

City of Keene

Capital Improvement Program Fiscal Years 2020-2025



Shaping the Future of Keene



Updating the City's zoning regulations will help Keene meet the needs of an evolving, 21st century population, helping to ensure continued sustainability and economic development well into the future.

City of Keene, New Hampshire
Capital Improvement Program
FY 2020-2025
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January 17, 2019

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

We are pleased to present this year's proposed Capital Improvement Plan (CIP) spanning the next six years, through June 30, 2025, including the proposed budget for FY 2020 capital projects. City staff and the City Council work very hard to produce Capital and Operating Budgets that meet and balance citizen and community needs and City Council Fiscal Policy. The Capital Improvement Program identifies and funds community capital needs identified by citizens, the City Council and staff, recognizing that resources are limited, and priorities need to be established.

The proposed capital investment program is consistent with goals and priorities identified within the Comprehensive Master Plan (CMP) adopted in 2010 and Council Goals, including an emphasis on economic development. A critical element to achieve the City's vision is the development, maintenance, and replacement of the infrastructure and amenities promoting to the health, wellbeing, and vitality of the community. #ChooseKeene.

Budgeting and planning processes are never ending and at the micro level, there are many details. City staff, when developing the program advanced, has analyzed individual project and financial details which need to be connected to support a comprehensive improvement plan. At the macro level, budgeting is less detail oriented and complex, but no less challenging. The community establishes goals and priorities through its elected officials (the City Council and Mayor), documents such as the CMP and City Council Goals and Policies, and through communications with the City Manager and City staff.

It is the job of City staff to implement the goals and priorities of the community, and also to identify and communicate additional opportunities and challenges to our elected officials and community. Oftentimes priorities can be in conflict. One set of priorities may reflect the desire to control government spending in order to limit property tax or utility rate increases. Another set of priorities may reflect a desire to fund ongoing preservation and maintenance of critical transportation and water/sewer infrastructure or to invest in other community infrastructure, programs, or amenities.

Budgeting and planning processes are used to identify priorities, explore alternative means or approaches to accomplish goals and priorities (such as the "Road Asset Management" approach which seeks to prioritize road preventative maintenance in order to improve road condition and reduce costly bond funded repaving), and most of all to prioritize and balance conflicting community goals and priorities to as great an extent as possible. In a time of limited resources and increasing competitiveness and demand for public investment in our community, the need to balance conflicting priorities and needs is paramount. Budgeting and planning processes are also used to communicate, share, and solicit feedback from the community with regard to implementation of community priorities as expressed through proposed budgets.

In recent years, 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). During upcoming CIP cycles and annual operating budget presentations staff will continue the effort that supports the community's vision.

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 are incorporated into this plan that guides our community's future. Such projects are included within the six year planning horizon or highlighted in the narrative portion of this message under FUTURE INITIATIVES.

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 continuing the community conversation with regards to the future of the downtown core, improvements to utility and storm water systems, sidewalks and roads, airport infrastructure, or city parks; this year's CIP with continuing collaboration includes them all.

Keene must remain competitive if we are going to continue to attract investment, jobs, and resultant increases to our tax base. Quality of life is a vital part of keeping the City competitive. The right balance between investment and affordability ensure the City will remain an attractive place to live, learn, work, and play. #liveworkplaykeene

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, 2019, and ending June 30, 2025 (FY 2020 - FY 2025). This program is fluid and will change from CIP to CIP, and can also be amended from time to time by 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.

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 ice rink, Library Campus Development now moving toward completion, and proposed skateboard park project. Through engagement with employers, the Chamber of Commerce, College/City Commission, social service agencies, other governmental partners and community groups, our organization, community, and City Council priorities advance.

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. As a ratio, this indicator is vulnerable to changes in operations budget growth assumptions, as well as changes in debt service commitments versus other capital financing tools implemented. Recent years have seen new programs and priorities, including Flood Management and the implementation of the principles of asset management, impact this key ratio. The assumptions upon which projections are made are reviewed and adjusted annually as part of the CIP process and inform additional refinement of this indicator.
 2. Projections. Based upon the proposed CIP indicate positive reductions in this critical ratio from 16.68% in FY 2020 to 14.16% in FY 2025, the last year of the CIP. The ratio would decrease in each year covered by the CIP, and based upon longer term projections using currently available information, through FY 2029
- B. Policy - Unassigned fund balance for the General Fund will be maintained at between 7% and 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 19 budgets and projections, and tax commitments to the school and county, inflated by 3% per year, indicate that the City will remain in compliance with this policy throughout the life of the CIP (FY 2020 - 2025) and through FY 2030.
 2. Projections. Over this period, unassigned fund balance is projected to range between 7.99% and 9.19%.

FUTURE INITIATIVES

Parks and Recreation has included funding requests for FY 2020-FY2022 for the Patricia T. Russell Park. In FY2020-\$125,000 is included for design work with planned construction included at \$1,275,000 FY 2022. The Patricia T. Russell Park, adjacent to the downtown footprint along Beaver Brook and the Cheshire Rail Trail, plays a significant role in restoring recreational opportunities to the east side of Keene.

The location of Fire Station 2 at 110 Hasting Ave in West Keene is currently under evaluation. The building was deeded back to the City by the State of NH Adjutant General's Office (NHARNG) following a determination that the facility was no longer needed to meet their mission. Funding to study Fire Station 2 has been contemplated in the CIP plan for approximately 10 years. The transfer of ownership of the facility initiated through the current capital budget and a study of the current location along with consideration of the fire department's future service needs. The overall project is planned to be implemented in phases and funded over several years. The first phase (currently in progress) is assessing the best location to meet the city's needs. Once the location is finalized, next steps will involve a review of building and system needs. The final phase is renovation and/or construction of a new facility which is dependent upon these initial actions and future CIPs.

In FY 2014, an appropriation from the Downtown Infrastructure Capital Reserve was authorized to provide for the predesign costs for of a parking structure in the downtown area. No further action has been undertaken on that project and it is not anticipated in the current six year CIP horizon. The

proposed FY 2020-2025 CIP redirects the funding towards the proposed Downtown Revitalization project.

The Downtown Revitalization project is included in the proposed CIP starting in FY2020. The City just recently learned that we were unsuccessful in our attempts to get a \$750,000 Build America Planning Grant for proposed Downtown work. Aging and deficient underground infrastructure in the downtown core initiated this project which will disrupt the City's downtown streetscape developed almost thirty years ago. Therefore, the scope of work proposed in FY2020 would pick up where the initial work left off continuing to involve the community in discussion on treatments, activities, and functions needed for a vibrant Downtown. It would provide community decision makers with options and alternatives to meet the needs of the citizens, visitors, and businesses of Keene. The FY2020 funding would also include preliminary design, with final design and contract documents to be completed in FY2021.

Parks and Recreation with the assistance of BH & A Inc., an architecture firm, completed an evaluation of our current program at the Recreation Center and a potential collaboration with Keene Senior Center. The study provided four options: Option 1-Senior Center addition and Recreation Center addition along with building renovations; Option 2-Senior Center and building renovations; Option 3-Recreation Center addition and building renovations and Option 4-building renovations study. While the cost and feasibility for the entire project (Option 1 and 2-Recreation Center & Senior Center combination) has been presented in a variety of forums, there is still a need for further discussion and examination of recreation programmatic and age driven building improvements for the recreation center alone which was a component of the program's original intent. The initial EMG report provided an assessment of \$1.2 million needed for existing building infrastructure. Currently no funds are allocated in the capital plan for this project or future recreation programmatic needs.

There have been discussions regarding the development of an Ashuelot River Greenspace Park expansion with major funding to come through private donations. Should that project come to pass, there may be the need to upgrade city drainage infrastructure crossing the property before the park is developed.

The concept of a Storm Water Management Utility has been raised as a discussion point. A storm water utility would have the purpose of funding capital improvements related to the storm water and storm runoff infrastructure system. The funding method would be user fees, in a manner similar to the existing water and sewer utility funds. The storm water drainage infrastructure system (managed by the Department of Public Works) is currently funded with property taxes. A storm water utility would be funded by all properties, including tax exempt properties.

Appendix A and B of this document contain supplemental information on various projects including those discussed in this section, extending beyond the six year plan that are still in the preliminary planning or discussion stages.

FINANCIAL INFORMATION & PROJECT REQUESTS

Project requests are developed by City departments, after considering priorities identified in the Comprehensive Master Plan, council goals, department master plans, public demand for services or facilities, or by operational needs. Requests, in addition to articulating scope, justification, a financial plan and schedule, are aligned to a CMP 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 funding plan, the funding proposed (current revenue, debt, etc.) by staff take into consideration the capacity of the fund, timing relative to other projects within the fund, and the impact upon property taxes and user rates over a given time period.

Projects 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 CIP document contains the following sections:

- A. Letter of Introduction and City Manager's Message.
- B. Executive Summary – Several graphs and tables providing a broad overview of the proposed projects and funding included in the proposed CIP.
- C. Financial Section –
 - 1. FY 2020-2025 CIP Financial Discussion and Analysis – an analysis of the proposed CIP project and funding plans by fund. The analysis includes a specific look at revenue assumptions, tax and fee changes built into CIP projections, and outstanding debt.
 - 2. Fund basis financial information including detail on property tax, utility rate and fee projections, the impact of the proposed CIP on outstanding debt, and financial projections, for each fund, over the life of the CIP. Included are lists of individual project requests by fund, as well as detail on proposed funding source(s), and a summary debt service schedule providing information on existing and proposed levels of debt service through FY 2025 by fund.
- D. Capital Reserve Presentation – Includes a one page financial summary for each active capital reserve providing a projected balance at the beginning of FY 2019, proposed funding for each year of the CIP, and a list and schedule of projects to be funded from each reserve, and a projected ending balance of each reserve.
- E. Project Requests –In the Proposed FY 2020-2025 CIP, the project requests are organized in the following manner :
 - 1. Public Health and Safety – programs, activities, and projects which are intended to protect the health and safety of individuals and the community. The primary goal of these activities is the protection of the public from dangers affecting health and safety from crime, disaster, fire, and disease. Included in this section are the Police and Fire Departments from the General Fund, and the Sewer, Water and Solid Waste Funds (Public Works Department or PWD).
 - 2. Transportation – programs, activities, and projects which are intended to facilitate the safe and efficient movement of people and things within the City, and to connect the local community with Monadnock Region, the state, and the world. The primary goal of these activities is to provide that roads, bridges, sidewalks, bike paths, and other transportation infrastructure are in good condition and meet the needs of the community. Included in this section are project requests developed by the PWD, Highway and Engineering Divisions (General Fund).
 - 3. Economic Development and Vitality – programs, activities, and projects which are intended to promote the retention and expansion of existing businesses and to encourage and attract new business development in the City of Keene. The primary goal of these activities is enhance

overall quality of life and the sustainability of the community. Projects included in this section were developed by the Airport and PWD from the General Fund, as well as the Parking Fund.

4. Flood and Storm Water Management – programs, activities, and projects which are intended to prevent and remediate conditions leading to localized flooding due to more frequently occurring major precipitation events through preventative maintenance, drainage system improvements, and comprehensive storm water infrastructure planning. Projects in this section were developed by PWD Engineering Division and the Planning Department (General Fund).
 5. Community Development - programs, activities, and projects which are intended to add to or significantly expand the capacity of community infrastructure or facilities. The primary goal of these activities is to improve the quality of life in the community and to meet the needs of a changing community. Included projects were developed by the Parks and Recreation and Fire Departments (General Fund)
 6. General Operations Facilities and Infrastructure - programs, activities, and projects which are intended to maintain and provide facilities, infrastructure, and equipment necessary for the provision of basic governmental services. The primary goal of these activities is to maintain City operational assets in good working order in an environmentally friendly and economically efficient manner. Included projects were developed by the Equipment Fund Division of the PWD, the Assessor's Office, the Facilities Division of Parks and Recreation, and the Information Technology Department, all within the General Fund.
- F. Appendix A – General Fund projects not included in the proposed FY 2020-2025 CIP which may appear in future CIP documents. These projects have not been included in the CIP for a variety of reasons, including limited resources and the need for additional project analysis and development.
- G. Appendix B – Water and Sewer Funds capital projects that are scheduled for FY 2026 and beyond. Also included is a brief discussion of recommendations for additional water main replacement funding. Due to the nature of aging utility infrastructure, and the scope of the proposed projects, this information is provided in an effort to better inform the long term discussion regarding utility fund infrastructure.
- H. Appendix C – Various projects by geographical distribution within the City.
- I. Appendix D – This section provides detailed debt service schedules for all debt proposed to be issued between FY 2020 and FY 2025.

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

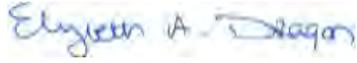
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| • Thursday, January 17, 2019 | Documents distributed to City Council, Planning Board |
| • Thursday, January 24, 2019 | Finance, Organization & Personnel (FOP) Committee review |
| • Saturday, January 26, 2019 | City Council and Planning Board CIP Presentation |
| • Thursday, February 14, 2019 | FOP Committee review |
| • Thursday, February 28, 2019 | FOP Committee review |
| • Thursday, March 7, 2019 | Public Hearing |
| • Thursday, March 14, 2019 | FOP Committee develops recommendation |
| • Thursday, March 21, 2019 | Council vote |

The Planning Board will conduct its independent review at its February 2019 meeting, and will report the result of their review directly to the City Council.

An Executive Summary of the proposed FY 2020-2025 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,



Elizabeth A. Dragon
City Manager

EXECUTIVE SUMMARY

FY 20 - 25 Proposed CIP, By Year, Fund, and Funding Source

FY19/20	Current Revenues	City Bonds	Federal	State	Other	Total	% of program
General Fund	\$ 1,511,076	\$ 2,788,193	\$ 2,473,650	\$ 3,553,441	\$ 2,923,191	\$ 13,249,551	64.20%
Parking Fund	60,000				52,300	112,300	0.54%
Solid Waste Fund	65,000	166,750			300,000	531,750	2.58%
Sewer Fund	914,100				722,377	1,636,477	7.93%
Water Fund	1,128,875	1,717,030			877,724	3,723,629	18.04%
Equipment Fund	665,000				717,743	1,382,743	6.70%
TOTAL	\$ 4,344,051	\$ 4,671,973	\$ 2,473,650	\$ 3,553,441	\$ 5,593,335	\$ 20,636,450	
% of program	21.05%	22.64%	11.99%	17.22%	27.10%	100.00%	

FY20/21	Current Revenues	City Bonds	Federal	State	Other	Total	% of program
General Fund	\$ 1,722,074	\$ 2,300,244	\$ 1,274,940	\$ 164,748	\$ 211,792	\$ 5,673,798	49.81%
Parking Fund	60,000					60,000	0.53%
Solid Waste Fund	65,000					65,000	0.57%
Sewer Fund	979,500	1,455,513			543,806	2,978,819	26.15%
Water Fund	1,100,800					1,100,800	9.66%
Equipment Fund	700,000				812,356	1,512,356	13.28%
TOTAL	\$ 4,627,374	\$ 3,755,757	\$ 1,274,940	\$ 164,748	\$ 1,567,954	\$ 11,390,773	
% of program	40.62%	32.97%	11.19%	1.45%	13.77%	100.00%	

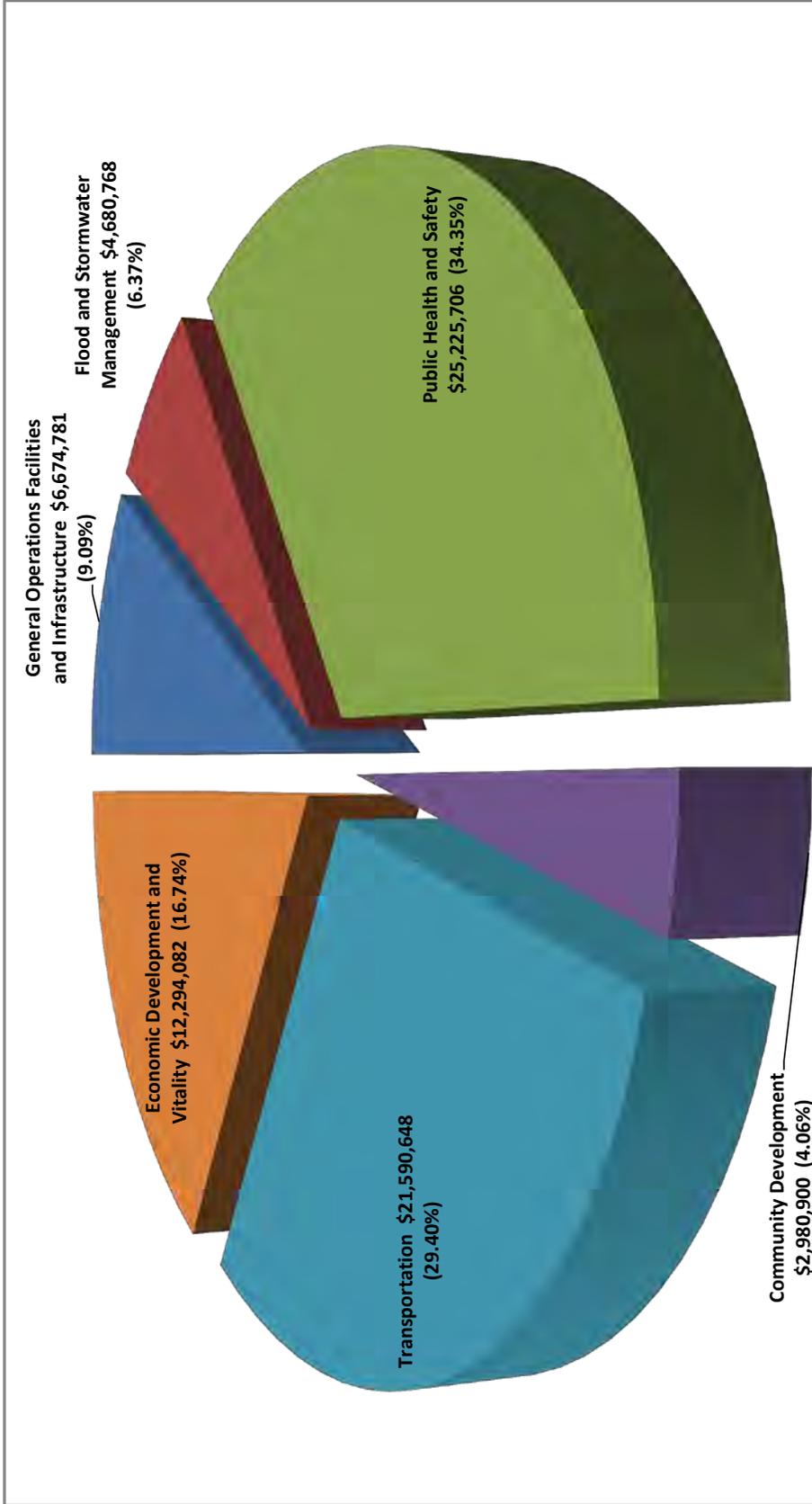
FY21/22	Current Revenues	City Bonds	Federal	State	Other	Total	% of program
General Fund	\$ 1,617,613	\$ 3,089,852	\$ 1,983,740	\$ 917,451	\$ 1,686,811	\$ 9,295,467	63.80%
Parking Fund	111,300				55,100	166,400	1.14%
Solid Waste Fund	72,000				75,000	147,000	1.01%
Sewer Fund	845,000				691,449	1,536,449	10.55%
Water Fund	1,135,400				961,354	2,096,754	14.39%
Equipment Fund	700,000				627,576	1,327,576	9.11%
TOTAL	\$ 4,481,313	\$ 3,089,852	\$ 1,983,740	\$ 917,451	\$ 4,097,290	\$ 14,569,646	
% of program	30.76%	21.21%	13.62%	6.30%	28.12%	100.00%	

FY22/23	Current Revenues	City Bonds	Federal	State	Other	Total	% of program
General Fund	\$ 1,911,220	\$ 2,001,632	\$ 830,574	\$ 46,143	\$ 655,000	\$ 5,444,569	38.41%
Parking Fund	60,000				98,200	158,200	1.12%
Solid Waste Fund	65,000				242,000	307,000	2.17%
Sewer Fund	1,015,700				591,542	1,607,242	11.34%
Water Fund	1,279,500	2,275,882			1,758,723	5,314,105	37.49%
Equipment Fund	734,178				607,746	1,341,924	9.47%
TOTAL	\$ 5,065,598	\$ 4,277,514	\$ 830,574	\$ 46,143	\$ 3,953,211	\$ 14,173,040	
% of program	35.74%	30.18%	5.86%	0.33%	27.89%	100.00%	

FY23/24	Current Revenues	City Bonds	Federal	State	Other	Total	% of program
General Fund	\$ 2,025,967	\$ 3,341,219	\$ 292,200	\$ 582,236	\$ 851,501	\$ 7,093,123	54.60%
Parking Fund	310,000				57,400	367,400	2.83%
Solid Waste Fund	65,000					65,000	0.50%
Sewer Fund	1,146,600				1,527,964	2,674,564	20.59%
Water Fund	1,004,800				582,231	1,587,031	12.22%
Equipment Fund	625,000				579,787	1,204,787	9.27%
TOTAL	\$ 5,177,367	\$ 3,341,219	\$ 292,200	\$ 582,236	\$ 3,598,883	\$ 12,991,905	
% of program	39.85%	25.72%	2.25%	4.48%	27.70%	100.00%	

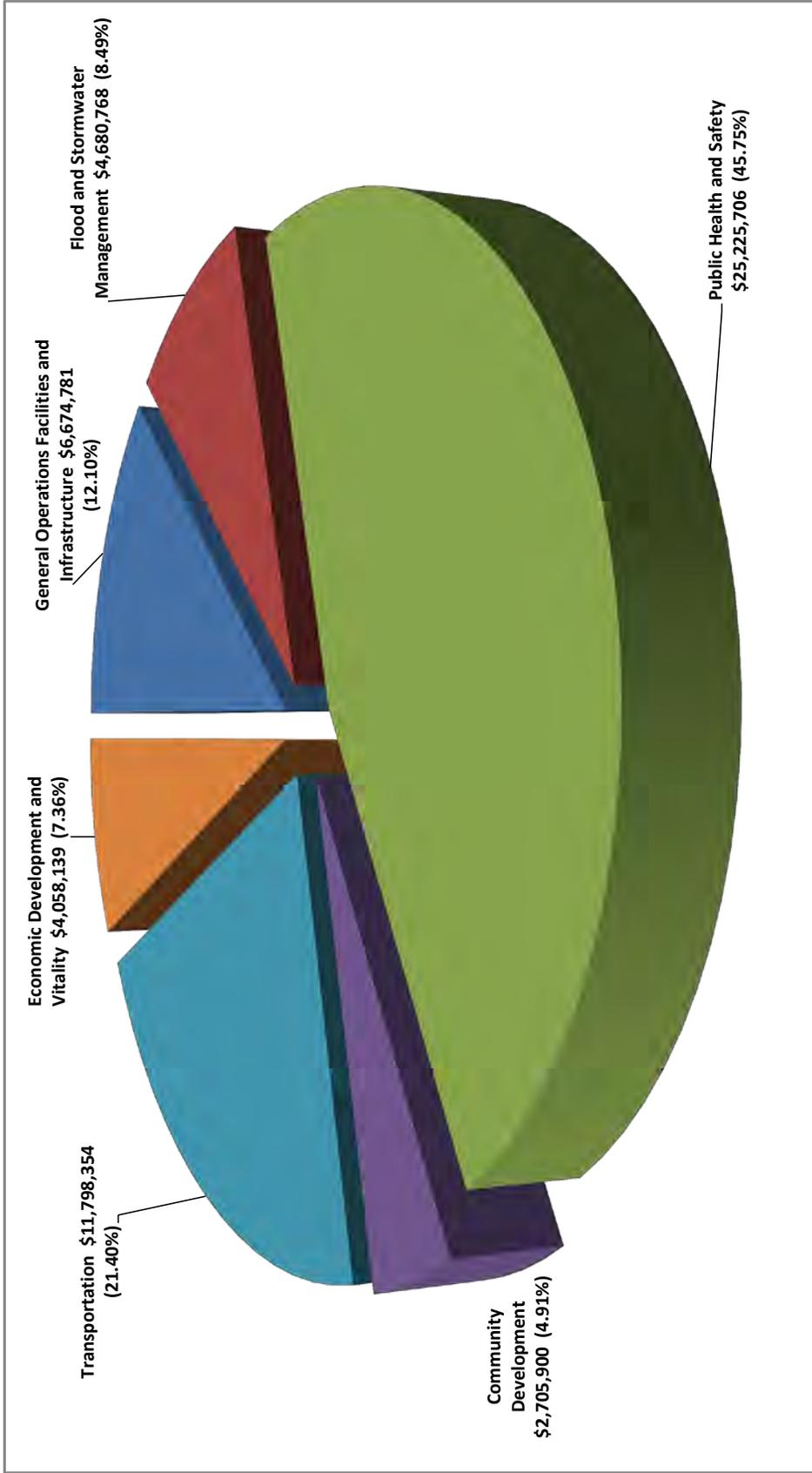
FY24/25	Current Revenues	City Bonds	Federal	State	Other	Total	% of program
General Fund	\$ 2,117,094	\$ 3,256,502	\$ -	\$ 4,909,114	\$ 1,829,396	\$ 12,112,106	61.62%
Parking Fund	123,000					123,000	0.63%
Solid Waste Fund	65,000				145,000	210,000	1.07%
Sewer Fund	1,121,782				898,993	2,020,775	10.28%
Water Fund	1,304,200	1,226,000			1,135,343	3,665,543	18.65%
Equipment Fund	625,000				899,767	1,524,767	7.76%
TOTAL	\$ 5,356,076	\$ 4,482,502	\$ -	\$ 4,909,114	\$ 4,908,499	\$ 19,656,191	
% of program	27.25%	22.80%	0.00%	24.97%	24.97%	100.00%	

FY 20-25 Proposed CIP: All Project Requests by Program (Total - \$73,446,885)



Does not include capital reserve appropriations totalling \$19,971,120.

