	Highway						
0649	2006	\$110,000	Trackless (sidewalk plow)	49	Highway						
<b>BACKHOE</b>											
1541	2015	\$76,000	John Deere 310SK	41	Highway						
9608	1996	\$81,100	John Deere 710D	39	Water	\$100,000					
<b>PAYLOADERS</b>											
0115	2001	\$148,964	John Deere Pay/loader	17	Transfer Station				\$140,000		
0634	2006	\$126,667	Komatsu	34	Highway				\$150,000		
0031	2000	\$148,500	John Deere Pay/loader	33	Highway	\$140,000					
0306	2003	\$161,802	Case Pay/loader	AP5	Airport						
0607	2006	\$61,595	409 Loader	ICB	Recycle				\$60,000		
<b>TRACTORS</b>											
0407	2004	\$106,472	Ford Versatile Tractor	40	Highway					\$80,000	
066AP	2006	\$106,472	Ford Versatile Tractor	60	Airport		\$135,000				
0905	2009	\$31,000	New Holland Tractor	105	Parks & Rec				\$40,300		
0932	2009	\$20,125	Cub Cadet	132	Cemetery			\$26,163			
1429	2014	\$61,000	Kubota Tractor	29	WWTP						
1410	2014	\$23,400	Toyota Forklift		Recycle						
0513	2005	\$6,190	John Deere 1300	113	Parks & Rec		\$12,900				
0909	2009	\$8,000	John Deere X700	109	Parks & Rec			\$10,400			
1117	2011	\$32,250	Volvo MCI15C skidsteer	skidsteer	Highway						
0108	2001	\$33,020	New Holland LS190 skidsteer	skidsteer	Solid Waste		\$42,926				
0706	2007	\$70,588	Toro Mower	Mower	Cemetery				\$80,000		
0635	2006	\$8,359	Simplicity	135	Cemetery	\$10,867					
<b>SPECIALTY EQUIPMENT</b>											
1528	2015	\$307,000	Freightliner VacCon	28	Water/Sewer	\$65,000					
0317	2003	\$204,638	Sterling VacCon	36	Highway						
9408	1994		Oshkosh Snow Blower	AP4	Airport						
<b>AIR COMPRESSORS</b>											
9503	1990	\$10,000	Ingersoll Compressor	133	Cemetery						
9714	1997	\$10,000	Lindsay Compressor	88	Highway						
9909	1999	\$10,818	Lindsay Compressor	86	Water				\$24,000		
0589	2000	\$10,000	Air Compressor	89	Highway						

# VEHICLE AND EQUIPMENT 6 YEAR REPLACEMENT SCHEDULE

VEHICLE NUMBER	MODEL YEAR	Purchase Price	DESCRIPTION	VEHICLE DEPT. NO	USING DEPT/DIV	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY 2019/2020	FY 2020/2021	FY 2021/2022
<b>CONSTRUCTION EQUIPMENT</b>											
0704	2007	\$4,499	Graco Painter	80	Highway						
9012	1990	\$6,000	Snow Blower attach.	80	Highway				\$7,800		
9823	1998	\$10,000	Chipper		Highway		\$18,849				
0912	2009	\$1,788	Woods Brush Hog		Highway						
9912	2000	\$7,155	Rosco Roller		Highway		\$9,302				
9410	1994	\$18,700	Forklift		Fleet Services						
9818	1998	\$3,000	Trailer for Cemetery		Cemetery				\$3,900		
9924	1999	\$8,200	Hydro Tek Steamer		Highway				\$10,660		
0113	2001	\$21,208	Asphalt Reclaimer		Highway						\$53,530
9301	1993	\$21,208	Asphalt Reclaimer		Highway						\$53,530
8210	1982	\$20,000	Trailer		Highway						
0010	2000	\$5,800	Miller Curber		Highway		\$7,540				
0022	2000	\$33,000	Jimline Crack Sealer		Highway						
0520	2005	\$9,260	Welder/Generator on Trailer		Fleet Services						
0408	2004	\$38,000	USA Mower/Attach		Highway						
0011	2000	\$5,225	Stowe Roller		Parks & Rec						
9014	1990	\$20,000	Sno-go Blower		Highway						
0663AP	2006		Salsco/Chipper		Airport						
0409	2004		Pronovost Snowblower		Highway						
0036	2000	\$9,995	Vibromax Roller		Highway						
<b>Total</b>						<b>\$893,451</b>	<b>\$731,752</b>	<b>\$708,302</b>	<b>\$840,783</b>	<b>\$747,836</b>	<b>\$702,159</b>