FY 20-25 Proposed CIP: All Project Requests by Program - less grants, donations, and land sale (Total - \$55,143,648)



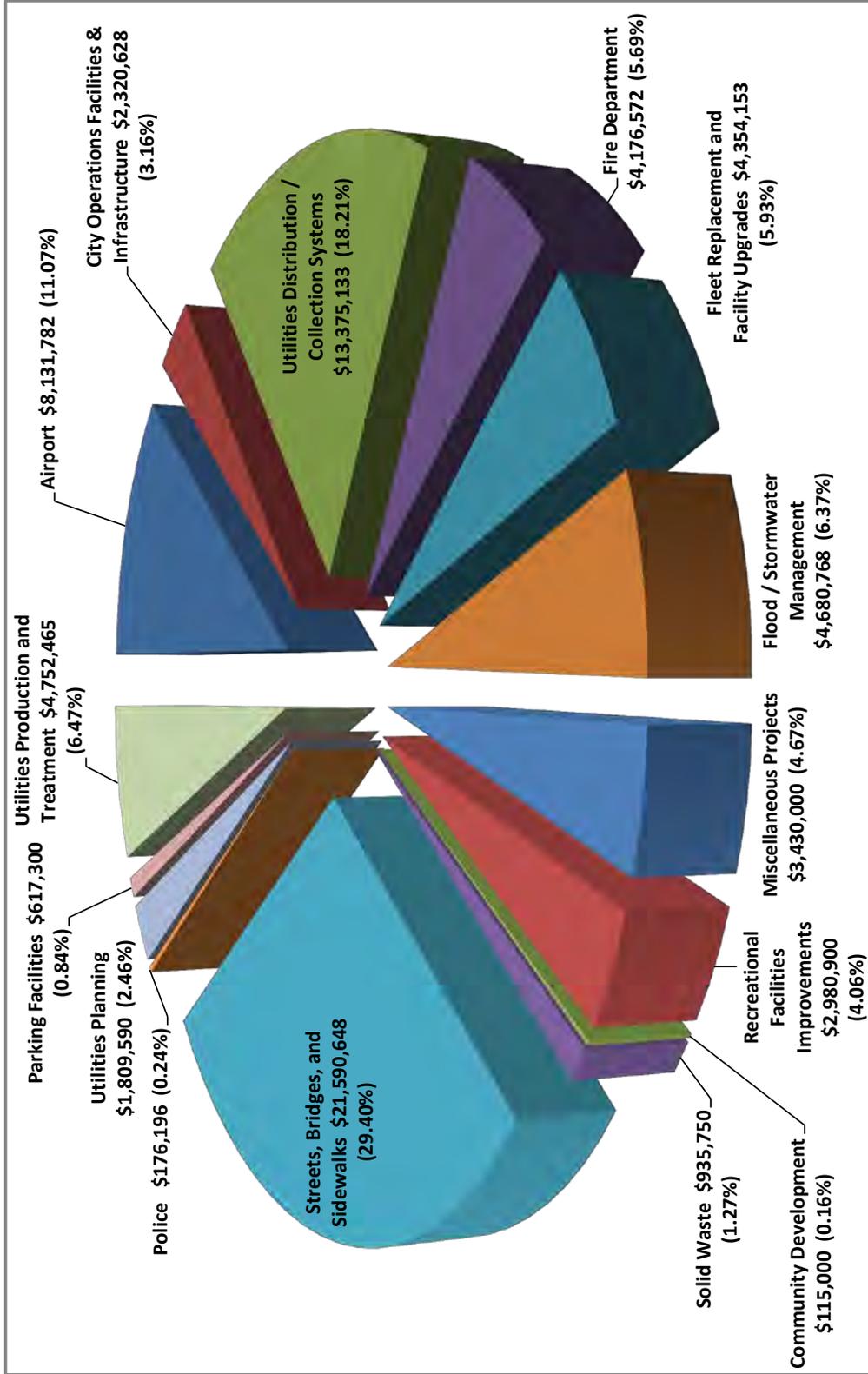
Does not include capital reserve appropriations totalling \$19,971,120.

This chart demonstrates the proposed allocation of locally generated funding (using current revenues) in the proposed CIP, including property taxes, rates, fees, and all other revenues and resources other than state and federal grants, donations, and the sale of 560 Main Street.

Grants, Donations, Sale of Property (not included in this presentation)

Airport Grants	\$7,235,943
Sale of 560 Main Street	\$1,000,000
Skate Park Capital Campaign	\$275,000
State By-Pass Grants	\$6,356,974
State Bridge Funding	\$3,435,320

FY 20-25 Proposed CIP: All Project Requests by Type Detailed Analysis (Total - \$73,446,885)



Does not include capital reserve appropriations totalling \$19,971,120

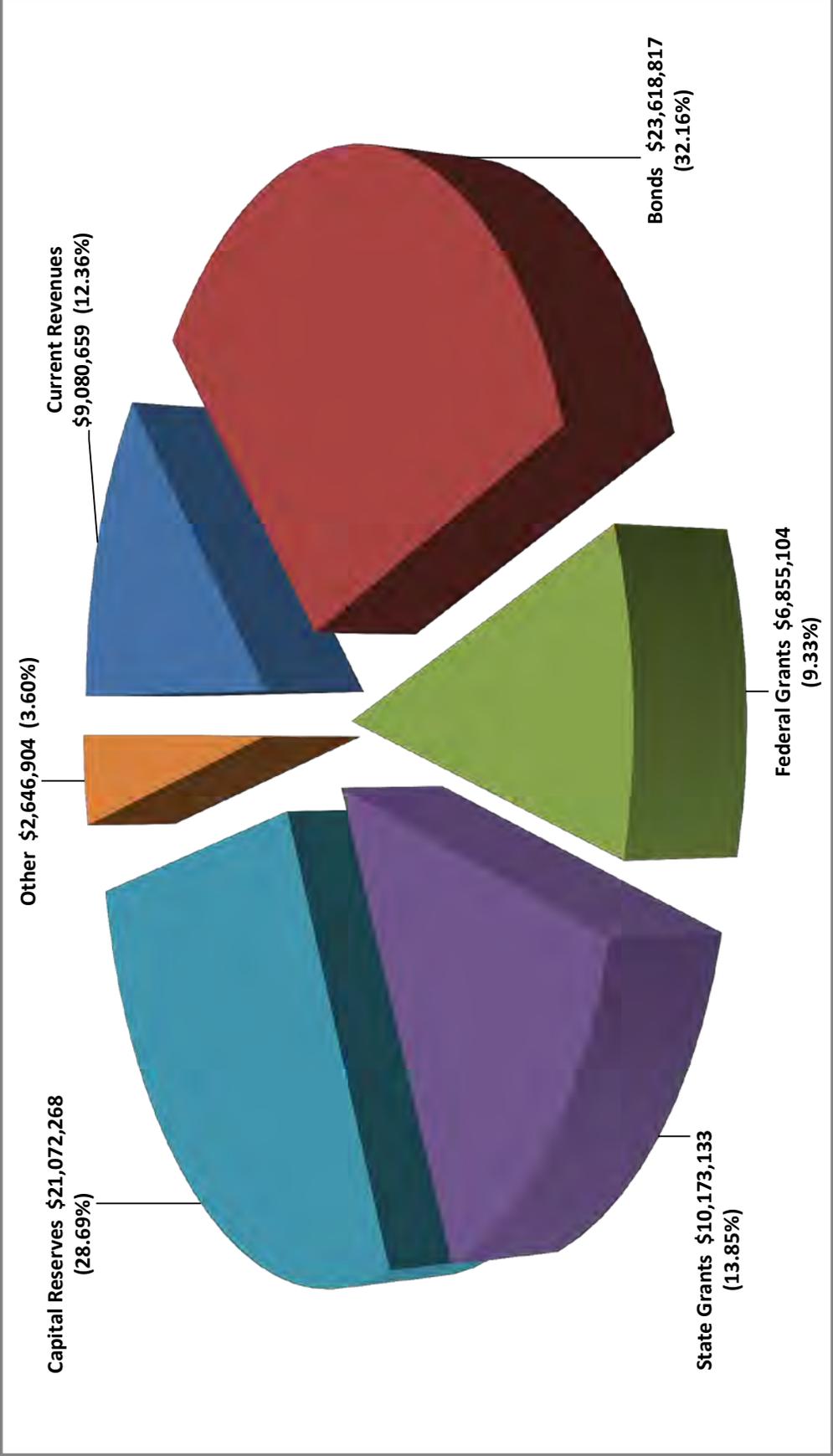
Miscellaneous Projects:

Downtown Revitalization	\$2,430,000
560 Main Street Assessment	\$1,000,000

Total

\$3,430,000

FY 20-25 Proposed CIP: All Project Funding Sources by Type (Total - \$73,446,885)



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 Sources of Funding Additional Detail

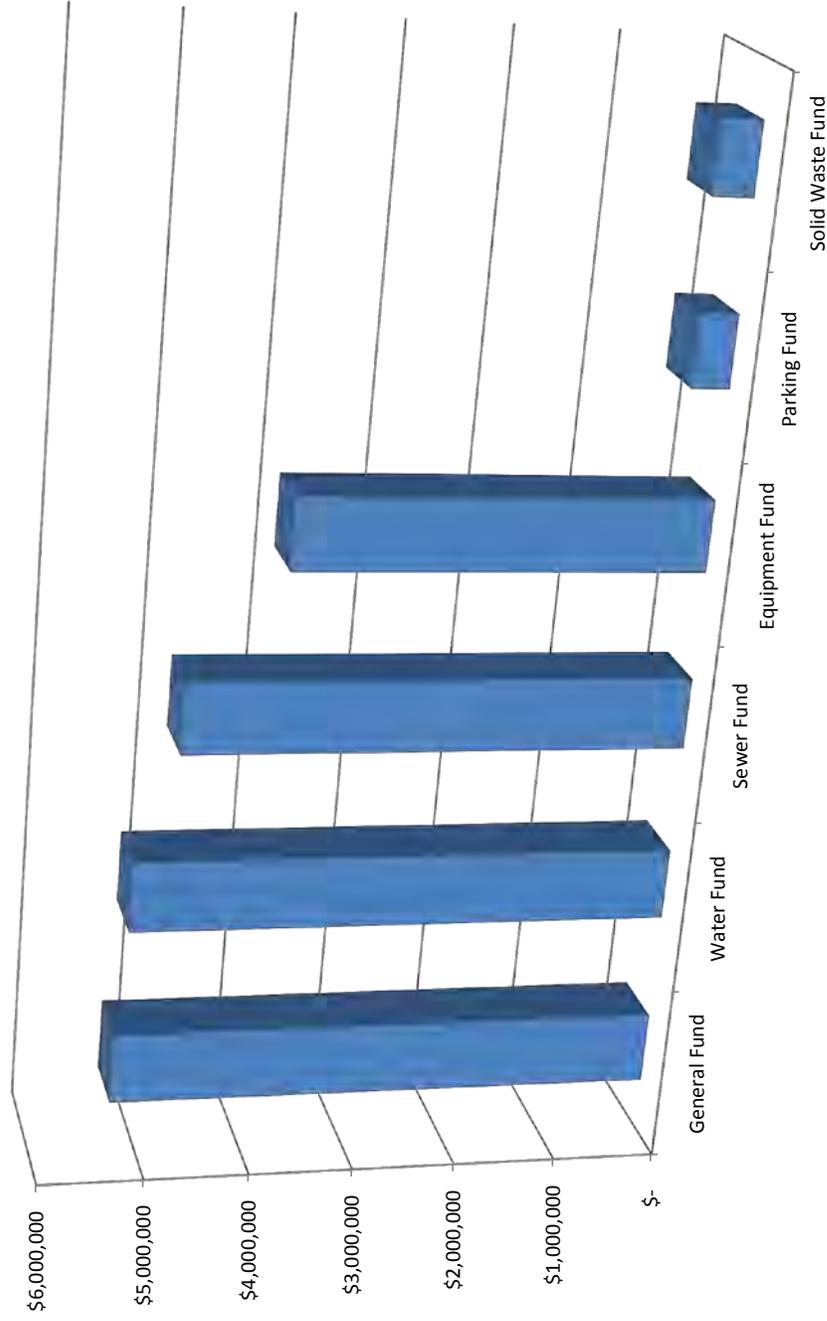
Other Sources of Funding

<u>Fund</u>	<u>Funded Project</u>	<u>Year</u>	<u>Amount</u>	<u>Funding Source</u>
General	560 Main Street Site Remediation	FY 20	1,000,000	Proceeds from Sale of 560 Main Street
General	Skate Park	FY 20	275,000	Donations (Capital Campaign)
General	Network Equipment Replacement	FY 20	6,000	PC Replacement Fund
General	Server Replacement	FY 20	27,000	PC Replacement Fund
General	Aerial Imagery Updates	FY 20	55,000	FY19 Carryover (If Available)
General	Voting Booths	FY 20	32,088	FY19 Carryover (If Available)
Water	Water Main Cleaning & Lining	FY 20	268,325	Use of Fund Balance (05063)
Water	Dam Improvements	FY 20	80,000	Reserve Appropriation Carried Forward (Babbidge Dam)
Sewer	Blower Replacement - FY 2014	FY 20	61,076	2014 Reserve Appropriation Carried Forward
Water	Water Main Cleaning & Lining	FY 22	175,000	Use of Fund Balance
Water	Water Main Cleaning & Lining	FY 25	300,000	Use of Fund Balance
			<u>2,279,489</u>	

Reappropriation of Project Balances

<u>Fund</u>	<u>Funded Project</u>	<u>Year</u>	<u>Amount</u>	<u>Funding Source</u>
General	Pavement Maint & Marking - Airport	FY 20	7,425	Pavement Maintenance (90170)
General	Drainage Spot Repairs - DPW	FY 20	65,478	Flood Control (90271)
General	Stormwater System Management	FY 20	41,200	Flood Control (90271)
Water	Water Supply Master Plan	FY 20	100,000	Water Supply Protection (05011)
General	Pavement Maint & Marking - Airport	FY 21	912	Pavement Maint (90170)
General	Stormwater System Management	FY 21	42,400	Flood Control (90271)
Sewer	WWTP Laboratory Renovation	FY 21	110,000	WWTP Phase 2 Solids Dewatering (08030)
			<u>367,415</u>	
	Total		2,646,904	

FY 20-25 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 \$19,971,120 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, \$21,072,268 of capital reserve funds are programmed in the proposed CIP to be spent on capital projects. The anticipated capital reserve balances across all funds is anticipated to be about \$5.4 million on June 30, 2025, at the conclusion of the CIP planning period.

Capital Reserves are funded completely by current revenue by fund, either user rates, property taxes, or other revenue generated during each fiscal year.

Major Infrastructure Projects Consolidated Across Funds and Program

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>Total</u>
<u>Downtown Revitalization</u>							
Sewer Main Improvements			506,708				506,708
Water Main Improvements			107,812				107,812
Drainage - Flood Management			577,300				577,300
Downtown Revitalization	180,000	100,000	500,000	550,000	550,000	550,000	2,430,000
Total Downtown Rehabilitation	180,000	100,000	1,691,820	550,000	550,000	550,000	3,621,820
<u>State By-Pass Projects</u>							
Sewer Bypass Utilities							-
Water Bypass Utilities							-
State Bypass Project	4,270,020		343,801		180,779	3,151,617	7,946,217
Total State Bypass Project	4,270,020	-	343,801	-	180,779	3,151,617	7,946,217
<u>Bridge Replacement*</u>							
Bridge Project		117,398	665,253		526,725	2,984,775	4,294,151
Water Main Improvements							-
Sewer Bridge Utilities							-
Water Bridge Utilities			47,300				47,300
Total Bridge Replacement	-	117,398	712,553	-	526,725	2,984,775	4,341,451
<u>Travel Surface Improvements</u>							
Road Rehabilitation	1,196,581	1,287,157	1,324,147	1,454,872	1,356,308	1,366,204	7,985,269
Granite Curbs	65,478	68,752	70,815	72,939	75,128	77,382	430,494
Sidewalk Repair	65,478	68,752	70,815	72,939	75,128	77,381	430,493
Total Travel Surface Imp.	1,327,537	1,424,661	1,465,777	1,600,750	1,506,564	1,520,967	8,846,256

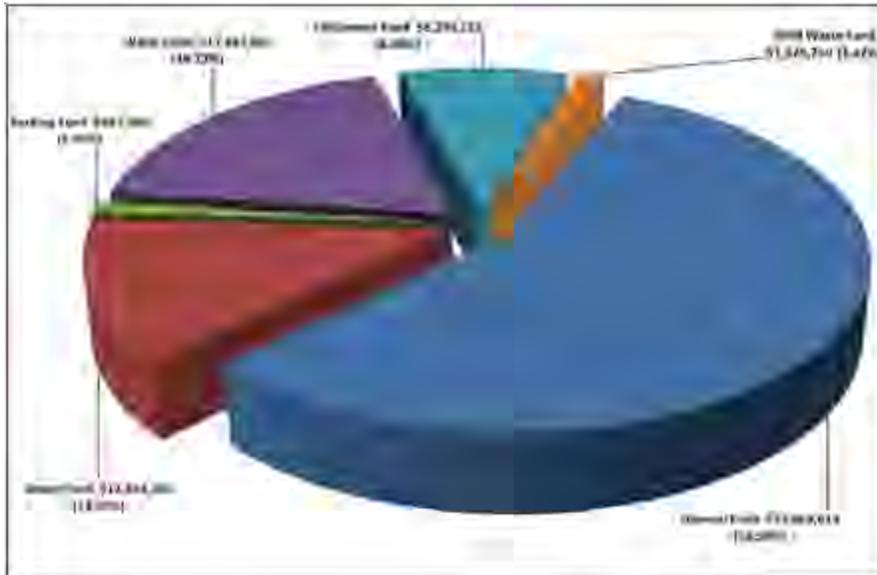
* FY 2021 & 2022 - George Street Bridge over Beaver Brook

* FY 2024 & 2025 - Lower Winchester Street over Ash Swamp Brook

FY 2020-2025 CIP – Fund Basis Financial Discussion and Summary

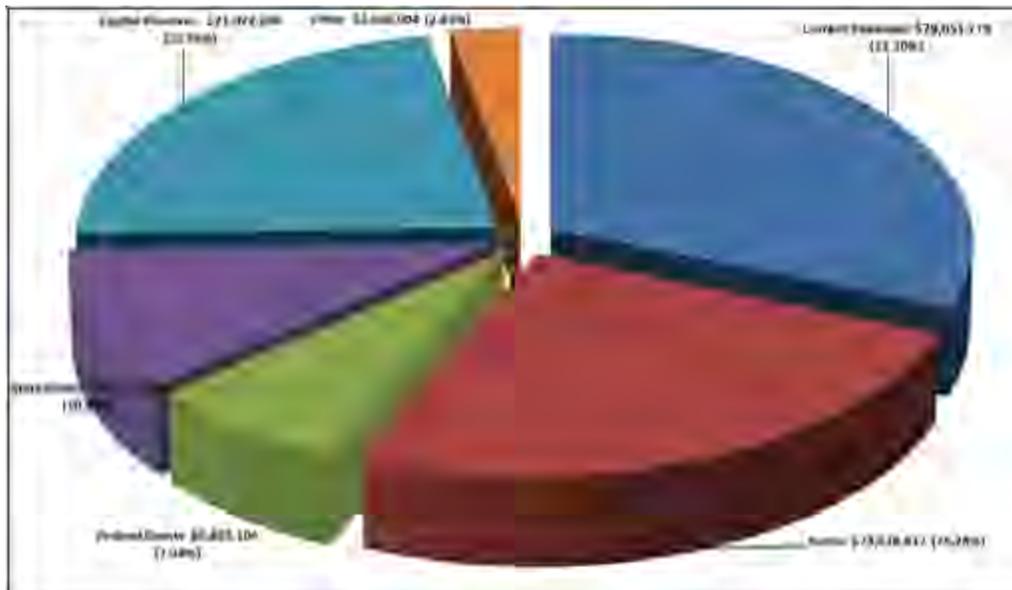
The following chart presents total requested appropriations (\$93.418 million, including appropriations into capital reserves) by fund for the program. About 88.65% of the six year program is directed towards activities in the General Fund and Water and Sewer Utility Funds. This represents a .81% increase from the FY 2019-2024 CIP figure of 87.84%.

Capital Improvements Program By Fund



The following graph summarizes proposed funding sources for the proposed CIP. Three major revenue types fund 81.77% of the CIP. These are current revenues (property taxes, other General Fund revenues, various fees and charges, utility rates), bonding, and capital reserves and other (donations, grants, and project balances). In the FY 2019-2024 CIP, that figure was 82.28%.

Capital Improvements Program By Funding Source



Current revenues include property taxes, water and sewer utility charges, motor vehicle registration fees, ambulance fees, parking fees and fines, rents, program fees, and all other fees and charges generated by the City in the ordinary course of business. Current revenues also include intergovernmental revenues such as inter-municipal agreements and state shared revenues. Current revenues are typically recurring revenues generated / raised / received by the City every year. Current revenues do not include the use of capital reserves (current revenues were allocated and put aside in prior years), donations, grants, and one time sales of property or other nonrecurring events.

State and Federal grant funding, as a proportion of proposed CIP funding has increased by 40.63%. The increase largely represents proposed FAA grant funded Airport projects and State By-Pass road projects. Two major projects (Taxiway A Relocation and State By-Pass) totaling \$5,886,016 in State and Federal grants are scheduled for FY 2020. Grant funding for these two projects represents 34.57% of all grant funding included in the FY 2020-2025 CIP.

The FY 2020-2025 proposed CIP invests \$93.4 million in City infrastructure and equipment over next six years. The proposed CIP is approximately \$6.05 million or 6.92% larger than the FY 2019-2024 CIP.

NEW PROJECTS

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

- a. Airport Easement Acquisition – utilizes federal and state funding for easement acquisition so that the airport can continue to meet its safety obligations for the management of obstructions. FY22 \$300,000 FAA partially funded.
- b. Airport Fuel Tank Removal & Replacement – Remove 2 - 20 plus year old underground fuel storage tanks and replace with above ground tanks. FY21 \$515,000.
- c. Aerial Imagery Update (5 & 10 Year) – Aerial imagery update of buildings, decks, pools and driveways. Last digital base map and aerial photography update gap was close to 15 years ago. FY20 \$55,000.
- d. City Hall Rear Wall – Review and recommendation for resolving the issue of the abandoned channel of the Old Town Brook that runs beneath the building causing a crack in the rear wall. FY20 \$175,000.
- e. Municipal Building Roofs – Roofs on many municipal buildings will reach the end of their useful life cycles and need replacement. FY23 \$450,475, FY24 \$91,620, and FY25 \$86,945.
- f. Welcome Center – Reopen and renovation the existing transportation center to establish a downtown facility for public use. FY20 \$134,000.
- g. Ashuelot River Dam Repair or Removal – Repair or removal of the dam to address issues outlined in a 2009 letter of deficiency from the NH Department of Environmental Service. FY24 \$87,400 and FY25 \$495,300.
- h. Campground Repurposed – Removing out of date and decaying facilities and obsolete utilities and create an area to support 'RV style' camping. FY21 \$40,000.

- i. Open Space Trails – Ongoing project for the rehabilitation and maintenance across current trail networks.
- j. Robin Hood Dam Repairs – Repair the dam to comply with NH dam safety regulations. FY24 \$83,200.

PROJECT DISCUSSION BY FUND

The charts indicate that the General Fund and Water and Sewer Funds fund nearly 89% of the proposed six year CIP. With that in mind, what follows is a discussion regarding these 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 \$52,868,614 or 56.59% of the proposed CIP. The General Fund is the City fund funded primarily by property taxes (approximately 59% in FY 2018-2019).

FY 2020 - 2025 General Fund Proposed CIP By Program

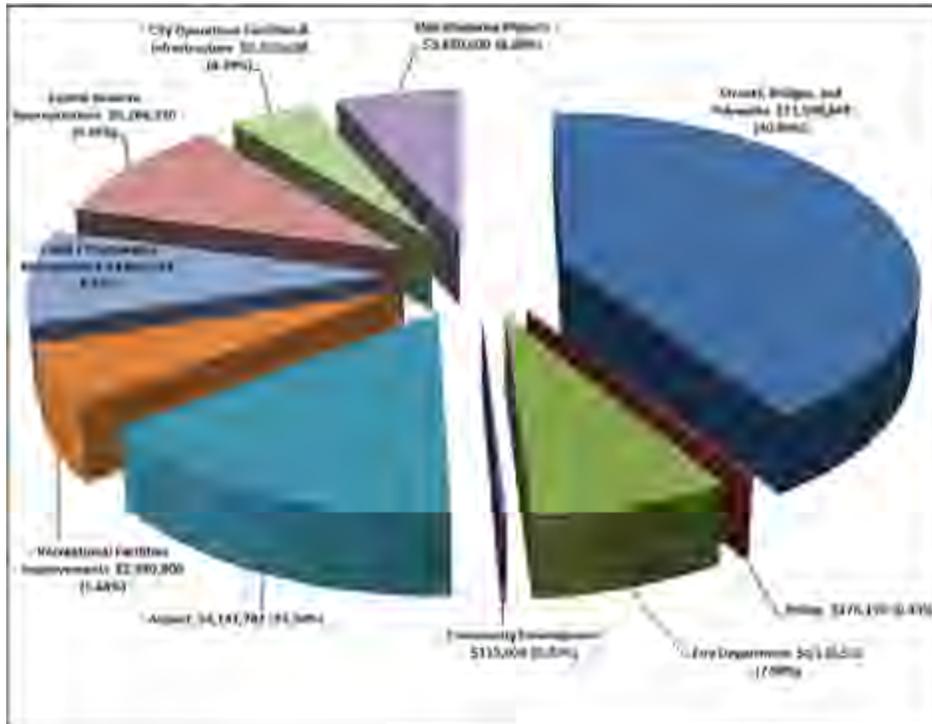
Transportation projects (streets, bridges and sidewalks) comprise 40.84% of proposed projects, up slightly from 40.35% in the FY 2019-2024 CIP.

Flood and Stormwater Management projects total 8.85% of the proposed General Fund CIP, down from 10.6% in the prior CIP.

Airport Improvement Projects make up about 15% of the proposed General Fund CIP. These three programs combined account for about 65% of the proposed capital program.

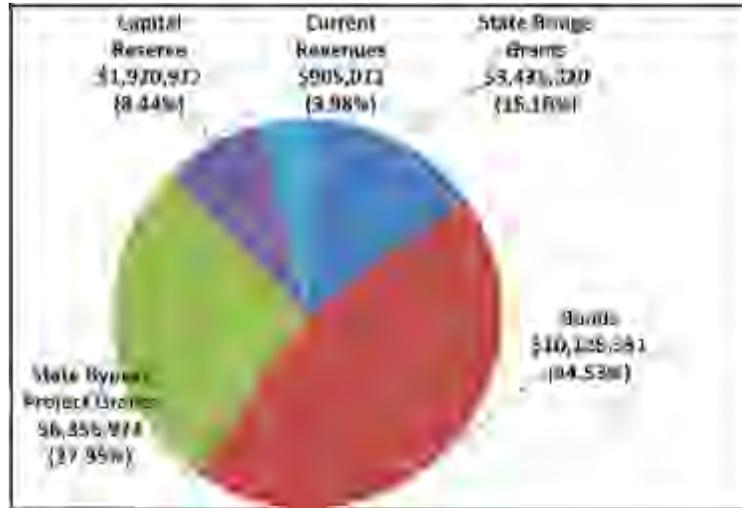
The following chart summarizes the level of proposed spending on various activities and programs in the General Fund proposed CIP.

FY 2020-2025 General Fund Proposed CIP by Program

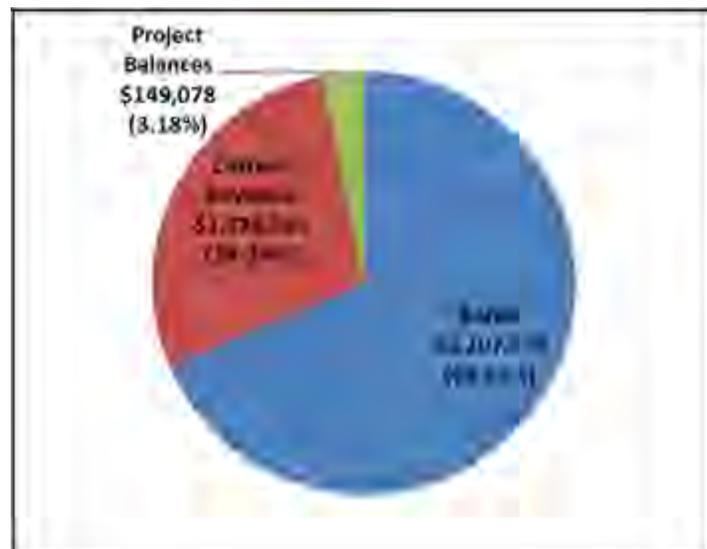


Streets, Bridges and Sidewalks - included projects include the \$8.085m Road Rehabilitation project which is directed at resurfacing and maintaining roads, along with \$860,987 for granite curbing and sidewalk repair. Included in this group of projects is the upper and lower Winchester Street state by-pass projects with proposed funding in the amount of \$7,946,217, including about \$6.36m in state grant funding. Replacement of the bridge over Ash Swamp Brook in the amount of \$3.5m, with \$3.4m in state grant funding, is scheduled for FY25 and will be incorporated into the Lower Winchester Street Corridor of the state by-pass project.

The following graph highlights the funding profile of the Transportation Projects section of the proposed General Fund CIP:



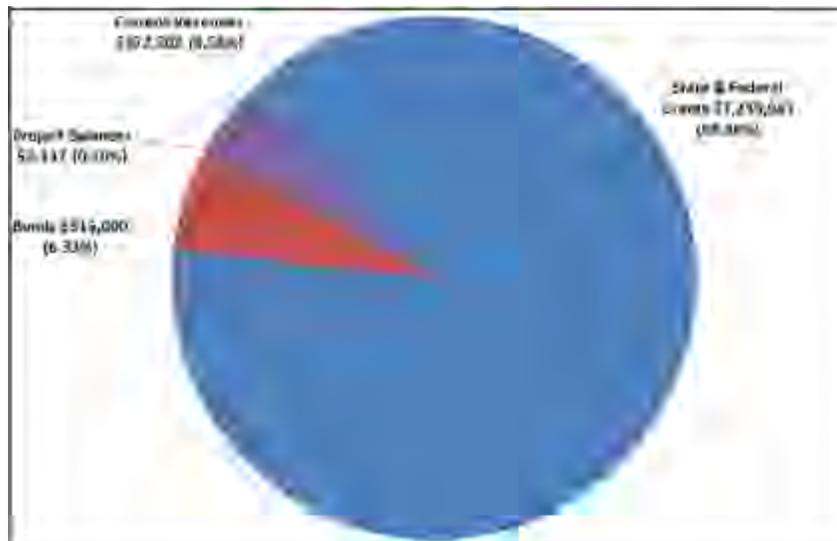
Flood and Stormwater Management The FY 2018 budget included funding for the Climate Adaptation Vulnerability Assessment and Beaver Brook Hydrologic and Hydraulic Study. Funding to begin work on the Beaver Brook Flood Mitigation project is scheduled in FY 2024 and FY 2025 totaling \$1.0m. Funding for ongoing flood management projects totaling \$2.2m is scheduled to begin in FY 2020 as well as a series of ongoing drainage system capital planning, maintenance, and repair projects. Major drain system capacity expansion projects are planned for Roxbury Street, Church Street, Central Square, Main Street, and Probate Street. Projects are funded as follows:



Fire Department CIP requests make up about 7.9% of the total program (up from 7.1% in the FY 19-24 CIP), with requested funding of about \$4.177,000 (*not including capital reserve appropriations*) mainly for the purchase of 2 ambulances, fire apparatus, and self contained breathing apparatus.

Airport Development projects make up 16.06% of the proposed General Fund CIP. All but one of the project requests included in the CIP (totalling \$8,131,782) have been approved for FAA and State Aeronautical Program funding which will cover 95% of the project costs. One new project added in the FY 2020-2025 CIP is the removal and replacement of the fuel tanks totaling \$515,000 in FY 2021 which does not qualify for FAA and State Aeronautical Program funding.

The following table highlights the funding profile of the proposed airport development projects:



Capital Reserve Appropriations the proposed CIP includes capital reserve appropriation requests totalling \$5,266,120 representing about 10% of the program.

Capital reserve funds included in the General Fund CIP presentation include the Ambulance Capital Reserve, Fire Apparatus Capital Reserve, Downtown Infrastructure Capital Reserve, Transportation Improvements Capital Reserve, and Bridge Capital Reserve.

Over the term of the proposed CIP, \$5,848,792 in capital reserve funds will be utilized for the purchase of equipment replacement and infrastructure improvements, including ambulance and fire apparatus replacement, replacement of the Church Street Bridge, rehabilitation of the downtown core area, and a variety of transportation related infrastructure improvements. These are detailed in the Capital Reserve Detail section of this document.

Capital reserves are used to level out the property tax impact of capital activity such as equipment replacement, emergency repairs, or even larger infrastructure projects. 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.

Parks and Recreation Department requests include a major project to renovate Patricia T. Russell Park, build a skate park, and ongoing maintenance of the trails network beginning in FY 2021.

Total Parks and Recreation CIP requests total \$2,980,900 or 5.64% of the General Fund CIP proposal over six years.

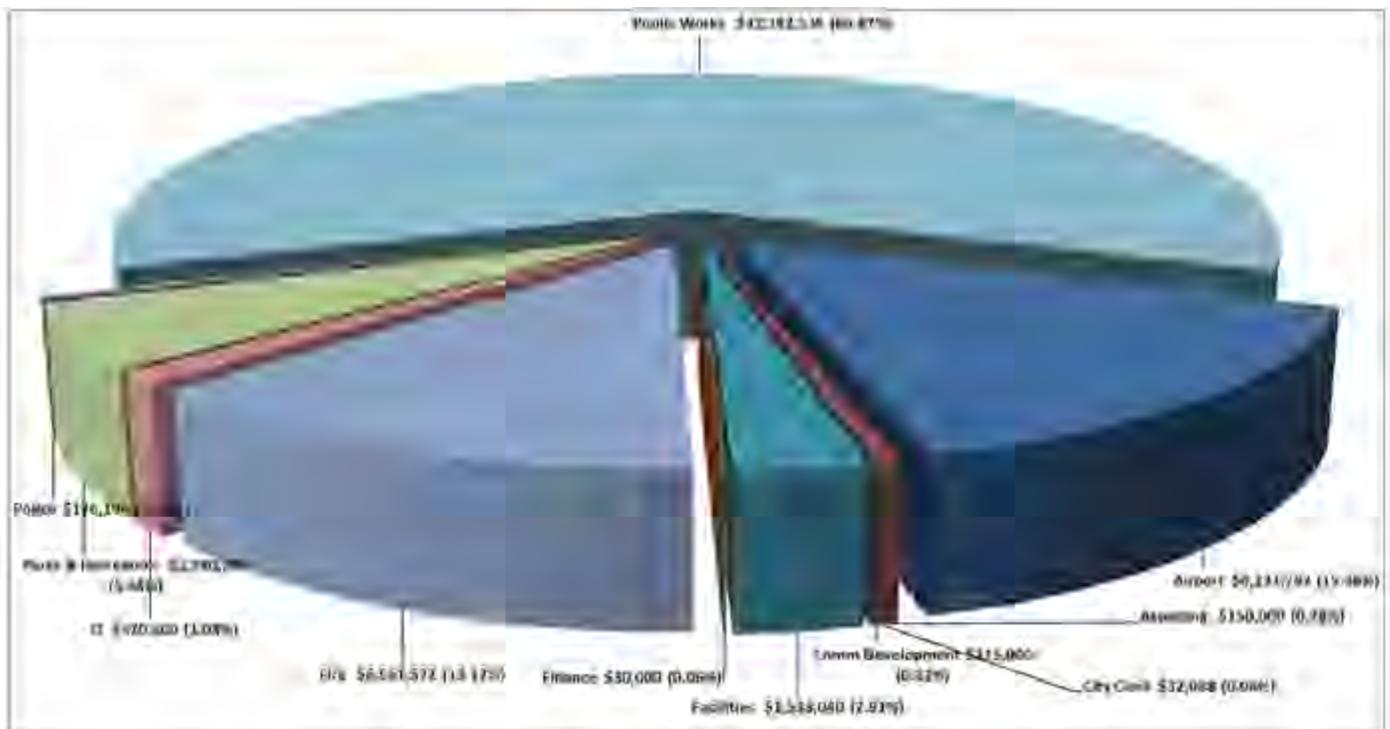
Miscellaneous Projects totalling \$3,430,000 are comprised of the 560 Main Street Landfill Remediation and the Downtown Revitalization projects. The 560 Main Street project is expected to be funded through the sale of the property.

The balance of the General Fund proposed CIP includes project requests for ongoing municipal facility, communications, and technology systems, as well as smaller projects for community planning, financial management, and the replacement of voting booths.

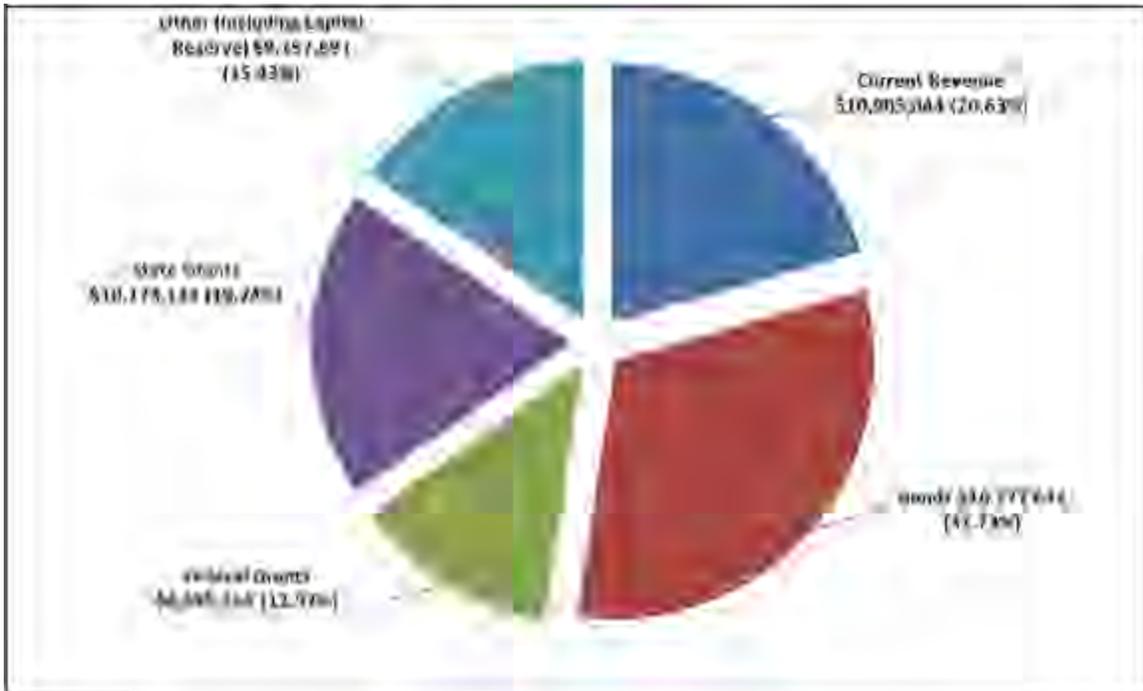
Additional General Fund Information

The following graphs highlight CIP project requests by department, and proposed funding sources:

General Fund Capital Improvements Program By Department



General Fund Capital Improvements Program Funding By Source



State and Federal grants totalling \$17,028,237, or 32.29% of total General Fund CIP funding will be used for airport projects, the state by-pass projects, and a bridge replacement project.

WATER AND SEWER FUNDS

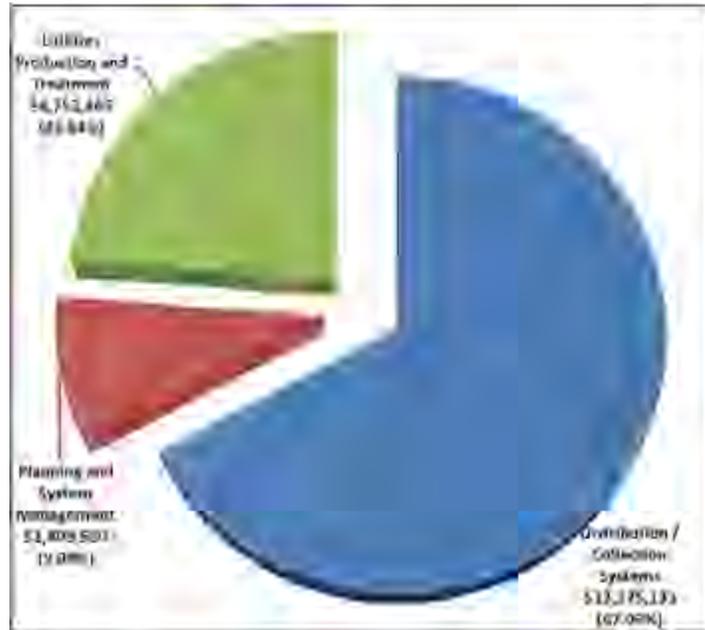
The Water and Sewer Funds combined CIP request totals approximately \$29,942,188 (32.05% of the proposed CIP). Of that, \$10,005,000, or 33.41% consists of appropriations to capital reserves. During the life of the proposed CIP, \$9,197,105 will be withdrawn from capital reserves to fund projects included in the proposed CIP.

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, and as noted in the General Fund discussion, 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.

The balance of the Water and Sewer combined CIP (\$19,937,188) funds system improvements and equipment replacement as outlined in the proposed FY 2020-2025.

The following graphs 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.

Proposed Water and Sewer Projects FY 2020 to 2025 by Program



Project Highlights By Activity and Fund

Water and Sewer Distribution and Collection Systems

Water and Sewer distribution and collection systems are a network of dams, reservoirs, wells, water tanks, pump and booster stations, and water and sewer mains (pipes) and related infrastructure. In the case of sewer, these systems collect and transport wastewater from throughout the City to the Wastewater Treatment Plant for treatment and disposal in a safe and environmentally healthy manner. In the case of water, these systems collect and transport water to the Water Treatment Facility (WTF) for treatment, and then transport clean and healthy drinking water throughout the City for use in homes and businesses.

Over six years, the combined project requests for the upgrades and maintenance of these systems totals \$13,375,133, with approximately \$6.31m requested for sewer system projects, and \$7.06m for water system projects.

A. Sewer System highlights

1. Sewer Main replacement, repair, and lining – the six year request for projects of this type total \$5.66m.
2. Martell Court Roof Replacement – Removal of old roof and replacement with a rubber membrane roof is scheduled for FY 2023 at a cost of \$32,714.
3. Martell Court Pump Station Upgrade Phase 2 – replacement of the transformer and emergency backup generator in FY 2021 at a cost of \$130,810.
4. Sewer manhole Lining – lining failing manholes currently lined with brick at a cost of \$487,100.

B. Water System highlights

1. Water Main replacement, repair and lining – the six year request for projects of this nature total \$4.255m.
2. Water valve replacement – water valves provide the ability to stop or redirect water flows in the water distribution system. The requested six year funding is \$602,700.
3. Woodward Dam Improvements – reservoir dam rehabilitation to address deficiencies identified by NH Department of Environmental Services is schedule for FY 2020 with a cost of \$1,797,030.
4. System Upgrades - requested funding of \$408,134 for repairs and upgrades to booster stations, emergency generators, Chapman Road, and Black Brook water tanks.

Water and Sewer Production and Treatment Systems

Water production and treatment facilities include the Water Treatment Facility where water is treated for distribution to the public, and the nearby 1.5 and 3 million gallon (mg) water tanks. The sewer production and treatment facilities include the Wastewater Treatment Plant and related infrastructure and equipment, where wastewater is treated to remove bacteria, metals, and other pollutants providing for environmentally safe discharge into the Ashuelot River.

Over the life of the FY 2020-2025 CIP, these improvements total \$4,752,465, with \$1,321,887 requested for Wastewater Treatment Plant improvements, and \$3,430,578 for improvements to the Water Treatment Facility and water tanks.

A. Sewer System highlights

1. Facilities Upgrade and Equipment Replacement - blowers, emergency generator, and SCADA radio - \$1,285,995.
2. HVAC ductwork insulation replacement at the Wastewater Treatment Plant - \$35,892

B. Water System highlights

1. Water Tank replacement or repair - \$2,709,590
2. Filter Media replacement - \$610,088
3. Facilities and Equipment upgrades - pressure reduction valve, paving, and instrumentation - \$110,900.

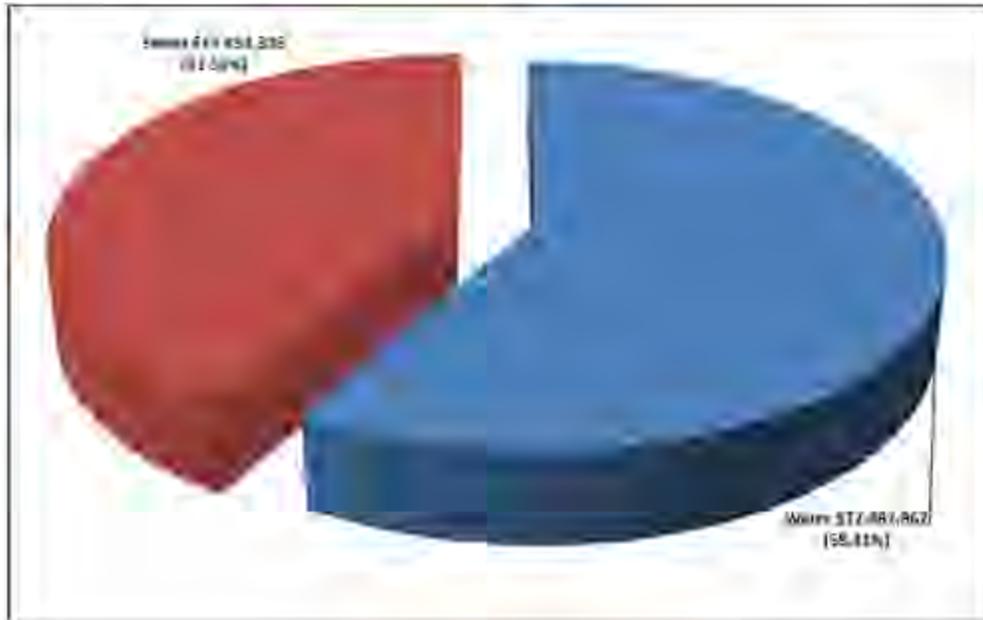
Water and Sewer Planning and System Management

Two planning projects are requested in the FY 2020-2025 CIP. The first project, with a requested budget of \$1,709,590 will evaluate the productivity and condition of the current well fields supplying water to the City's residents and funds the design and rehabilitated or construction of a new well supply.

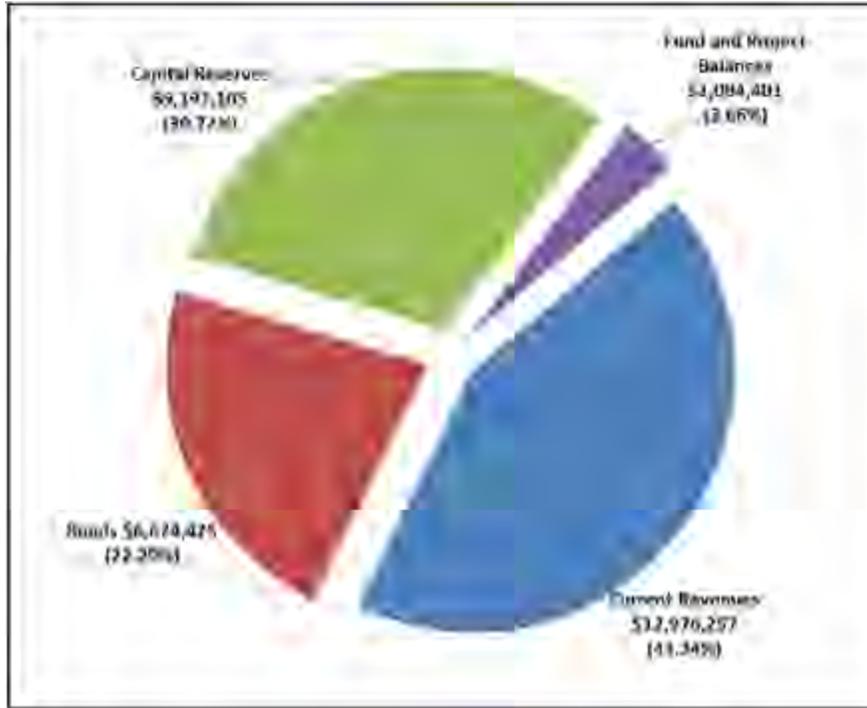
The second project is the Water Supply Master Plan, which will update a 25 year old plan guiding the management of the water system totaling \$100,000.

Allocation of Water and Sewer CIP Funding Requests

The following graph provides information on the proposed funding of the Water and Sewer Funds FY 2020-2025 CIP:



Proposed Funding – FY 2020-2025 Water and Sewer Funds CIP



OTHER FUNDS

Equipment Fund activity represents 8.88% of the program, and its' purpose is to fund the replacement of worn out vehicles and accessories (police cars, dump trucks, sidewalk plows, staff vehicles, etc.). The proposed CIP includes a project to reroof the shop building. Funding for the Equipment Fund is predominantly derived from user fees charged to other departments.

The Parking Fund and Solid Waste Funds represent 1.06% of the proposed CIP. Projects in these funds relate primarily to maintenance and improvement of facilities and the replacement of Parking and Solid waste infrastructure and equipment.

Discussion - Projected Impact on Property Taxes and User Fees

In addition to identifying capital projects needed to maintain or advance the community, determining the appropriate project scope and estimated project capital and operating costs, and identifying a method of paying for the project, the impact of the proposed CIP on property tax, and fee and rate payers are estimated and included in the CIP.

Each of the major funds has a primary funding source:

<u>Fund</u>	<u>Primary Revenue</u>	<u>Fund</u>	<u>Primary Revenue</u>
General Fund	Property Tax	Parking Fund	Meter Fees / Reserved Space Rents
Water Fund	Water User Fees	Solid Waste Fund	Landfill Tip Fee
Sewer Fund	Sewer User Fees	Equipment Fund	Fleet Rental Rates - internal charges

In order to project the impact of the proposed CIP on the budgets of future years, the annual direct costs of the proposed CIP are added to existing debt service obligations, and projections of operating costs such as payroll, utilities, supplies, and so on.

The current CIP includes operating budget projection factors ranging from 1.3% to 2.5%, depending on fund and department. Operating budget projection assumptions based upon historical trends, new information, Council and management initiatives, and results of operations.

Current non-primary revenue projection assumptions range from an annual growth rate of 0% to 1.8% based upon historical trends, new information, Council and management initiatives, and results of operations. These revenues are also projected over the life of the CIP, and form part of the funding picture in future years.

The primary revenue funding source for each fund typically funds the difference between expenditure need, and the amount of revenue projected to be generated by other revenues in each fund. 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 2019.

Projections are made for each fund (General Fund, Water Fund, Sewer Fund, Parking Fund, Solid Waste Fund, and Equipment Fund) for each of the six years included in the CIP, and include adjustments to property taxes, utility rates, and fees, which are detailed in the following table. In the General, Water, Sewer, and Equipment Funds, the primary revenue source is reviewed and adjusted each year in the context of the adopted capital and operations budgets.

The primary revenues source for the General, Water, Sewer, and Equipment Funds are reviewed and adjusted each year in the context of the capital and operating budgets adopted by the City Council. The Parking Fund primary revenue requirements are also reviewed each year in the context of the capital and operations budgets, and when necessary, revenue adjustments are brought to the City Council for review and adoption.

The following table details all property tax and utility rate increases included in the proposed FY 2020 – FY 2025 CIP that would be needed to balance annual General Fund, Water Fund, and Sewer Fund budgets based upon operating budget projections, current revenue requirements of the proposed CIP, and debt service on all existing debt and new debt proposed in the CIP.

Increases in Parking Fund revenue needed to balance annual budgets as projected in the proposed CIP are also included in the table. January 2019 rate and fee increases have been calculated into the revenue projections as well as future rate increases as anticipated in the previous FY 2019-2024 CIP.

In the Fleet Fund, annual increases of 3.5% in internal charges from FY 2020 through FY 2022 are anticipated, followed by 2% increases in FY 2023 and FY 2025.

A discussion of Solid Waste tip fees follows the table.

Revenue Assumptions FY 2020-2025 CIP						
	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
General Fund - Property Taxes						
Dollar change	579,262	1,175,277	730,154	794,060	1,103,659	964,976
Percent change	2.30%	4.56%	2.71%	2.87%	3.88%	3.26%
	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
Water and Sewer - Combined Utility Bill (full year)						
Dollar change	30.24	50.48	-	23.76	29.72	(13.76)
Percent change	2.14%	3.50%	0.00%	1.59%	1.96%	-0.89%
<i>Residential user, 27 hundred cubic feet consumption / quarter</i>						
	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
Parking Fund						
<i>Downtown meter / hr</i>	\$ 0.85		\$ 0.89		\$ 0.94	\$ -
Dollar change	\$ 0.10		\$ 0.04		\$ 0.05	\$ -
Percent change	13.33%		5.00%		5.00%	
<i>Surface lot meter / hr</i>	\$ 0.35		\$ 0.37		\$ 0.39	\$ -
Dollar change	\$ 0.05		\$ 0.02		\$ 0.02	\$ -
Percent change	16.67%		5.00%		5.00%	
<i>Surface lot / quarter</i>	\$ 145.00		\$ 152.25		\$ 159.86	\$ -
Dollar change	\$ 15.00		\$ 7.61		\$ 7.99	\$ -
Percent change	11.54%		5.00%		5.00%	
<i>Covered lot / quarter</i>	\$ 200.00		\$ 210.00		\$ 220.50	\$ -
Dollar change	\$ 45.00		\$ 10.50		\$ 11.03	\$ -
Percent change	29.03%		5.00%		5.00%	
<i>FY 2020 reflects actual rate changes effective 1/1/2019. The reflected rate changes in FY 2022 and FY 2024 are not proposed rates, but are presented to provide a sense of the magnitude and timing of rate changes as reflected in projected revenues and operating results.</i>						
	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
Equipment Fund - Internal Service Charges						
Dollar change	82,499	87,238	89,627	53,532	54,590	56,973
Percent change	3.50%	3.50%	3.50%	2.00%	2.00%	2.00%
	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
Solid Waste Fund - Tip Fee per ton						
Dollar change	1	1	1	1	1	1
Percent change in tip fee	0.81%	0.80%	0.79%	0.79%	0.78%	0.78%
<i>The amount of waste received at the transfer station is expected to decrease over the next several years. This is due to decreased contractual tonnage from outside Keene delivered by Waste Management and market pressure from other private transfer stations capturing larger market share.</i>						

In the Solid Waste Fund, under Chapter 78, Section 5, tipping fees (the primary revenue) have been established by the Public Works Director administratively.

Sec. 78-5. - Tipping fees; permit fees.

Tipping fees will be set by the operator. Waste that requires a tipping fee and the applicable fee will be determined by the operator on a yearly basis and will be effective beginning July 1 of each year. Tipping fees must be paid at the time of disposal unless prior agreement has been made upon such terms and conditions established by the public works director. Permit fees for private contractors will be set by the public works director beginning July 1 of each year. Permit fees shall be paid within 30 days of invoice. Permit fees shall not be prorated. (Ord. No. O-2010-13, 7-1-2010)

The recent history of the tip fees is as follows:

1999-2000	\$98/ton for MSW & C & D
2001-2004	\$117/ton for MSW & C & D (Waste Management ran the City's Transfer Station during this time)
2004-2007	\$90/ton for MSW & C & D (Waste Management brought no waste to City-used Peterborough Transfer Station)
2007-2010	\$110/ton for MSW, \$115/ton for C & D (Waste Management contracted to transport and dispose of MSW & C & D)
2010-2016	\$120/ton for MSW, \$125/ton for C & D (Waste Management contracted to transport and dispose of MSW & C & D)
2016-2017	\$121/ ton for MSW, \$126/ton for C & D (Waste Management contracted to transport and dispose of MSW & C & D)
2017-2018	\$124/ ton for MSW, \$129/ton for C & D (Waste Management contracted to transport and dispose of MSW & C & D)
2018-to present	\$126/ ton for MSW, \$131/ton for C & D (Waste Management contracted to transport and dispose of MSW & C & D)

Recent and ongoing changes in the solid waste market / industry regionally and nationally are leading to an understanding that our current business model is becoming less sustainable in the long term. City staff will be reviewing and analyzing alternatives and / or adjustments to the current business model to establish a sustainable solid waste handling and disposal operation.

Discussion - Projected Impact on Outstanding Debt

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 cost is viewed favorably when the City goes to market.

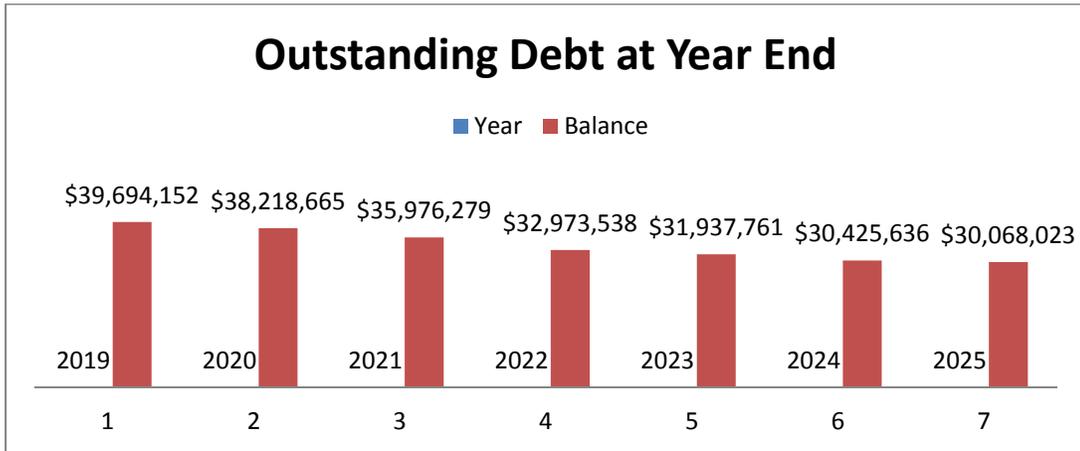
The following two tables illustrate the impact of the proposed CIP on outstanding debt:

Sewer Fund	9,905,256	4,175,643	(5,729,613)	-57.84%
Water Fund	1,273,568	4,070,712	2,797,144	219.63%
Solid Waste Fund	400,500	277,283	(123,217)	-30.77%
Parking Fund	2,665,000	795,000	(1,870,000)	-70.17%
Totals	39,694,152	30,425,636	(9,268,516)	-23.35%
	New Debt		Debt Service*	Net Change
	<u>FY 2020-2025</u>		<u>FY 2020-2025</u>	<u>in Outstanding Debt</u>
General Fund	16,777,642		(21,138,008)	(4,360,366)
Sewer Fund	1,455,513		(8,305,440)	(6,849,927)
Water Fund	5,218,912		(1,440,415)	3,778,497
Solid Waste Fund	166,750		(336,083)	(169,333)
Parking Fund			(2,025,000)	(2,025,000)
Totals	23,618,817		(33,244,946)	(9,626,129)
*Debt Service - Principal payments on outstanding debt				

As the above chart indicates, the proposed FY 2020-2025 CIP projects the issuance of \$23,618,817 in new bonded debt. Offsetting the newly issued debt would be projected debt service principal payments totaling \$33,244,946.

The projected impact on total outstanding debt from the end of FY 2019 through the end of FY 2025 would be a decrease of \$9,268,516 or 23.35%.

This graph highlights the decrease in outstanding debt based upon the proposed CIP:



A detailed presentation of proposed new debt included in the FY 2020-2025 CIP is presented in the table on the following page. Appendix D provides debt service schedules by year for each new bond issue included in the proposed CIP.

Of note in this presentation is that the Road Rehabilitation (repaving) largest single source of new bonded debt over the six year life of the CIP (\$8,085,269 or 34.23% of total new debt and 48.19% of General Fund new debt). The additional annual cash flow out due to funding this annually recurring project with debt every year is estimated to average about \$314,990 above and beyond the amount budgeted annually for Road Rehabilitation project work every year.

It is the recommendation of staff that the City Council consider, as funding permits and bearing in mind the impacts (both long and short term) on property tax payers, that this recurring project be slowly transitioned from debt as a funding source, to current revenue as a funding source.

Consolidated New Bond Schedule FY 2020 - 2025 Proposed Capital Improvement Program

<u>Issue</u>	<u>Term</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
<u>General Fund</u>							
Beaver Brook Flood Mitigation	15	1,000,000				500,000	500,000
Breathing Apparatus Replacement	7	847,676				847,676	
Bridge - Winchester Over Ash Brook	10	558,955					558,955
City Hall Rear Wall	7	175,000					
Flood Management	15	2,207,375	458,087	490,705	96,285	545,615	114,075
Municipal Building Roofs	15	629,040			450,475	91,620	86,945
Patricia T. Russell Park	20	1,275,000		1,275,000			
Road Rehabilitation / Paving	10	8,085,269	1,327,157	1,324,147	1,454,872	1,356,308	1,366,204
State Bypass Project	15	1,484,327		854,004			630,323
Airport Fuel Tank Removal & Replace	10	515,000					
<u>General Fund Totals</u>		<u>16,777,642</u>	<u>2,300,244</u>	<u>3,089,852</u>	<u>2,001,632</u>	<u>3,341,219</u>	<u>3,256,502</u>
<u>Solid Waste Fund</u>							
Transfer Station Roof Repair	15	166,750					
<u>Sewer Fund</u>							
Colony Court - Bloomer Swamp Main	15	1,455,513	1,455,513				
<u>Water Fund</u>							
3 MG Water Tank Replacement / Repair	20	2,275,882			2,275,882		
Well Field Upgrades	20	1,226,000					1,226,000
Woodward Pond Dam	20	1,717,030					
<u>Proposed Bond Issues FY 2020-2025</u>		<u>\$23,618,817</u>	<u>\$3,755,757</u>	<u>\$3,089,852</u>	<u>\$4,277,514</u>	<u>\$3,341,219</u>	<u>\$4,482,502</u>

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**CITY OF KEENE, NEW HAMPSHIRE
CAPITAL IMPROVEMENT PROGRAM FY20 - FY25
General Fund Multi-Year Projections**

	ACTUAL FY 17/18	BUDGET FY 18/19	PROJECTED FY 19/20	PROJECTED FY 20/21	PROJECTED FY 21/22	PROJECTED FY 22/23	PROJECTED FY 23/24	PROJECTED FY 24/25
REVENUES								
Property Tax	\$24,733,654	\$25,201,519	\$25,780,781	\$26,956,058	\$27,686,212	\$28,480,272	\$29,583,931	\$30,548,907
Other Local Taxes	587,060	451,450	453,707	455,976	458,256	460,547	462,850	465,164
Tax Increment Financing	463,270	628,685	852,155	853,625	854,385	860,362	864,499	717,861
Licenses, Permits & Fees	4,148,628	3,657,935	3,694,514	3,722,223	3,750,140	3,778,266	3,816,049	3,854,209
Intergovernmental	3,083,763	2,707,392	2,734,466	2,748,138	2,761,879	2,775,688	2,789,567	2,803,515
Charges for Services	2,881,067	1,832,673	1,865,111	1,893,088	1,921,484	1,950,307	1,984,827	2,019,958
Fines & Forfeits	72,806	89,822	90,719	91,626	92,543	93,468	94,403	95,347
Miscellaneous	1,405,794	2,573,287	1,781,153	1,685,356	1,689,570	1,698,018	1,706,508	1,715,040
Other Financing Sources (net capital financing- not current)	2,414,196	3,079,971	2,910,829	2,325,932	2,275,692	2,300,725	2,326,032	2,351,619
Noncurrent Revenue Sources to Fund Capital		(1,649,925)						
Use of Fund Balance		882,403	700,000	870,000	994,000	875,000	400,000	600,000
Use of Fund Balance - Appropriations Carried Forward		448,192	0	0	0	0	0	0
SUBTOTAL - current revenues	\$39,790,238	\$39,903,404	\$40,863,435	\$41,602,022	\$42,484,161	\$43,272,653	\$44,028,666	\$45,171,620
Sale of Bonds	\$2,757,500	2,766,000	\$2,788,193	\$2,300,244	\$3,089,852	\$2,001,632	\$3,341,219	\$3,256,502
TOTAL REVENUES & OTHER FIN SOURCES	\$42,547,738	\$42,669,404	\$43,651,628	\$43,902,266	\$45,574,013	\$45,274,285	\$47,369,885	\$48,428,122
EXPENDITURES								
ELECTED/APPOINTED OFFICIALS:								
Mayor & City Council	\$123,257	\$170,099	\$155,405	\$157,969	\$160,575	\$163,225	\$165,918	\$168,656
City Manager	292,535	444,426	451,759	459,213	466,790	474,492	482,321	490,280
City Clerk & Elections	575,137	600,959	607,226	617,245	627,429	637,782	648,305	659,002
City Attorney	336,634	349,159	354,920	360,776	366,729	372,780	378,931	385,183
Outside Agencies	255,500	262,550	262,550	262,550	262,550	262,550	262,550	262,550
Unclassified	72,099	109,962	111,776	113,621	115,495	117,401	119,338	121,307
Employee Benefits	310,038	689,924	679,204	685,996	893,542	906,945	1,116,921	1,053,382
Risk Management	295,165	286,127	290,848	295,647	300,525	305,484	310,524	315,648
Total Elected/Appointed Officials	\$2,260,365	\$2,913,206	\$2,913,687	\$2,953,016	\$3,193,636	\$3,240,659	\$3,484,809	\$3,456,008
ADMINISTRATIVE SERVICES:								
Assessment	\$473,805	\$487,405	\$497,153	\$507,096	\$517,238	\$527,583	\$538,135	\$548,897
Finance	1,464,952	1,625,941	1,611,751	1,643,986	1,676,866	1,710,403	1,744,611	1,779,503
Human Services	692,434	723,130	741,208	759,738	778,732	798,200	818,155	838,609
Human Resources	346,212	369,818	370,455	377,864	385,421	393,130	400,992	409,012
Information Technology	1,233,253	1,381,053	1,319,985	1,346,385	1,373,312	1,400,779	1,428,794	1,457,370
Total Administrative Services	\$4,210,656	\$4,587,347	\$4,540,552	\$4,635,069	\$4,731,569	\$4,830,094	\$4,930,687	\$5,033,392
COMMUNITY SERVICES:								
Fire & Ambulance	\$6,764,146	\$6,981,063	\$7,155,590	\$7,334,479	\$7,517,841	\$7,705,787	\$7,898,432	\$8,095,893
Library	1,352,972	1,420,229	1,456,445	1,493,584	1,531,671	1,570,728	1,610,782	1,651,857
Parks, Recreation & Facilities	2,994,065	3,501,100	3,724,647	3,811,036	3,899,585	3,990,347	4,083,379	4,178,736
Police	6,957,173	7,533,794	7,703,467	7,896,054	8,093,455	8,295,792	8,503,187	8,715,766
Youth Services	111,834	114,815	117,685	120,628	123,643	126,734	129,903	133,150
Total Community Services	\$18,180,189	\$19,551,001	\$20,157,834	\$20,655,781	\$21,166,195	\$21,689,388	\$22,225,683	\$22,775,402

**CITY OF KEENE, NEW HAMPSHIRE
CAPITAL IMPROVEMENT PROGRAM FY20 - FY25
General Fund Multi-Year Projections**

	ACTUAL FY 17/18	BUDGET FY 18/19	PROJECTED FY 19/20	PROJECTED FY 20/21	PROJECTED FY 21/22	PROJECTED FY 22/23	PROJECTED FY 23/24	PROJECTED FY 24/25
MUNICIPAL DEVELOPMENT SERVICES:								
Airport	\$625,709	\$640,756	\$655,493	\$670,570	\$685,993	\$701,771	\$717,911	\$734,423
Community Development	1,490,023	1,659,555	1,667,686	1,706,043	1,745,282	1,785,424	1,826,488	1,868,498
Public Works	4,314,729	4,512,943	4,518,987	4,622,924	4,729,251	4,838,024	4,949,298	5,063,132
Total Mun. Development Services	\$6,430,461	\$6,813,254	\$6,842,166	\$6,999,537	\$7,160,526	\$7,325,219	\$7,493,697	\$7,666,053
CAPITAL:								
Debt Service (including repayment of interfund loan)	4,697,914	4,533,629	4,898,119	4,636,545	4,614,620	4,276,072	3,867,822	4,123,671
CAPITAL PROJECTS (funded by current revenues)	3,818,912	1,504,967	1,511,076	1,722,074	1,617,613	1,911,220	2,025,967	2,117,094
Total Capital	\$8,516,826	\$6,038,596	\$6,409,195	\$6,358,619	\$6,232,233	\$6,187,292	\$5,893,789	\$6,240,765
SUBTOTAL - current expenditures	\$39,903,497	\$39,903,404	\$40,863,435	\$41,602,022	\$42,484,161	\$43,272,653	\$44,028,666	\$45,171,620
CAPITAL PROJECTS (funded by bonds)	\$2,757,500	\$2,766,000	\$2,788,193	\$2,300,244	\$3,089,852	\$2,001,632	\$3,341,219	\$3,256,502
TOTAL EXPENDITURES	\$42,355,997	\$42,669,404	\$43,651,628	\$43,902,266	\$45,574,013	\$45,274,285	\$47,369,885	\$48,428,122
CITY PROPERTY TAX REVENUE INCREASE			\$ 579,262	\$ 1,175,277	\$ 730,154	\$ 794,060	\$ 1,103,660	\$ 964,976
CITY PROPERTY TAX REVENUE INCREASE (%)			2.30%	4.56%	2.71%	2.87%	3.88%	3.26%
Assessments (trended 0% per year)								
ADD: Overlay	1,827,082.0	1,827,082.0	1,827,082.0	1,827,082.0	1,827,082.0	1,827,082.0	1,827,082.0	1,827,082.0
ADD: War Service Credits	\$824,593	\$824,593	\$600,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
Property Tax Rate - City Share	\$226,613	\$226,613	\$235,000	\$235,000	\$235,000	\$235,000	\$235,000	\$235,000
city tax rate increase (decrease)	\$14.36	\$14.57	\$14.57	\$15.05	\$15.45	\$15.88	\$16.48	\$17.01
			1.46%	3.29%	2.66%	2.78%	3.78%	3.22%
CAPITAL (current) & DEBT AS % OF BUDGET		15.10%	15.60%	15.20%	14.60%	14.20%	13.30%	13.80%
GENERAL FUND INCREASE (EXcluding bonds)			2.4%	1.8%	2.1%	1.9%	1.7%	2.6%
GENERAL FUND INCREASE (Including bonds)			2.3%	0.6%	3.8%	-0.7%	4.6%	2.2%
Noncurrent Revenue Sources Used to Fund Capital FY 2018-2019								
Capital Reserves	411,017							
Project Balances - various	151,908							
Trust Funds	40,000							
Sale of 560 Main Street Property	1,000,000							
Capital Carry Forward Downtown Sidewalks	47,000							
Total : Excluded from Budget to Emphasize Current Revenue Impact	1,649,925							
								Capital Expenditure

CITY OF KEENE, NEW HAMPSHIRE

General Fund 2020 - 2025 Capital Improvement Program Summary

Dept.	Project Name	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	TOTAL
Airport	Beacon Replacement	-	-	-	500,000	-	-	500,000
Airport	Easement Acquisition	-	-	300,000	-	-	-	300,000
Airport	Fuel Tank Removal & Replacement	-	515,000	-	-	-	-	515,000
Airport	Obstruction Removal	-	-	-	250,000	250,000	-	500,000
Airport	Pavement Maintenance & Marking	148,500	66,600	48,600	112,860	74,666	-	451,226
Airport	Perimeter Fence	-	1,350,000	-	-	-	-	1,350,000
Airport	Runway 20 PAPI Replacement	-	-	-	60,000	-	-	60,000
Airport	Snow Removal Equipment	-	-	555,556	-	-	-	555,556
Airport	Taxiway A Relocation	2,600,000	-	-	-	-	-	2,600,000
Airport	Terminal Apron Expansion	-	-	1,300,000	-	-	-	1,300,000
	TOTAL AIRPORT	\$ 2,748,500	\$ 1,931,600	\$ 2,204,156	\$ 922,860	\$ 324,666	\$ -	\$ 8,131,782
Assessing	Revaluation	-	75,000	75,000	-	-	-	150,000
	TOTAL ASSESSING	\$ -	\$ 75,000	\$ 75,000	\$ -	\$ -	\$ -	\$ 150,000
City Clerk	Voting Booths	32,088	-	-	-	-	-	32,088
	TOTAL CITY CLERK	\$ 32,088	\$ -	\$ 32,088				
Comm Dev.	Master Plan Update	-	-	-	30,000	30,000	-	60,000
Comm Dev.	Aerial Imagery Update (5 & 10 Year)	55,000	-	-	-	-	-	55,000
	TOTAL COMMUNITY DEVELOPMENT	\$ 55,000	\$ -	\$ -	\$ 30,000	\$ 30,000	\$ -	\$ 115,000
Facilities	City Hall Rear Wall	175,000	-	-	-	-	-	175,000
Facilities	Municipal Buildings Improvements	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Facilities	Municipal Buildings Roofs	-	-	-	450,475	91,620	86,945	629,040
Facilities	Welcome Center	134,000	-	-	-	-	-	134,000
	TOTAL FACILITIES	\$ 409,000	\$ 100,000	\$ 100,000	\$ 550,475	\$ 191,620	\$ 186,945	\$ 1,538,040
Finance	Business / Financial Software	-	-	-	-	30,000	-	30,000
	TOTAL FINANCE	\$ -	\$ -	\$ -	\$ -	\$ 30,000	\$ -	\$ 30,000
Fire	Ambulance Replacement	-	-	260,000	-	-	285,000	545,000
Fire	Apparatus Replacement	1,100,000	45,000	725,000	105,000	-	756,396	2,731,396
Fire	Breathing Apparatus	-	-	-	-	847,676	-	847,676
Fire	Capital Reserve Ambulance Replacement	-	130,000	130,000	90,000	90,000	100,000	540,000
Fire	Capital Reserve Apparatus Replacement	400,000	385,000	385,000	350,000	350,000	375,000	2,245,000
Fire	Portable Radio Replacement	52,500	-	-	-	-	-	52,500
	TOTAL FIRE	\$ 1,552,500	\$ 560,000	\$ 1,500,000	\$ 545,000	\$ 1,287,676	\$ 1,516,396	\$ 6,961,572
IT	Database Software	-	-	-	80,000	-	-	80,000
IT	Network Equipment Replacement	6,000	31,000	6,500	25,000	-	-	68,500
IT	Server Replacement	27,000	14,000	9,000	9,000	55,000	-	114,000
IT	Storage Area Network	-	-	-	-	105,000	-	105,000
IT	Telephone System Replacement	-	-	-	203,000	-	-	203,000
	TOTAL IT	\$ 33,000	\$ 45,000	\$ 15,500	\$ 317,000	\$ 160,000	\$ -	\$ 570,500
Parks & Rec.	Ashuelot River Dam Repair or Removal	-	-	-	-	87,400	495,300	582,700
Parks & Rec.	Campground Repurposed	-	40,000	-	-	-	-	40,000
Parks & Rec.	Open Space and Trails	-	25,000	25,000	25,000	85,000	25,000	185,000
Parks & Rec.	Parks Improvements	50,000	50,000	50,000	75,000	75,000	90,000	390,000
Parks & Rec.	Patricia T. Russell Park	125,000	-	1,275,000	-	-	-	1,400,000
Parks & Rec.	Robin Hood Dam Repairs	-	-	-	-	83,200	-	83,200
Parks & Rec.	Skate Park	300,000	-	-	-	-	-	300,000
	TOTAL PARKS & RECREATION	\$ 475,000	\$ 115,000	\$ 1,350,000	\$ 100,000	\$ 330,600	\$ 610,300	\$ 2,980,900
Police	Mobile Radio Replacement	86,796	89,400	-	-	-	-	176,196
	TOTAL POLICE	\$ 86,796	\$ 89,400	\$ -	\$ -	\$ -	\$ -	\$ 176,196
Public Works	Capital Reserve - Bridges	-	137,700	99,860	99,860	109,350	109,350	556,120
Public Works	Capital Reserve- Downtown Infrastructure	200,000	200,000	200,000	225,000	250,000	250,000	1,325,000
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 Flood Mitigation	-	-	-	-	500,000	500,000	1,000,000
Public Works	Bridge Program	-	117,398	665,253	-	526,725	2,984,775	4,294,151
Public Works	Curb Installation	65,478	68,752	70,815	72,939	75,128	77,382	430,494
Public Works	Downtown Revitalization	180,000	100,000	500,000	550,000	550,000	550,000	2,430,000
Public Works	Flood Management	502,608	458,087	490,705	96,285	545,615	114,075	2,207,375
Public Works	Guardrail Replacement	44,024	-	-	-	-	-	44,024
Public Works	Road Rehabilitation	1,256,581	1,327,157	1,324,147	1,454,872	1,356,308	1,366,204	8,085,269
Public Works	Sidewalks - Replacement/Repair	65,478	68,752	70,815	72,939	75,128	77,381	430,493
Public Works	State By-Pass Projects	4,270,020	-	343,801	-	180,779	3,151,617	7,946,217
Public Works	Storm Drainage Cleaning	66,800	68,800	70,900	73,000	75,200	77,400	432,100
Public Works	Storm Drainpipe Lining	-	-	-	116,400	112,800	115,100	344,300
Public Works	Stormwater Drainage Spot Repair Program	65,478	68,752	70,815	72,939	75,128	77,381	430,493
Public Works	Stormwater System Management	41,200	42,400	43,700	45,000	46,400	47,800	266,500
Public Works	Traffic Signal Replacement	-	-	-	-	160,000	200,000	360,000
	TOTAL PUBLIC WORKS	\$ 7,857,667	\$ 2,757,798	\$ 4,050,811	\$ 2,979,234	\$ 4,738,561	\$ 9,798,465	\$ 32,182,536
GRAND TOTAL - ALL GENERAL FUND PROJECTS		\$ 13,249,551	\$ 5,673,798	\$ 9,295,467	\$ 5,444,569	\$ 7,093,123	\$ 12,112,106	\$ 52,868,614

General Fund 2020 Capital Improvement Program Detail

Dept.	Project Name	cur rev	bonds	federal	state	other	2019/2020
Airport	Pavement Maintenance & Marking			133,650	7,425	7,425	148,500
Airport	Taxiway A Relocation	130,000		2,340,000	130,000		2,600,000
City Clerk	Voting Booths					32,088	32,088
Comm Dev.	Aerial Imagery Updates (5 & 10 Year)					55,000	55,000
Facilities	City Hall Rear Wall		175,000				175,000
Facilities	Municipal Buildings Improvements	100,000					100,000
Facilities	Welcome Center					134,000	134,000
Fire	Capital Reserve Apparatus Replacement	400,000					400,000
Fire	Ladder 1 Replacement					1,100,000	1,100,000
Fire	Portable Radio Replacement	52,500					52,500
IT	Network Equipment Replacement					6,000	6,000
IT	Server Replacement					27,000	27,000
Parks & Rec.	Parks Improvements	50,000					50,000
Parks & Rec.	Patricia T. Russell Park	125,000					125,000
Parks & Rec.	Skate Park	25,000				275,000	300,000
Police	Mobile Radio Replacement	86,796					86,796
Public Works	Capital Reserve - Downtown Infrastructure	200,000					200,000
Public Works	Capital Reserve - Transportation Imp.	100,000					100,000
Public Works	560 Main Street Assessment					1,000,000	1,000,000
Public Works	Curb Installation	65,478					65,478
Public Works	Downtown Revitalization					180,000	180,000
Public Works	Flood Management		502,608				502,608
Public Works	Guardrail Replacement	44,024					44,024
Public Works	Road Rehabilitation		1,256,581				1,256,581
Public Works	Sidewalks - Replacement/Repair	65,478					65,478
Public Works	State By-Pass Projects		854,004		3,416,016		4,270,020
Public Works	Storm Drainage Cleaning	66,800					66,800
Public Works	Stormwater Drainage Spot Repair Program					65,478	65,478
Public Works	Stormwater System Management					41,200	41,200
GRAND TOTAL - ALL GENERAL FUND PROJECTS		\$ 1,511,076	\$ 2,788,193	\$ 2,473,650	\$ 3,553,441	\$ 2,923,191	\$ 13,249,551

General Fund 2021 Capital Improvement Program Detail

Dept.	Project Name	cur rev	bonds	federal	state	other	2020/2021
Airport	Fuel Tank Removal & Replacement		515,000				515,000
Airport	Pavement Maintenance & Marking	2,418		59,940	3,330	912	66,600
Airport	Perimeter Fence	67,500		1,215,000	67,500		1,350,000
Assessing	Revaluation	75,000					75,000
Facilities	Municipal Buildings Improvements	100,000					100,000
Fire	Brush 1 Replacement					45,000	45,000
Fire	Capital Reserve Ambulance Replacement	130,000					130,000
Fire	Capital Reserve Apparatus Replacement	385,000					385,000
IT	Network Equipment Replacement	31,000					31,000
IT	Server Replacement	14,000					14,000
Parks & Rec.	Campground Repurposed	40,000					40,000
Parks & Rec.	Open Space and Trails	25,000					25,000
Parks & Rec.	Parks Improvements	50,000					50,000
Police	Mobile Radio Replacement	89,400					89,400
Public Works	Bridge Program - George St over Beaver				93,918	23,480	117,398
Public Works	Capital Reserve - Bridges	137,700					137,700
Public Works	Capital Reserve - Downtown Infrastructure	200,000					200,000
Public Works	Capital Reserve - Transportation Imp.	100,000					100,000
Public Works	Curb Installation	68,752					68,752
Public Works	Downtown Revitalization					100,000	100,000
Public Works	Flood Management		458,087				458,087
Public Works	Road Rehabilitation		1,327,157				1,327,157
Public Works	Sidewalks - Replacement/Repair	68,752					68,752
Public Works	Storm Drainage Cleaning	68,800					68,800
Public Works	Stormwater Drainage Spot Repair Program	68,752					68,752
Public Works	Stormwater System Management					42,400	42,400
GRAND TOTAL - ALL GENERAL FUND PROJECTS		\$ 1,722,074	\$ 2,300,244	\$ 1,274,940	\$ 164,748	\$ 211,792	\$ 5,673,798

General Fund 2022 Capital Improvement Program Detail

Dept.	Project Name	cur rev	bonds	federal	state	other	2021/2022
Airport	Easement Acquisition	15,000		270,000	15,000		300,000
Airport	Pavement Maintenance & Marking	2,430		43,740	2,430		48,600
Airport	Snow Removal Equipment	27,778		500,000	27,778		555,556
Airport	Terminal Apron Expansion	65,000		1,170,000	65,000		1,300,000
Assessing	Revaluation	75,000					75,000
Facilities	Municipal Buildings Improvements	100,000					100,000
Fire	Ambulance Replacement					260,000	260,000
Fire	Tanker 1 Replacement					725,000	725,000
Fire	Capital Reserve Ambulance Replacement	130,000					130,000
Fire	Capital Reserve Apparatus Replacement	385,000					385,000
IT	Network Equipment Replacement	6,500					6,500
IT	Server Replacement	9,000					9,000
Parks & Rec	Open Space and Trails	25,000					25,000
Parks & Rec	Parks Improvements	50,000					50,000
Parks & Rec.	Patricia T. Russell Park		1,275,000				1,275,000
Public Works	Bridge Program - George St over Beaver				532,202	133,051	665,253
Public Works	Capital Reserve - Bridges	99,860					99,860
Public Works	Capital Reserve - Downtown Infrastructure	200,000					200,000
Public Works	Capital Reserve - Transportation Imp.	100,000					100,000
Public Works	Curb Installation	70,815					70,815
Public Works	Downtown Revitalization					500,000	500,000
Public Works	Flood Management		490,705				490,705
Public Works	Road Rehabilitation		1,324,147				1,324,147
Public Works	Sidewalks - Replacement/Repair	70,815					70,815
Public Works	State By-Pass Projects				275,041	68,760	343,801
Public Works	Storm Drainage Cleaning	70,900					70,900
Public Works	Stormwater Drainage Spot Repair Program	70,815					70,815
Public Works	Stormwater System Management	43,700					43,700
GRAND TOTAL - ALL GENERAL FUND PROJECTS		\$ 1,617,613	\$ 3,089,852	\$ 1,983,740	\$ 917,451	\$ 1,686,811	\$ 9,295,467

General Fund 2023 Capital Improvement Program Detail

Dept.	Project Name	cur rev	bonds	federal	state	other	2022/2023
Airport	Beacon Replacement	25,000		450,000	25,000		500,000
Airport	Obstruction Removal	12,500		225,000	12,500		250,000
Airport	Pavement Maintenance & Marking	5,643		101,574	5,643		112,860
Airport	Runway 20 PAPI Replacement	3,000		54,000	3,000		60,000
Comm Dev.	Master Plan Update	30,000					30,000
Facilities	Municipal Buildings Improvements	100,000					100,000
Facilities	Municipal Buildings Roofs		450,475				450,475
Fire	Utility 1 and Brush 2 Replacement					105,000	105,000
Fire	Capital Reserve Ambulance Replacement	90,000					90,000
Fire	Capital Reserve Apparatus Replacement	350,000					350,000
IT	Database Software	80,000					80,000
IT	Network Equipment Replacement	25,000					25,000
IT	Server Replacement	9,000					9,000
IT	Telephone System Replacement	203,000					203,000
Parks & Rec	Open Space and Trails	25,000					25,000
Parks & Rec	Parks Improvements	75,000					75,000
Public Works	Capital Reserve - Bridges	99,860					99,860
Public Works	Capital Reserve - Downtown Infrastructure	225,000					225,000
Public Works	Capital Reserve - Transportation Imp.	100,000					100,000
Public Works	Curb Installation	72,939					72,939
Public Works	Downtown Revitalization					550,000	550,000
Public Works	Flood Management		96,285				96,285
Public Works	Road Rehabilitation		1,454,872				1,454,872
Public Works	Sidewalks - Replacement/Repair	72,939					72,939
Public Works	Storm Drainage Cleaning	73,000					73,000
Public Works	Storm Drainpipe Lining	116,400					116,400
Public Works	Stormwater Drainage Spot Repair Program	72,939					72,939
Public Works	Stormwater System Management	45,000					45,000
GRAND TOTAL - ALL GENERAL FUND PROJECTS		\$ 1,911,220	\$ 2,001,632	\$ 830,574	\$ 46,143	\$ 655,000	\$ 5,444,569

General Fund 2024 Capital Improvement Program Detail

Dept.	Project Name	cur rev	bonds	federal	state	other	2023/2024
Airport	Obstruction Removal	12,500		225,000	12,500		250,000
Airport	Pavement Maintenance & Marking	3,733		67,200	3,733		74,666
Comm Dev.	Master Plan Update	30,000					30,000
Facilities	Municipal Buildings Improvements	100,000					100,000
Facilities	Municipal Buildings Roofs		91,620				91,620
Finance	Business / Financial Software	30,000					30,000
Fire	Breathing Apparatus Replacement		847,676				847,676
Fire	Capital Reserve Ambulance Replacement	90,000					90,000
Fire	Capital Reserve Apparatus Replacement	350,000					350,000
IT	Server Replacement	55,000					55,000
IT	Storage Area Network	105,000					105,000
Parks & Rec	Ashuelot River Dam Repair or Removal	87,400					87,400
Parks & Rec	Open Space and Trails	85,000					85,000
Parks & Rec	Parks Improvements	75,000					75,000
Parks & Rec	Robin Hood Dam Repairs	83,200					83,200
Public Works	Beaver Brook Flood Mitigation		500,000				500,000
Public Works	Bridge Program - Winch over Ash Brook				421,380	105,345	526,725
Public Works	Capital Reserve - Bridges	109,350					109,350
Public Works	Capital Reserve - Downtown Infrastructure	250,000					250,000
Public Works	Capital Reserve - Transportation Imp.	100,000					100,000
Public Works	Curb Installation	75,128					75,128
Public Works	Downtown Revitalization					550,000	550,000
Public Works	Flood Management		545,615				545,615
Public Works	Road Rehabilitation		1,356,308				1,356,308
Public Works	Sidewalks - Replacement/Repair	75,128					75,128
Public Works	State By-Pass Projects				144,623	36,156	180,779
Public Works	Storm Drainage Cleaning	75,200					75,200
Public Works	Storm Drainpipe Lining	112,800					112,800
Public Works	Stormwater Drainage Spot Repair Program	75,128					75,128
Public Works	Stormwater System Management	46,400					46,400
Public Works	Traffic Signal Replacement					160,000	160,000
GRAND TOTAL - ALL GENERAL FUND PROJECTS		\$ 2,025,967	\$ 3,341,219	\$ 292,200	\$ 582,236	\$ 851,501	\$ 7,093,123

General Fund 2025 Capital Improvement Program Detail

Dept.	Project Name	cur rev	bonds	federal	state	other	2024/2025
Facilities	Municipal Buildings Improvements	100,000					100,000
Facilities	Municipal Buildings Roofs		86,945				86,945
Fire	Ambulance Replacement					285,000	285,000
Fire	Rescue 1 Replacement					756,396	756,396
Fire	Capital Reserve Ambulance Replacement	100,000					100,000
Fire	Capital Reserve Apparatus Replacement	375,000					375,000
Parks & Rec	Ashuelot River Dam Repair or Removal	495,300					495,300
Parks & Rec	Open Space and Trails	25,000					25,000
Parks & Rec	Parks Improvements	90,000					90,000
Public Works	Beaver Brook Flood Mitigation		500,000				500,000
Public Works	Bridge Program - Winch over Ash Brook		558,955		2,387,820	38,000	2,984,775
Public Works	Capital Reserve - Bridges	109,350					109,350
Public Works	Capital Reserve - Downtown Infrastructure	250,000					250,000
Public Works	Capital Reserve - Transportation Imp.	100,000					100,000
Public Works	Curb Installation	77,382					77,382
Public Works	Downtown Revitalization					550,000	550,000
Public Works	Flood Management		114,075				114,075
Public Works	Road Rehabilitation		1,366,204				1,366,204
Public Works	Sidewalks - Replacement/Repair	77,381					77,381
Public Works	State By-Pass Projects		630,323		2,521,294		3,151,617
Public Works	Storm Drainage Cleaning	77,400					77,400
Public Works	Storm Drainpipe Lining	115,100					115,100
Public Works	Stormwater Drainage Spot Repair Program	77,381					77,381
Public Works	Stormwater System Management	47,800					47,800
Public Works	Traffic Signal Replacement					200,000	200,000
GRAND TOTAL - ALL GENERAL FUND PROJECTS		\$ 2,117,094	\$ 3,256,502	\$ -	\$ 4,909,114	\$ 1,829,396	\$ 12,112,106

General Fund 2020 - 2025 Capital Improvement Program Debt Summary

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Existing and Authorized Debt	\$25,449,828	\$24,277,276	\$22,852,266	\$22,217,109	\$20,800,104	\$21,106,998
New Issues Proposed	2,788,193	2,300,244	3,089,852	2,001,632	3,341,219	3,256,502
Principal Paid	(3,960,745)	(3,725,254)	(3,725,009)	(3,418,637)	(3,034,325)	(3,274,039)
Total Existing Debt & Issues Proposed	\$24,277,276	\$22,852,266	\$22,217,109	\$20,800,104	\$21,106,998	\$21,089,462

	<u>Issue</u>	<u>Term</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Existing & Authorized Debt Service (P & I)			\$4,838,869	\$4,233,191	\$3,896,782	\$3,245,399	\$2,574,643	\$2,401,647
<u>Proposed Debt Service CIP FY20</u>								
City Hall Rear Wall	175,000	7	3,719	31,906	30,844	29,781	28,719	27,656
Consolidated Infrastructure	1,256,581	10	26,702	176,393	171,052	165,712	160,371	155,031
Flood Management	502,608	15	10,680	54,156	52,732	51,308	49,884	48,460
State Bypass Project	854,004	15	18,148	92,019	89,599	87,180	84,760	82,340
<u>Proposed Debt Service CIP FY21</u>								
AIP Fuel Tank Remove & Replace	515,000	10		10,944	72,293	70,104	67,916	65,727
Consolidated Infrastructure	1,327,157	10		28,202	186,300	180,659	175,019	169,378
Flood Management	458,087	15		9,734	49,359	48,061	46,763	45,465
<u>Proposed Debt Service CIP FY22</u>								
Consolidated Infrastructure	1,324,147	10			28,138	185,877	180,250	174,622
Flood Management	490,705	15			10,427	52,873	51,483	50,093
Patricia T. Russell Park	1,275,000	20			27,094	116,583	113,873	111,164
<u>Proposed Debt Service CIP FY23</u>								
Consolidated Infrastructure	1,454,872	10				30,916	204,228	198,044
Flood Management	96,285	15				2,046	10,375	10,102
Municipal Building Roofs	450,475	15				9,573	48,539	47,262
<u>Proposed Debt Service CIP FY24</u>								
Consolidated Infrastructure	1,356,308	10					28,822	190,392
Flood Management	545,615	15					11,594	58,790
Breathing Apparatus	847,676	7					18,013	154,550
Beaver Brook Mitigation	500,000	15					10,625	53,875
Municipal Building Roofs	91,620	15					1,947	9,872
<u>Proposed Debt Service CIP FY25</u>								
Bridge - Winchester Over Ash Brook	558,955	10						11,878
Consolidated Infrastructure	1,366,204	10						29,032
Flood Management	114,075	15						2,424
Beaver Brook Mitigation	500,000	15						10,625
Municipal Building Roofs	86,945	15						1,848
State Bypass	630,323	15						13,394
Total CIP 20-25 Debt Service Proposed			59,249	403,354	717,838	1,030,673	1,293,179	1,722,024
Total Projected Debt Service: General Fund			\$4,898,119	\$4,636,545	\$4,614,620	\$4,276,072	\$3,867,822	\$4,123,671

GENERAL FUND - "Other" Project Financing Detail by Year

FY 19-20

Airport	Pavement Maintenance & Marking	7,425	Project Balance 90170 - Airport Pavement Maintenance
City Clerk	Voting Booths	32,088	FY19 Carryover (If Available)
Comm Dev.	Aerial Imagery Updates	55,000	FY19 Carryover (If Available)
Facilities	Welcome Center	134,000	Downtown Infrastructure Capital Reserve
Fire	Ladder 1 Replacement	1,100,000	Fire Apparatus Capital Reserve
IT	Network Equipment Replacement	6,000	PC Replacement Fund
IT	Server Replacement	27,000	PC Replacement Fund
Parks & Rec.	Skate Park	275,000	Donations
Public Works	Downtown Revitalization Study	180,000	Downtown Infrastructure Capital Reserve
Public Works	560 Main Street Assessment	1,000,000	Sale of 560 Main Street Property
Public Works	Stormwater Drainage Spot Repair Program	65,478	Project Balance 90271 - Flood Control
Public Works	Stormwater System Management	41,200	Project Balance 90271 - Flood Control

Total 2,923,191

FY 20-21

Airport	Pavement Maintenance & Marking	912	Project Balance 90170 - Airport Pavement Maintenance
Fire	Apparatus Replacement	45,000	Fire Apparatus Capital Reserve
Public Works	Bridge Program - George St over Beaver	23,480	Bridge Capital Reserve
Public Works	Downtown Revitalization	100,000	Downtown Infrastructure Capital Reserve
Public Works	Stormwater System Management	42,400	Project Balance 90271 - Flood Control

Total 211,792

FY 21-22

Fire	Capital Reserve Apparatus Replacement	725,000	Fire Apparatus Capital Reserve
Fire	Ambulance Replacement	260,000	Ambulance Capital Reserve
Public Works	Bridge Program - George St over Beaver	133,051	Bridge Capital Reserve
Public Works	Downtown Revitalization	500,000	Downtown Infrastructure Capital Reserve
Public Works	State By-Pass Projects	68,760	Transportation Improvements Capital Reserve

Total 1,686,811

FY 22-23

Fire	Apparatus Replacement	105,000	Fire Apparatus Capital Reserve
Public Works	Downtown Revitalization	550,000	Downtown Infrastructure Capital Reserve

Total 655,000

FY 23-24

Public Works	Bridge Program - Winchester over Ash Brk	105,345	Bridge Capital Reserve
Public Works	Downtown Revitalization	550,000	Downtown Infrastructure Capital Reserve
Public Works	State By-Pass Projects	36,156	Transportation Improvements Capital Reserve
Public Works	Traffic Signal Replacement	160,000	Transportation Improvements Capital Reserve

Total 851,501

FY 24-25

Fire	Ambulance Replacement	285,000	Ambulance Capital Reserve
Fire	Apparatus Replacement	756,396	Fire Apparatus Capital Reserve
Public Works	Bridge Program - Winchester over Ash Brk	38,000	Bridge Capital Reserve
Public Works	Downtown Revitalization	550,000	Downtown Infrastructure Capital Reserve
Public Works	Traffic Signal Replacement	200,000	Transportation Improvements Capital Reserve

Total 1,829,396

**CITY OF KEENE, NEW HAMPSHIRE
CAPITAL IMPROVEMENT PROGRAM FY20 - FY25
PARKING FUND MULTI-YEAR PROJECTIONS**

	ACTUAL FY 16/17	ACTUAL FY 17/18	BUDGET FY 18/19	PROJECTED FY19/20	PROJECTED FY20/21	PROJECTED FY21/22	PROJECTED FY22/23	PROJECTED FY23/24	PROJECTED FY24/25
REVENUES									
Taxes	\$1,146,740	\$1,027,467	\$850,501	\$ 836,230	\$ 604,975	\$ 589,975	\$ 214,700	\$ 209,900	\$ 210,100
Parking Meter Fees / Space Rentals	657,402	656,215	732,994	763,490	766,121	803,077	813,607	844,592	855,290
Fines & Forfeits	279,560	287,786	273,772	302,442	310,210	318,211	326,451	334,939	343,682
Miscellaneous	13,000	52,750	14,299	14,371	14,442	14,501	14,574	14,633	14,706
Capital reserve / Project Balances			21,668	52,300		55,100	98,200	57,400	
Use of (Addition to) Surplus	42,500	42,500	42,500	42,500					
State Courthouse Payment									
Bond issue									
TOTAL REVENUES	\$2,139,202	\$2,066,718	\$1,935,734	\$2,011,333	\$1,695,748	\$1,780,864	\$1,467,532	\$1,461,464	\$1,423,779
EXPENDITURES									
Lots & Meters	\$648,132	\$649,179	\$694,522	\$710,148	\$726,127	\$742,465	\$759,170	\$776,251	\$793,717
Outside Services	212,241	217,324	201,026	\$206,052	211,203	216,483	221,895	227,442	233,129
City Hall Parking Facility	19,265	19,082	22,396	\$22,508	22,621	22,734	22,847	22,962	23,076
Wells Street Parking Facility	26,559	14,715	35,089	\$35,791	36,507	37,237	37,981	38,741	39,516
Capital	255,209	178,708	119,700	112,300	60,000	166,400	158,200	367,400	123,000
Property Taxes: Courthouse	247,259	252,899	261,751	259,705	574,975	559,975	184,700	179,900	175,100
Debt Service-TAX INC. FIN.	801,113	784,750	601,250	589,025					
TOTAL EXPENDITURES	\$2,209,777	\$2,116,656	\$1,935,734	\$1,935,529	\$1,631,432	\$1,745,293	\$1,384,794	\$1,612,697	\$1,387,538
Addition to (use of) Surplus	(\$70,575)	(\$49,938)	\$0	\$75,804	\$64,316	\$35,571	\$82,738	(\$151,232)	\$36,241
CAPITAL & DEBT AS % OF BUDGET	59.0%	57.5%	50.8%	49.7%	38.9%	41.6%	24.8%	33.9%	21.5%
PARKING FUND INCREASE	1.3%	-4.2%	-12.4%	0.0%	-15.71%	6.98%	-20.66%	16.46%	-13.96%
Projected fund balance at year end	173,981	249,785	314,101	349,671	432,410	281,177	317,418		
Projected fund balance as a % of operating budget (total-capital)	9.58%	13.70%	19.99%	22.15%	35.25%	22.58%	25.10%		

Note on Taxes: Wells Street Tax Increment Financing District (TIFD) revenues are raised to pay for the following TIFD expenditures:

Debt Service	\$	589,025	\$	574,975	\$	559,975	\$	184,700	\$	179,900	\$	175,100
Wells Street Parking Facility Capital Reserve		30,000		30,000		30,000		30,000		30,000		35,000
District Courthouse- Property Tax		259,705		(42,500)								
Offset - State of NH Courthouse Rental Payments												
TIFD Taxes to be Raised for Parking Fund	\$	836,230	\$	604,975	\$	589,975	\$	214,700	\$	209,900	\$	210,100

Parking Meter Fees / Space Rentals include allowances in FY 21/22 (5.0%), and FY 23/24 (5.0%) for meter and parking space rental fees as planning allowances.

CITY OF KEENE, NEW HAMPSHIRE

Parking Fund 2020 - 2025 Capital Improvement Program Summary

<u>Dept.</u>	<u>Project Name</u>	<u>2019/2020</u>	<u>2020/2021</u>	<u>2021/2022</u>	<u>2022/2023</u>	<u>2023/2024</u>	<u>2024/2025</u>	<u>TOTAL</u>
Public Works	Capital Reserve - City Hall Parking Facility	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 35,000	\$ 185,000
Public Works	Capital Reserve - Wells Street Parking Facility	30,000	30,000	30,000	30,000	30,000	35,000	185,000
Police	Parking Smart Meter Technology					250,000		250,000
Public Works	Parking Structure Maintenance - City Hall	52,300	-	-	-	57,400		109,700
Public Works	Parking Structure Maintenance - Wells St	-		55,100	98,200			153,300
Public Works	Surface Parking Lot Maintenance			51,300			53,000	104,300
TOTAL CAPITAL PROGRAM		\$ 112,300	\$ 60,000	\$ 166,400	\$ 158,200	\$ 367,400	\$ 123,000	\$ 987,300

PROJECT FUNDING DETAIL

Reserve Funded Projects

Public Works	Parking Structure Maintenance - City Hall	\$ 52,300	\$ -	\$ -	\$ -	\$ 57,400	\$ -	\$ 109,700
Public Works	Parking Structure Maintenance - Wells St	-	-	55,100	98,200	-	-	153,300
Total: Reserve Funded Projects		\$ 52,300	\$ -	\$ 55,100	\$ 98,200	\$ 57,400	\$ -	\$ 263,000

Projects Funded with Debt

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

Capital Reserve Appropriations

Public Works	Capital Reserve - City Hall Parking Facility	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 35,000	\$ 185,000
Public Works	Capital Reserve - Wells Street Parking Facility	30,000	30,000	30,000	30,000	30,000	35,000	185,000
Total: Capital Reserve Appropriations		\$ 60,000	\$ 70,000	\$ 370,000				

Projects Funded with Cash

Public Works	Parking Smart Meter Technology	\$ -	\$ -	\$ -	\$ -	\$ 250,000	\$ -	\$ 250,000
Public Works	Surface Parking Lot Maintenance	-	-	51,300	-	-	53,000	104,300
Total: Projects Funded with Cash		\$ -	\$ -	\$ 51,300	\$ -	\$ 250,000	\$ 53,000	\$ 354,300

Subtotal: Uses of Cash

(Capital Reserve Appropriations plus Projects Funded with Cash)

TOTAL CAPITAL PROGRAM

\$ 112,300	\$ 60,000	\$ 166,400	\$ 158,200	\$ 367,400	\$ 123,000	\$ 987,300
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New Cash Requirement FY 20-25: reconciliation

<i>Total: Uses of cash</i>	\$60,000	\$60,000	\$111,300	\$60,000	\$310,000	\$123,000	\$724,300
<i>New Funds needed</i>	\$ 60,000	\$ 60,000	\$ 111,300	\$ 60,000	\$310,000	\$123,000	\$724,300

Parking Fund 2020 - 2025 Capital Improvement Program Debt Summary

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Existing and Authorized Debt	\$2,665,000	\$2,145,000	\$1,625,000	\$1,105,000	\$950,000	\$795,000
New Issues Proposed	-	-	-	-	-	-
Principal Paid	(520,000)	(520,000)	(520,000)	(155,000)	(155,000)	(155,000)
Total Existing Debt & Issues Proposed	\$2,145,000	\$1,625,000	\$1,105,000	\$950,000	\$795,000	\$640,000

	<u>Issue</u>	<u>Term</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Existing & Authorized Debt Service (P & I)			\$589,025	\$574,975	\$559,975	\$184,700	\$179,900	\$175,100
<u>Proposed Debt Service CIP FY20</u>								
N/A								
<u>Proposed Debt Service CIP FY21</u>								
N/A								
<u>Proposed Debt Service CIP FY22</u>								
N/A								
<u>Proposed Debt Service CIP FY23</u>								
N/A								
<u>Proposed Debt Service CIP FY24</u>								
N/A								
<u>Proposed Debt Service CIP FY25</u>								
N/A								
Total CIP 20-25 Debt Service Proposed			0	0	0	0	0	0
Total Projected Debt Service: Parking Fund			\$589,025	\$574,975	\$559,975	\$184,700	\$179,900	\$175,100

**CITY OF KEENE, NEW HAMPSHIRE
CAPITAL IMPROVEMENT PROGRAM FY20-FY25
SOLID WASTE FUND MULTI-YEAR PROJECTIONS**

	ACTUAL FY 16/17	ACTUAL FY 17/18	BUDGET FY 18/19	PROJECTED FY19/20	PROJECTED FY20/21	PROJECTED FY21/22	PROJECTED FY22/23	PROJECTED FY23/24	PROJECTED FY24/25
REVENUES									
Charges for Services	\$ 4,707,619	\$ 4,740,065	\$ 4,670,483	\$ 4,661,132	\$ 4,708,970	\$ 4,757,320	\$ 4,806,186	\$ 4,855,575	\$ 4,905,491
Other Financing Sources	44,867	49,787	37,495	31,495	27,790	24,085	20,379	16,674	12,969
Use of Surplus			89,429						
Bond Issue									
Capital Reserve									
Miscellaneous	18,092								
TOTAL REVENUES	\$ 4,770,577	\$ 4,789,852	\$ 4,797,407	\$ 4,692,627	\$ 4,736,760	\$ 4,781,405	\$ 4,826,565	\$ 4,872,249	\$ 4,918,460
EXPENDITURES									
Management/Admin.	\$ 627,253	\$ 594,808	\$ 625,246	\$ 633,527	\$ 641,943	\$ 650,494	\$ 659,184	\$ 668,015	\$ 676,991
Transfer/Recycling Facility	102,923	140,752	118,761	119,058	119,356	119,654	119,953	120,253	120,554
Landfill / Operations	2,978,825	2,925,381	3,007,743	3,037,152	3,066,854	3,096,852	3,127,150	3,157,750	3,188,655
Recycling	545,561	597,561	568,621	585,575	603,035	621,015	639,531	658,600	678,237
Household Hazardous Waste	27,283	38,017	99,063	100,054	50,527	51,032	51,543	52,058	52,579
Demolition Transfer/Disposal	158,166	176,792	148,109	149,795	151,501	153,228	154,975	156,742	158,531
Landfill Monitoring	24,817	17,653	59,500	60,095	60,696	61,303	61,916	62,535	63,160
Landfill Gas System	70,646	72,985	59,505	60,695	61,909	63,147	64,410	65,698	67,012
Debt Service	47,771	48,135	45,860	80,810	92,808	89,465	62,642	60,464	58,286
SUBTOTAL	\$ 4,583,244	\$ 4,612,084	\$ 4,732,407	\$ 4,826,761	\$ 4,848,628	\$ 4,906,190	\$ 4,941,303	\$ 5,002,116	\$ 5,064,005
CAPITAL	45,000	50,000	65,000	65,000	65,000	72,000	65,000	65,000	65,000
TOTAL EXPENDITURES	\$ 4,628,244	\$ 4,662,084	\$ 4,797,407	\$ 4,891,761	\$ 4,913,628	\$ 4,978,190	\$ 5,006,303	\$ 5,067,116	\$ 5,129,005
NET REVENUE (EXPENSE)	\$ 142,333	\$ 127,768	\$ (0)	\$ (199,134)	\$ (176,868)	\$ (196,785)	\$ (179,738)	\$ (194,867)	\$ (210,545)

SOLID WASTE FUND INCREASE 1.40% 3.66% 1.97% 0.45% 1.31% 0.56% 1.21% 1.22%

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) \$ (112,964) \$ (90,698) \$ (110,615) \$ (93,568) \$ (108,697) \$ (124,375)

Projected current resources at fiscal year end \$ 1,335,221 \$ 1,222,257 \$ 1,131,559 \$ 1,020,944 \$ 927,376 \$ 818,679 \$ 694,304

Current resources as a percentage of operating budget 28.21% 25.32% 23.34% 20.81% 18.77% 16.37% 13.71%

Note on Revenue Estimates - Charges for Services projections anticipate a \$1 per ton tip fee increase each year from 2020 through 2025. The increase represents a .81% increase in the blended tip fee rate in 2020, and a six year increase of 4.62%. City staff will be reviewing the current operating model for the Solid Waste Operation over the next several fiscal years, and developing sustainable alternative operating and funding models for the consideration of the City Council.

CITY OF KEENE, NEW HAMPSHIRE
Solid Waste Fund 2020 - 2025 Capital Improvement Program Summary

<u>Dept.</u>	<u>Project Name</u>	<u>2019/2020</u>	<u>2020/2021</u>	<u>2021/2022</u>	<u>2022/2023</u>	<u>2023/2024</u>	<u>2024/2025</u>	<u>TOTAL</u>
Public Works	Capital Reserve - Recycling/Transfer Facility	\$ 65,000	\$ 65,000	\$ 65,000	\$ 65,000	\$ 65,000	\$ 65,000	\$ 390,000
Public Works	Recycling Equipment Replacement	300,000	-	75,000	-	-	-	375,000
Public Works	Scale System Replacement	-	-	-	92,000	-	-	92,000
Public Works	Transfer Station Interior Updates	-	-	7,000	150,000	-	-	157,000
Public Works	Pavement Replacement	-	-	-	-	-	145,000	145,000
Public Works	Transfer Station Roof Replacement	166,750	-	-	-	-	-	166,750
TOTAL CAPITAL PROGRAM		\$ 531,750	\$ 65,000	\$ 147,000	\$ 307,000	\$ 65,000	\$ 210,000	\$ 1,325,750

PROJECT FUNDING DETAIL

Reserve Funded Projects

Public Works	Recycling Equipment Replacement	\$ 300,000	\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ 375,000
Public Works	Pavement Replacement	-	-	-	-	\$ 145,000	\$ -	\$ 145,000
Public Works	Scale System Replacement	-	-	-	92,000	-	-	92,000
Public Works	Transfer Station Interior Updates	-	-	-	150,000	-	-	150,000
Total: Reserve Funded Projects		\$ 300,000	\$ -	\$ 75,000	\$ 242,000	\$ -	\$ 145,000	\$ 762,000

Projects Funded with Debt

Public Works	Transfer Station Roof Replacement	\$ 166,750	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 166,750
Total: Projects Funded with Debt		\$ 166,750	\$ -	\$ 166,750				

Capital Reserve Appropriations

Public Works	Capital Reserve - Recycling/Transfer Facility	\$ 65,000	\$ 65,000	\$ 65,000	\$ 65,000	\$ 65,000	\$ 65,000	\$ 390,000
Total: Capital Reserve Appropriations		\$ 65,000	\$ 390,000					

Projects Funded with State Grant

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

Projects Funded with Cash

Public Works	Transfer Station Interior Updates	\$ -	\$ -	\$ 7,000	\$ -	\$ -	\$ -	\$ 7,000
Total: Projects Funded with Cash		\$ -	\$ -	\$ 7,000	\$ -	\$ -	\$ -	\$ 7,000

Subtotal: Uses of Cash

(Capital Reserve Appropriations plus Projects Funded with Cash)

\$ 65,000	\$ 65,000	\$ 72,000	\$ 65,000	\$ 65,000	\$ 65,000	\$ 65,000	\$ 397,000
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TOTAL CAPITAL PROGRAM

\$ 531,750	\$ 65,000	\$ 147,000	\$ 307,000	\$ 65,000	\$ 210,000	\$ 1,325,750
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Solid Waste Fund 2020 - 2025 Capital Improvement Program Debt Summary

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Existing and Authorized Debt	\$400,500	\$508,750	\$439,133	\$369,517	\$323,400	\$277,283
New Issues Proposed	166,750	-	-	-	-	-
Principal Paid	(58,500)	(69,617)	(69,617)	(46,117)	(46,117)	(46,117)
Total Existing Debt & Issues Proposed	\$508,750	\$439,133	\$369,517	\$323,400	\$277,283	\$231,167

	<u>Issue</u>	<u>Term</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Existing & Authorized Debt Service (P & I)			\$76,850	\$74,035	\$71,220	\$44,925	\$43,275	\$41,625
<u>Proposed Debt Service CIP FY20</u>								
Transfer Station Roof Repair	166,750	15	3,960	18,773	18,245	17,717	17,189	16,661
<u>Proposed Debt Service CIP FY21</u>								
N/A								
<u>Proposed Debt Service CIP FY22</u>								
N/A								
<u>Proposed Debt Service CIP FY23</u>								
N/A								
<u>Proposed Debt Service CIP FY24</u>								
N/A								
<u>Proposed Debt Service CIP FY25</u>								
N/A								
Total CIP 20-25 Debt Service Proposed			3,960	18,773	18,245	17,717	17,189	16,661
Total Projected Debt Service: Solid Waste Fund			\$80,810	\$92,808	\$89,465	\$62,642	\$60,464	\$58,286

**CITY OF KEENE, NEW HAMPSHIRE
CAPITAL IMPROVEMENT PROGRAM FY20-FY25
Sewer Fund Multi-Year Projections**

	ACTUAL FY 16/17	ACTUAL FY 17/18	BUDGET FY 18/19	PROJECTED FY19/20	PROJECTED FY20/21	PROJECTED FY21/22	PROJECTED FY22/23	PROJECTED FY23/24	PROJECTED FY24/25
REVENUES									
Taxes	\$38,840	\$36,518							
Intergovernmental	160,601	313,978	150,000	151,125	152,258	153,400	154,551	155,710	156,878
Charges for Services	6,612,353	6,492,294	6,363,408	6,586,923	6,693,710	6,704,411	6,881,467	6,915,377	6,657,726
Miscellaneous	39,940	58,115	16,200	16,322	16,444	16,567	16,691	16,817	16,943
Use of Surplus			(839,389)						
TOTAL REVENUES	\$6,851,734	\$6,900,905	5,690,219	6,754,370	\$6,862,412	\$6,874,378	\$7,052,709	\$7,087,904	\$6,831,547
EXPENSES									
Sewer Administration	\$550,258	\$672,602	\$615,429	\$622,814	\$630,287	\$637,851	\$645,505	\$653,251	\$661,090
Mains & Manholes	289,299	261,105	357,084	361,369	365,705	370,094	374,535	379,029	383,578
Services	(11,371)	9,772	10,840	10,970	11,102	11,235	11,370	11,506	11,644
Martell Court Pump Station	117,020	113,905	128,716	130,261	131,824	133,406	135,006	136,627	138,266
Laboratory	209,715	217,677	226,128	228,842	231,588	234,367	237,179	240,026	242,906
Maintenance	103,720	133,544	150,192	151,994	153,818	155,664	157,532	159,422	161,335
WWTP	2,546,310	2,504,066	2,699,966	2,732,365	2,765,154	2,798,336	2,831,916	2,865,899	2,900,290
Depreciation Expense	1,186,029	1,189,849	1,247,250	1,207,696	1,265,959	1,225,812	1,284,948	1,244,199	1,304,222
Debt Service	257,148	237,804	254,614	237,649	241,468	242,953	207,344	172,115	139,029
SUBTOTAL	5,248,129	5,340,324	5,690,219	5,683,960	5,796,905	5,809,718	5,885,335	5,862,074	5,942,360
MINOR CAPITAL	124,048	83,802	0	0	0	0	0	0	0
TOTAL EXPENSE	\$5,372,177	\$5,424,126	\$5,690,219	5,683,960	\$5,796,905	\$5,809,718	\$5,885,335	\$5,862,074	\$5,942,360
NET REVENUE (EXPENSE)	\$1,479,557	\$1,476,779	\$0	\$1,070,410	\$1,065,507	\$1,064,660	\$1,167,374	\$1,225,830	\$889,187

SEWER FUND INCREASE -12.48% 0.97% 5.92% -0.11% 1.99% 0.22% 1.30% -0.40% 1.37%

CITY OF KEENE, NEW HAMPSHIRE
CAPITAL IMPROVEMENT PROGRAM FY20-FY25
Sewer Fund Multi-Year Projections

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 20 thru FY 25:

Add Back: Depreciation	\$1,207,696	\$1,265,959	\$1,225,812	\$1,284,948	\$1,244,199	\$1,304,222
State Aid Grant Principal Receipts	55,628	54,257	52,784	51,135	49,828	48,688
Subtract: Debt Service Principal (Note 3)	(1,419,634)	(1,406,223)	(1,498,256)	(1,487,757)	(1,373,257)	(1,120,315)
Trfers to Capital Reserve (Note 2)	(735,000)	(795,000)	(655,000)	(820,000)	(945,000)	(870,000)
Capital Outlays Funded through Rates and Fund Resources (Note 2)	(179,100)	(184,500)	(190,000)	(195,700)	(201,600)	(251,782)
<i>Projected Annual Cash Surplus (Deficit)</i>	\$0	\$0	\$0	\$0	\$0	\$0

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 20-25 to cover capital outlays and debt service in future years.

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

\$	360.82	\$	373.44	\$	373.44	\$	379.38	\$	386.81	\$	383.37
\$	7.56	\$	12.62	\$	-	\$	5.94	\$	7.43	\$	(3.44)
	2.14%		3.50%		0.00%		1.59%		1.96%		-0.89%

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

\$	213.34	\$	221.44	\$	221.44	\$	226.84	\$	232.78	\$	227.38
\$	3.51	\$	8.10	\$	-	\$	5.40	\$	5.94	\$	(5.40)
	1.67%		3.80%		0.00%		2.44%		2.62%		-2.32%

CITY OF KEENE, NEW HAMPSHIRE

Sewer Fund 2020 - 2025 Capital Improvement Program Summary

<u>Dept.</u>	<u>Project Name</u>	<u>2019/2020</u>	<u>2020/2021</u>	<u>2021/2022</u>	<u>2022/2023</u>	<u>2023/2024</u>	<u>2024/2025</u>	<u>TOTAL</u>
Public Works	Capital Reserve: Martell Court	\$ -		\$ 35,000	\$ 75,000	\$ 75,000	\$ -	\$ 185,000
Public Works	Capital Reserve: Sewer Infrastructure	615,000	625,000	450,000	575,000	700,000	700,000	3,665,000
Public Works	Capital Reserve: Wastewater Treatment Plant	120,000	170,000	170,000	170,000	170,000	170,000	970,000
Public Works	Martell Court Phase 2	-	130,810	-	-	-	-	130,810
Public Works	Martell Court Roof	-	-	-	32,714	-	-	32,714
Public Works	Sewer Main Improvements	661,301	1,455,513	506,708	365,336	782,664	731,793	4,503,315
Public Works	Sewer Manhole Lining	-	-	-	157,600	162,300	167,200	487,100
Public Works	Sewer Structural Repairs & Lining	179,100	184,500	190,000	195,700	201,600	207,600	1,158,500
Public Works	WWTP Access Road Repavement	-	-	-	-	583,000	-	583,000
Public Works	WWTP Blower Replacement	61,076	179,360	184,741	-	-	-	425,177
Public Works	WWTP HVAC Ductwork Insulation	-	-	-	35,892	-	-	35,892
Public Works	WWTP Generator Replacement	-	123,636	-	-	-	-	123,636
Public Works	WWTP Laboratory Renovation	-	110,000	-	-	-	-	110,000
Public Works	Wastwater SCADA Radio	-	-	-	-	-	44,182	44,182
TOTAL CAPITAL PROGRAM		\$ 1,636,477	\$ 2,978,819	\$ 1,536,449	\$ 1,607,242	\$ 2,674,564	\$ 2,020,775	\$ 12,454,326

PROJECT FUNDING DETAIL

Reserve Funded Projects

Public Works	Martell Court Phase 2	-	130,810	-	-	-	-	130,810
Public Works	Martell Court Roof	-	-	-	32,714	-	-	32,714
Public Works	Sewer Main Improvements	661,301	-	506,708	365,336	782,664	731,793	3,047,802
Public Works	Sewer Manhole Lining	-	-	-	157,600	162,300	167,200	487,100
Public Works	WWTP Access Road Repavement	-	-	-	-	583,000	-	583,000
Public Works	WWTP Blower Replacement	-	179,360	184,741	-	-	-	364,101
Public Works	WWTP HVAC Ductwork Insulation	-	-	-	35,892	-	-	35,892
Public Works	WWTP Generator Replacement	-	123,636	-	-	-	-	123,636
Total: Reserve Funded Projects		\$ 661,301	\$ 433,806	\$ 691,449	\$ 591,542	\$ 1,527,964	\$ 898,993	\$ 4,805,055

Projects Funded with Debt

Public Works	Martell Court Headworks Treatment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Works	Sewer Main Improvements	-	1,455,513	-	-	-	-	1,455,513
Total: Projects Funded with Debt		\$ -	\$ 1,455,513	\$ -	\$ -	\$ -	\$ -	\$ 1,455,513

Projects Funded with Grants

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

Capital Reserve Appropriations

Public Works	Capital Reserve: Martell Court	\$ -	\$ -	\$ 35,000	\$ 75,000	\$ 75,000	\$ -	\$ 185,000
Public Works	Capital Reserve: Sewer Infrastructure	615,000	625,000	450,000	575,000	700,000	700,000	3,665,000
Public Works	Capital Reserve: Wastewater Treatment Plant	120,000	170,000	170,000	170,000	170,000	170,000	970,000
Total: Capital Reserve Appropriations		\$ 735,000	\$ 795,000	\$ 655,000	\$ 820,000	\$ 945,000	\$ 870,000	\$ 4,820,000

CITY OF KEENE, NEW HAMPSHIRE
Sewer Fund 2020 - 2025 Capital Improvement Program Summary

<u>Dept.</u>	<u>Project Name</u>	<u>2019/2020</u>	<u>2020/2021</u>	<u>2021/2022</u>	<u>2022/2023</u>	<u>2023/2024</u>	<u>2024/2025</u>	<u>TOTAL</u>
<u>Projects Funded with Cash</u>								
Public Works	Sewer Structural Repairs & Lining	\$ 179,100	\$ 184,500	\$ 190,000	\$ 195,700	\$ 201,600	\$ 207,600	1,158,500
Public Works	WWTP Blower Replacement	61,076	-	-	-	-	-	61,076
Public Works	WWTP Laboratory Renovation		110,000					110,000
Public Works	Wastwater SCADA Radio						44,182	44,182
Total: Projects Funded with Cash		\$ 240,176	\$ 294,500	\$ 190,000	\$ 195,700	\$ 201,600	\$ 251,782	\$ 1,373,758
Subtotal: Uses of Current Cash		\$ 975,176	\$ 1,089,500	\$ 845,000	\$ 1,015,700	\$ 1,146,600	\$ 1,121,782	\$ 6,193,758
(Capital Reserve Appropriations plus Projects Funded with Current Cash)								
TOTAL: CAPITAL PROGRAM		\$ 1,636,477	\$ 2,978,819	\$ 1,536,449	\$ 1,607,242	\$ 2,674,564	\$ 2,020,775	\$ 12,454,326

New Cash Requirement FY 20-25: Reconciliation

Total: Uses of Cash	\$975,176	\$1,089,500	\$845,000	\$1,015,700	\$1,146,600	\$1,121,782	\$6,193,758
Use of Retained Earnings/Project Balance	(61,076)	(110,000)					(\$171,076)
New Funds Needed	\$ 914,100	\$ 979,500	\$ 845,000	\$1,015,700	\$1,146,600	\$1,121,782	\$6,022,682

Sewer Fund 2020 - 2025 Capital Improvement Program Debt Summary

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Existing and Authorized Debt	\$9,905,256	\$8,485,623	\$8,534,913	\$7,036,657	\$5,548,900	\$4,175,643
New Issues Proposed	-	1,455,513	-	-	-	-
Principal Paid	(1,419,633)	(1,406,223)	(1,498,257)	(1,487,757)	(1,373,257)	(1,120,314)
Total Existing Debt & Issues Proposed	\$8,485,623	\$8,534,913	\$7,036,657	\$5,548,900	\$4,175,643	\$3,055,329

	<u>Issue</u>	<u>Term</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Existing & Authorized Debt Service (P & I)			\$1,657,282	\$1,613,122	\$1,577,344	\$1,535,843	\$1,390,724	\$1,109,304
<u>Proposed Debt Service CIP FY20</u>								
N/A								
<u>Proposed Debt Service CIP FY21</u>								
Colony Court -Bloomer Swamp Main	1,455,513	15		34,568	163,867	159,257	154,648	150,039
<u>Proposed Debt Service CIP FY22</u>								
N/A								
<u>Proposed Debt Service CIP FY23</u>								
N/A								
<u>Proposed Debt Service CIP FY24</u>								
N/A								
<u>Proposed Debt Service CIP FY25</u>								
N/A								
Total CIP 20-25 Debt Service Proposed			0	34,568	163,867	159,257	154,648	150,039
Total Projected Debt Service: Sewer Fund			\$1,657,282	\$1,647,690	\$1,741,210	\$1,695,101	\$1,545,372	\$1,259,343

CITY OF KEENE, NEW HAMPSHIRE
CAPITAL IMPROVEMENT PROGRAM FY20-FY25
WATER FUND MULTI-YEAR PROJECTIONS

	ACTUAL FY 16/17	ACTUAL FY 17/18	BUDGET FY 18/19	PROJECTED FY19/20	PROJECTED FY20/21	PROJECTED FY21/22	PROJECTED FY22/23	PROJECTED FY23/24	PROJECTED FY24/25
REVENUES									
Taxes	\$106,600	\$100,228							
Intergovernmental									
Charges for Services	3,510,359	3,903,050	4,070,119	4,308,062	4,437,893	4,502,152	4,653,746	4,698,507	4,852,574
Miscellaneous	30,253	42,909	17,500	28,698	28,896	29,096	29,300	29,503	29,709
Use of Surplus		54	(160,849)	448,325		175,000		(200,000)	300,000
TOTAL REVENUES	\$3,647,212	\$4,046,241	\$3,926,770	\$4,785,085	\$4,466,789	\$4,706,248	\$4,683,046	\$4,528,010	\$5,182,283
EXPENSES									
Public Works Water	\$790,443	\$759,368	\$810,023	819,743	829,580	839,535	849,610	859,805	870,123
Water Main & Trench Repairs	199,827	184,044	221,332	223,988	226,675	229,395	232,148	234,934	237,753
Water Supply	155,936	177,060	177,088	179,213	181,364	183,540	185,743	187,972	190,227
Hydrants	128,225	105,051	130,014	131,574	133,153	134,751	136,368	138,004	139,660
Meters	386,269	409,642	450,041	455,441	460,907	466,437	472,035	477,699	483,431
Water Services	51,936	70,915	46,750	47,311	47,878	48,453	49,034	49,623	50,218
Water Treatment Facility	609,743	629,093	683,693	691,897	700,200	708,602	717,106	725,711	734,420
Laboratory	212,563	195,803	233,033	235,829	238,659	241,523	244,422	247,355	250,323
Maintenance	131,749	152,864	155,892	157,763	159,656	161,572	163,511	165,473	167,458
Depreciation Expense	1,009,154	952,237	979,000	990,748	1,002,637	1,014,669	1,026,845	1,039,167	1,051,637
Debt Service	46,634	47,022	39,905	76,541	110,867	102,327	147,790	191,988	209,822
Subtotal	3,722,480	3,683,100	3,926,770	4,010,049	4,091,577	4,130,805	4,224,610	4,317,730	4,385,073
MINOR CAPITAL	207,032	188,445		0	0	0	0	0	0
TOTAL EXPENSES	\$3,929,512	\$3,871,544	3,926,770	4,010,049	\$4,091,577	\$4,130,805	\$4,224,610	\$4,317,730	\$4,385,073
NET REVENUE (EXPENSE)	\$ (282,300)	\$ 174,696	\$ -	\$ 775,036	\$ 375,212	\$ 575,443	\$ 458,436	\$ 210,280	\$ 797,210

WATER FUND INCREASE	1.81%	-1.48%	-0.07%	2.12%	2.03%	0.96%	2.27%	2.20%	1.56%
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CITY OF KEENE, NEW HAMPSHIRE
CAPITAL IMPROVEMENT PROGRAM FY20-FY25
WATER FUND MULTI-YEAR PROJECTIONS

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 20 thru FY 25.

Add Back: Depreciation	\$990,748	\$1,002,637	\$1,014,669	\$1,026,845	\$1,039,167	\$1,051,637
State Aid Grant Principal Receipts	(188,584)	(277,049)	(279,712)	(205,781)	(244,647)	(244,647)
Subtract: Debt Svc Principal (Note 3)	(760,000)	(830,000)	(855,000)	(940,000)	(900,000)	(900,000)
Tfrs to Capital Reserve (Note 2)	(817,200)	(270,800)	(455,400)	(339,500)	(104,800)	(704,200)
Capital Outlays Funded through Rates and Fund Resources (Note 2)	\$0	\$0	(\$0)	(\$0)	(\$0)	\$0
Projected Annual Cash Surplus (Deficit)						

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 20-25 to cover capital outlays and debt service in future years.

Billing Projections

	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Combined Water and Sewer Utility Billing Projections: Residential property with a 5/8" connection and consumption of 27 HCF (hundred cubic feet) per quarter	\$ 360.82	\$ 370.74	\$ 372.09	\$ 379.38	\$ 386.81	\$ 383.37
	\$ 7.56	\$ 9.92	\$ 1.35	\$ 7.29	\$ 7.43	\$ (3.44)
	2.14%	2.75%	0.36%	1.96%	1.96%	-0.89%
Water Utility Billing Projections: Residential property with a 5/8" connection and consumption of 27 HCF (hundred cubic feet) per quarter	\$ 147.48	\$ 152.00	\$ 147.68	\$ 152.54	\$ 154.03	\$ 155.99
	\$ 4.05	\$ 4.52	\$ (4.32)	\$ 4.86	\$ 1.49	\$ 1.96
	2.82%	3.06%	-2.84%	3.29%	0.98%	1.27%

CITY OF KEENE, NEW HAMPSHIRE
Water Fund 2020 - 2025 Capital Improvement Program Summary

Dept.	Project Name	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	TOTAL
Public Works	Capital Reserve: Water Treatment Facility	\$ 85,000	\$ 155,000	\$ 155,000	\$ 240,000	\$ 200,000	\$ 200,000	\$ 1,035,000
Public Works	Capital Reserve: Water Infrastructure	675,000	675,000	700,000	700,000	700,000	700,000	4,150,000
Public Works	Black Brook Storage Tank Repairs	5,000	-	30,000	-	-	-	35,000
Public Works	Chapman Rd Water Tank Repairs	25,000	-	54,449	-	-	-	79,449
Public Works	Dam Improvements	1,797,030	-	-	-	-	-	1,797,030
Public Works	Emergency Generators Replacement / Upgrade	-	-	-	-	250,793	-	250,793
Public Works	Fox Ave & Glenn Rd Pump Station Upgrade	42,892	-	-	-	-	-	42,892
Public Works	Water Distribution Improvements	-	-	107,812	1,278,233	115,942	796,343	2,298,330
Public Works	Water Main - Bridge Improvements	-	-	47,300	-	-	-	47,300
Public Works	Water Main Cleaning and Lining	544,000	174,800	356,500	237,700	-	596,200	1,909,200
Public Works	Water Valve Replacement	93,200	96,000	98,900	101,800	104,800	108,000	602,700
Public Works	Well Field Upgrades	75,000	-	-	408,590	-	1,226,000	1,709,590
Public Works	Water Supply Master Plan	100,000	-	-	-	-	-	100,000
Public Works	WTF 1.5 MG Storage Tank Repairs	90,041	-	343,667	-	-	-	433,708
Public Works	WTF 3 MG Storage Tank Repairs	-	-	-	2,275,882	-	-	2,275,882
Public Works	WTF Filter Media Replacement	191,466	-	203,126	-	215,496	-	610,088
Public Works	WTF Instrumentation Upgrade	-	-	-	-	-	39,000	39,000
Public Works	WTF Pavement Replacement	-	-	-	71,900	-	-	71,900
TOTAL CAPITAL PROGRAM		\$ 3,723,629	\$ 1,100,800	\$ 2,096,754	\$ 5,314,105	\$ 1,587,031	\$ 3,665,543	\$ 17,487,862

PROJECT FUNDING DETAIL

Reserve Funded Projects

Public Works	Black Brook Storage Tank Repairs	5,000	-	30,000	-	-	-	35,000
Public Works	Chapman Rd Water Tank Repairs	25,000	-	54,449	-	-	-	79,449
Public Works	Emergency Generators Replacement / Upgrade	-	-	-	-	250,793	-	250,793
Public Works	Fox Ave & Glenn Rd Pump Station Upgrade	42,892	-	-	-	-	-	42,892
Public Works	Water Distribution Improvements	-	-	107,812	1,278,233	115,942	796,343	2,298,330
Public Works	Water Main - Bridge Improvements	-	-	47,300	-	-	-	47,300
Public Works	Well Field Evaluation Plan	75,000	-	-	408,590	-	-	483,590
Public Works	WTF 1.5 MG Storage Tank Repairs	90,041	-	343,667	-	-	-	433,708
Public Works	WTF Filter Media Replacement	191,466	-	203,126	-	215,496	-	610,088
Public Works	WTF Instrumentation Upgrade	-	-	-	-	-	39,000	39,000
Public Works	WTF Pavement Replacement	-	-	-	71,900	-	-	71,900
Total: Reserve Funded Projects		\$ 429,399	\$ -	\$ 786,354	\$ 1,758,723	\$ 582,231	\$ 835,343	\$ 4,392,050

Projects Funded with Debt

Public Works	Dam Improvements	\$ 1,717,030	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,717,030
Public Works	Well Field Upgrades	-	-	-	-	-	\$ 1,226,000	\$ 1,226,000
Public Works	WTF 3 MG Storage Tank Repairs	-	-	-	\$ 2,275,882	-	-	\$ 2,275,882
Total: Projects Funded with Debt		\$ 1,717,030	\$ -	\$ -	\$ 2,275,882	\$ -	\$ 1,226,000	\$ 5,218,912

Capital Reserve Appropriations

Public Works	Capital Reserve: Water Treatment Facility	\$ 85,000	\$ 155,000	\$ 155,000	\$ 240,000	\$ 200,000	\$ 200,000	\$ 1,035,000
Public Works	Capital Reserve: Water Infrastructure	675,000	675,000	700,000	700,000	700,000	700,000	4,150,000
Total: Capital Reserve Appropriations		\$ 760,000	\$ 830,000	\$ 855,000	\$ 940,000	\$ 900,000	\$ 900,000	\$ 5,185,000

Projects Funded with State Grant

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

Projects Funded with Cash

Public Works	Dam Improvements	\$ 80,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 80,000
Public Works	Water Supply Master Plan	100,000	-	-	-	-	-	100,000
Public Works	Water Valve Replacement	93,200	96,000	98,900	101,800	104,800	108,000	602,700
Public Works	Water Main Cleaning and Lining	544,000	174,800	356,500	237,700	-	596,200	1,909,200
Total: Projects Funded with Cash		\$ 817,200	\$ 270,800	\$ 455,400	\$ 339,500	\$ 104,800	\$ 704,200	\$ 2,691,900

Subtotal: Uses of Cash

(Capital Reserve Appropriations plus Projects Funded with Cash)

TOTAL CAPITAL PROGRAM

\$ 3,723,629	\$ 1,100,800	\$ 2,096,754	\$ 5,314,105	\$ 1,587,031	\$ 3,665,543	\$ 17,487,862
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New Cash Requirement FY 20-25: Reconciliation

Total: Uses of Cash	\$ 1,577,200	\$ 1,100,800	\$ 1,310,400	\$ 1,279,500	\$ 1,004,800	\$ 1,604,200	\$ 7,876,900
Use of Retained Earnings/Project Balance	(448,325)	-	(175,000)	-	-	(300,000)	(923,325)
New Funds Needed	\$ 1,128,875	\$ 1,100,800	\$ 1,135,400	\$ 1,279,500	\$ 1,004,800	\$ 1,304,200	\$ 6,953,575

Water Fund 2020 - 2025 Capital Improvement Program Debt Summary

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Existing and Authorized Debt	\$1,273,568	\$2,802,016	\$2,524,967	\$2,245,255	\$4,315,357	\$4,070,711
New Issues Proposed	1,717,030	-	-	2,275,882	-	1,226,000
Principal Paid	(188,583)	(277,049)	(279,711)	(205,780)	(244,646)	(244,646)
Total Existing Debt & Issues Proposed	\$2,802,016	\$2,524,967	\$2,245,255	\$4,315,357	\$4,070,711	\$5,052,066

	<u>Issue</u>	<u>Term</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Existing & Authorized Debt Service (P & I)			\$224,345	\$222,545	\$220,745	\$142,303	\$64,300	\$62,500
<u>Proposed Debt Service CIP FY20</u>								
Woodward Pond Dam	1,717,030	20	40,779	165,371	161,294	157,216	153,138	149,060
<u>Proposed Debt Service CIP FY21</u>								
N/A								
<u>Proposed Debt Service CIP FY22</u>								
N/A								
<u>Proposed Debt Service CIP FY23</u>								
3 MG Water Tank	2,275,882	20				54,052	219,196	213,791
<u>Proposed Debt Service CIP FY24</u>								
N/A								
<u>Proposed Debt Service CIP FY25</u>								
Well Fields Upgrade	1,226,000	20						29,118
Total CIP 20-25 Debt Service Proposed			40,779	165,371	161,294	211,268	372,334	391,968
Total Projected Debt Service: Water Fund			\$265,124	\$387,916	\$382,039	\$353,570	\$436,634	\$454,468

**CITY OF KEENE, NEW HAMPSHIRE
CAPITAL IMPROVEMENT PROGRAM FY20-FY25
EQUIPMENT FUND MULTI-YEAR PROJECTIONS**

	ACTUAL FY 16/17	ACTUAL FY 17/18	BUDGET FY 18/19	PROJECTED FY19/20	PROJECTED FY20/21	PROJECTED FY21/22	PROJECTED FY22/23	PROJECTED FY23/24	PROJECTED FY24/25
REVENUES									
Charges for Services	\$2,311,293	\$2,367,654	\$2,478,689	\$2,563,011	\$2,650,249	\$2,739,876	\$2,793,408	\$2,847,998	\$2,904,971
Miscellaneous	21,486	16,472	4,495	4,495	2,529	2,555	2,580	2,606	2,632
Use of (Addition to) Surplus			(165,207)						
Equipment Sales	1,800	23,910	1,836	1,854	1,873	1,892	1,911	1,930	1,949
TOTAL REVENUES	\$2,334,579	\$2,408,036	\$2,319,813	\$2,569,360	\$2,654,651	\$2,744,323	\$2,797,899	\$2,852,534	\$2,909,552
EXPENSES									
Personnel & Benefits	\$529,863	\$572,204	\$598,156	\$616,998	\$624,093	\$631,271	\$638,530	\$645,873	\$653,301
Operating Costs	1,189,233	1,236,370	1,326,657	\$1,327,498	\$1,364,378	\$1,402,337	\$1,456,418	\$1,491,665	\$1,528,123
Depreciation	370,893	364,852	395,000	400,000	400,000	410,000	410,000	420,000	445,000
SUBTOTAL	2,089,989	2,173,427	2,319,813	2,344,496	2,388,472	2,443,608	2,504,948	2,557,538	2,626,423
MINOR CAPITAL			0	0	0	0	0	0	0
TOTAL EXPENSE	\$2,089,989	\$2,173,427	\$2,319,813	\$2,344,496	\$2,388,472	\$2,443,608	\$2,504,948	\$2,557,538	\$2,626,423
NET REVENUE (EXPENSE)	\$244,590	\$234,609	(\$0)	\$224,864	\$266,179	\$300,715	\$292,950	\$294,996	\$283,129

EQUIPMENT FUND INCREASE (DEC) -5.98% -1.32% 14.78% 1.06% 1.88% 2.31% 2.51% 2.10% 2.69%

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 20 thru FY 25:

Add: Depreciation	\$400,000	\$400,000	\$400,000	\$410,000	\$410,000	\$410,000	\$410,000	\$420,000	\$445,000
Subtract: Trfs to Capital Reserve (see Note 2)	(665,000)	(700,000)	(700,000)	(700,000)	(700,000)	(700,000)	(625,000)	(625,000)	(625,000)
Debt Service Principal (see Note 2)									
Capital Outlays (see Note 2)	0						(109,178)	0	
Projected Annual Cash Surplus (Deficit)	(\$40,136)		(\$33,821)	\$10,715			(\$31,228)	\$89,996	\$103,129

Projected cash balance at year end \$ 374,283 \$ 334,147 \$ 300,326 \$ 311,040 \$ 279,813 \$ 369,808 \$ 472,937

Projected cash balance as a % of operations budget (total minus depreciation) 17.18% 15.10% 15.30% 13.36% 17.30% 21.68%

Projected percentage increase - internal fleet charges 3.50% 3.50% 3.50% 2.00% 2.00% 2.00%

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 20-25.

CITY OF KEENE, NEW HAMPSHIRE
Equipment Fund 2020 - 2025 Capital Improvement Program Summary

<u>Dept.</u>	<u>Project Name</u>	<u>2019/2020</u>	<u>2020/2021</u>	<u>2021/2022</u>	<u>2022/2023</u>	<u>2023/2024</u>	<u>2024/2025</u>	<u>TOTAL</u>
Public Works	Capital Reserve - Equipment Replacement	\$ 665,000	\$ 700,000	\$ 700,000	\$ 625,000	\$ 625,000	\$ 625,000	\$ 3,940,000
Public Works	Equipment Replacement	717,743	812,356	627,576	607,746	579,787	899,767	4,244,975
Public Works	Roof Replacement	-	-	-	109,178	-	-	109,178
TOTAL CAPITAL PROGRAM		\$ 1,382,743	\$ 1,512,356	\$ 1,327,576	\$ 1,341,924	\$ 1,204,787	\$ 1,524,767	\$ 8,294,153

PROJECT FUNDING DETAIL

Reserve Funded Projects

Public Works	Equipment Replacement	\$ 717,743	\$ 812,356	\$ 627,576	\$ 607,746	\$ 579,787	\$ 899,767	\$ 4,244,975
Total: Reserve Funded Projects		\$ 717,743	\$ 812,356	\$ 627,576	\$ 607,746	\$ 579,787	\$ 899,767	\$ 4,244,975

Projects Funded with Debt

Public Works	n/a	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total: Projects Funded with Debt		\$ -						

Capital Reserve Appropriations

Public Works	Capital Reserve - Equipment Replacement	\$ 665,000	\$ 700,000	\$ 700,000	\$ 625,000	\$ 625,000	\$ 625,000	\$ 3,940,000
Total: Capital Reserve Appropriations		\$ 665,000	\$ 700,000	\$ 700,000	\$ 625,000	\$ 625,000	\$ 625,000	\$ 3,940,000

Projects Funded with State Grant

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

Projects Funded with Cash

Public Works	Roof Replacement	-	-	-	109,178	-	-	109,178
Total: Projects Funded with Cash		\$ -	\$ -	\$ -	\$ 109,178	\$ -	\$ -	\$ 109,178

Subtotal: Uses of Cash

(Capital Reserve Appropriations plus Projects Funded with Cash)

\$ 665,000	\$ 700,000	\$ 700,000	\$ 734,178	\$ 625,000	\$ 625,000	\$ 4,049,178
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TOTAL CAPITAL PROGRAM

\$ 1,382,743	\$ 1,512,356	\$ 1,327,576	\$ 1,341,924	\$ 1,204,787	\$ 1,524,767	\$ 8,294,153
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CITY OF KEENE, NEW HAMPSHIRE
Wells Street Tax Increment Financing District (TIFD)
Opportunities for Additional Public Infrastructure Improvements

FY 20 add library as developed value \$8m (Note 4) FY 26 Library taken out of developed \$8m
 FY 21 Court House taken out of developed \$7,424,100

	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28
value at designation	\$ 48,867,000	\$ 48,867,000	\$ 48,766,200	\$ 48,766,200	\$ 48,766,200	\$ 48,766,200	\$ 48,766,200	\$ 48,766,200	\$ 48,766,200
value, as developed	\$ 101,944,300	\$ 94,520,200	\$ 94,520,200	\$ 94,520,200	\$ 94,520,200	\$ 94,520,200	\$ 86,520,200	\$ 85,691,900	\$ 85,691,900
Captured Assessed Value - Total est available TIFD value increment	\$ 53,077,300	\$ 45,653,200	\$ 45,754,000	\$ 45,754,000	\$ 45,754,000	\$ 45,754,000	\$ 37,754,000	\$ 36,925,700	\$ 36,925,700

Sources Within TIFD

taxes generated by TIFD increment	\$ 1,970,229	\$ 1,694,647	\$ 1,698,388	\$ 1,698,388	\$ 1,698,388	\$ 1,698,388	\$ 1,401,428	\$ 1,370,682	\$ 1,370,682
additional revenue - district court rents paid by State of N.H.	\$ 42,500								
additional revenue NMTC financing loan interest payment	\$ 89,698	\$ 89,698	\$ 89,698	\$ 89,698	\$ 89,698	\$ 89,698			

Total Sources Within TIFD \$ 2,102,427 \$ 1,784,345 \$ 1,788,086 \$ 1,788,086 \$ 1,788,086 \$ 1,401,428 \$ 1,370,682 \$ 1,370,682

Uses Within TIFD (As of Fiscal Year 2019)

Wells Street Parking Facility - debt service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Railroad and Grove Streets, Cypress & Eagle Court - debt service	\$ 392,375	\$ 381,425	\$ 370,475	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Courthouse - debt service	\$ 107,400	\$ 105,800	\$ 104,000	\$ 102,200	\$ 100,400	\$ 98,600	\$ 96,800	\$ 95,000	\$ 93,200
Courthouse Taxes (New Market Tax Credits - 7 years)	\$ 275,583	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Norway Avenue & 93rd Street - debt service	\$ 89,250	\$ 87,750	\$ 85,500	\$ 82,500	\$ 79,500	\$ 76,500	\$ -	\$ -	\$ -
Library Connector and Library Annex Renovation (2017)	\$ 167,513	\$ 161,353	\$ 154,293	\$ 152,253	\$ 148,173	\$ 143,113	\$ 139,073	\$ 135,033	\$ 130,388
Library taxes (New Market tax Credits - 7 years)	\$ 304,384	\$ 311,994	\$ 319,793	\$ 327,788	\$ 335,983	\$ 344,383	\$ -	\$ -	\$ -
Library NMTC management fee	\$ 36,000	\$ 36,000	\$ 36,000	\$ 36,000	\$ 36,000	\$ 36,000	\$ -	\$ -	\$ -
NMTC Audit Fee	\$ 12,500	\$ 12,500	\$ 12,500	\$ 12,500	\$ 12,500	\$ 12,500	\$ -	\$ -	\$ -
NMTC Operating Lease	\$ 220,586	\$ 220,586	\$ 220,586	\$ 220,586	\$ 220,586	\$ 220,586	\$ -	\$ -	\$ -
Wells Street Parking Facility Capital Reserve	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 35,000	\$ 35,000	\$ 40,000	\$ 40,000
Downtown Public Infrastructure Capital Reserve	\$ 200,000	\$ 200,000	\$ 200,000	\$ 225,000	\$ 250,000	\$ 250,000	\$ 100,000	\$ 100,000	\$ 100,000

Total Uses Within TIFD \$ 1,835,590 \$ 1,547,407 \$ 1,533,147 \$ 1,188,827 \$ 1,213,141 \$ 1,216,681 \$ 370,873 \$ 370,033 \$ 363,588

Available For Future Development \$ 266,837 \$ 236,938 \$ 254,940 \$ 599,260 \$ 574,945 \$ 571,405 \$ 1,030,556 \$ 1,000,649 \$ 1,007,094

Total Future Uses Within TIFD \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -

Excess Sources Within TIFD \$ 266,837 \$ 236,938 \$ 254,940 \$ 599,260 \$ 574,945 \$ 571,405 \$ 1,030,556 \$ 1,000,649 \$ 1,007,094

Unretained Assessed Value Within TIF District \$ 7,188,504 \$ 6,383,020 \$ 6,867,983 \$ 16,143,850 \$ 15,488,820 \$ 15,393,465 \$ 27,762,823 \$ 26,957,152 \$ 27,130,778

Notes:

1. Projections assume no change in assessed value within the TIF District.
2. Taxes generated by TIFD increment utilize the Tax Year 2018 / 2019 Fiscal Year tax rate of \$37.12
3. Library as developed - set conservatively at \$8m for TIF tax revenue projections value

General Fund 2020 - 2025 Ambulance Capital Reserve

By way of R-2018-26 Fiscal Policies the City confirms the establishment of Capital Reserves as identified under NH RSA 34. The purpose of the Ambulance Capital Reserve is for the acquisition or significant rehabilitation of ambulances.

Proposed Capital Reserve Activity Summary

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Projected Balance - beginning of year	\$2,549	\$2,965	\$133,833	\$5,155	\$95,634	\$186,472
Funding - Current Revenues	0	130,000	130,000	90,000	90,000	100,000
Investment Earnings	416	868	1,322	479	838	1,292
Proposed Expenditure	0	0	(260,000)	0	0	(285,000)
Projected Balance at End of Fiscal Year	\$2,965	\$133,833	\$5,155	\$95,634	\$186,472	\$2,764

Appropriation

Total FY20 FY21 FY22 FY23 FY24 FY25

Proposed Capital Reserve Appropriation (raises resources for use in future projects)

Current Revenues	540,000	130,000	130,000	90,000	90,000	100,000
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Proposed Projects to Be Funded from the Ambulance Capital Reserve

Ambulance Replacement	545,000		260,000			285,000
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Total Proposed Projects Funded	\$545,000	\$0	\$260,000	\$0	\$0	\$285,000
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General Fund 2020 - 2025 Fire Apparatus Capital Reserve

By way of R-2018-26 Fiscal Policies the City confirms the establishment of Capital Reserves as identified under NH RSA 34. The purpose of the Fire Equipment Capital Reserve is for the acquisition or significant rehabilitation of fire apparatus.

Proposed Capital Reserve Activity Summary

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Projected Balance - beginning of year	\$703,581	\$9,099	\$351,069	\$14,749	\$261,573	\$614,325
Funding - Current Revenues	400,000	385,000	385,000	350,000	350,000	375,000
Investment Earnings	5,518	1,970	3,680	1,824	2,752	4,452
Proposed Expenditure	(1,100,000)	(45,000)	(725,000)	(105,000)	0	(756,396)
Projected Balance at End of Fiscal Year	\$9,099	\$351,069	\$14,749	\$261,573	\$614,325	\$237,381

Appropriation Total

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Proposed Capital Reserve Appropriation (raises resources for use in future projects)						
Current Revenues	2,245,000	400,000	385,000	385,000	350,000	375,000

Proposed Projects to Be Funded from the Fire Apparatus Capital Reserve

Ladder Truck	1,100,000	1,100,000				
Brush Truck	45,000	45,000				
Tanker Truck	725,000		725,000			
Brush Truck	45,000			45,000		
Utility Truck	60,000			60,000		
Rescue Truck						756,396
Total Proposed Projects Funded	\$1,975,000	\$1,100,000	\$45,000	\$725,000	\$105,000	\$0

General Fund 2020 - 2025 Downtown Infrastructure Capital Reserve

By way of R-2018-26 Fiscal Policies the City confirms the establishment of Capital Reserves as identified under NH RSA 34. The purpose of the Downtown Infrastructure and Facility Improvement Capital Reserve is for infrastructure and facility improvements in the downtown.

Proposed Capital Reserve Activity Summary

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Projected Balance - beginning of year	\$1,235,803	\$1,127,982	\$1,233,622	\$939,790	\$619,489	\$322,586
Funding - Wells Street TIF District	200,000	200,000	200,000	225,000	250,000	250,000
Investment Earnings	6,179	5,640	6,168	4,699	3,097	358
Proposed Expenditure	(314,000)	(100,000)	(500,000)	(550,000)	(550,000)	(550,000)
Projected Balance at End of Fiscal Year	<u>\$1,127,982</u>	<u>\$1,233,622</u>	<u>\$939,790</u>	<u>\$619,489</u>	<u>\$322,586</u>	<u>\$22,944</u>

In FY 2013-2014, \$672,000 was appropriated for the predesign of a parking structure in the downtown area. There has been no activity on the project to date. The proposed Downtown Rehabilitation project funding as detailed would preclude use of the FY 2014 appropriation for a new parking deck.

Appropriation

<u>Total</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
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Proposed Capital Reserve Appropriation (raises resources for use in future projects)

Wells Street TIF District Appropriation	1,325,000	200,000	200,000	200,000	225,000	250,000	250,000
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Proposed Projects to Be Funded from the Downtown Infrastructure Capital Reserve

Downtown Revitalization	2,430,000	180,000	100,000	500,000	550,000	550,000	550,000
Welcome Center	134,000	134,000					

Total Proposed Projects Funded	<u>\$2,564,000</u>	<u>\$314,000</u>	<u>\$100,000</u>	<u>\$500,000</u>	<u>\$550,000</u>	<u>\$550,000</u>	<u>\$550,000</u>
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General Fund 2020 - 2025 Transportation Improvements Capital Reserve

By way of R-2018-26 Fiscal Policies the City confirms the establishment of Capital Reserves as identified under NH RSA 34. The purpose of the Transportation Improvements Capital reserve is to fund, wholly or in part, improvements in the transportation system including roads, bridges, bicycle and pedestrian facilities, and intermodal facilities, except for parking.

Proposed Capital Reserve Activity Summary

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Projected Balance - beginning of year	\$28,082	\$128,222	\$228,863	\$261,247	\$362,553	\$268,210
Funding - Motor Vehicle Registration Surcharge (\$5)	100,000	100,000	100,000	100,000	100,000	100,000
Investment Earnings	140	641	1,144	1,306	1,813	1,341
Proposed Expenditure	0	0	(68,760)	0	(196,156)	(200,000)
Projected Balance at End of Fiscal Year	\$128,222	\$228,863	\$261,247	\$362,553	\$268,210	\$169,551

**Appropriation
Total**

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Proposed Capital Reserve Appropriation (raises resources for use in future projects)						
Motor Vehicle Registration Surcharge	600,000	100,000	100,000	100,000	100,000	100,000

Proposed Projects to Be Funded from the Transportation Improvements Capital Reserve

Keene Bypass - Lower Winchester St.	104,916		68,760		36,156	
Traffic Signal Replacement	360,000				160,000	200,000

Total Proposed Projects Funded	\$464,916	\$0	\$0	\$68,760	\$0	\$196,156	\$200,000
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General Fund 2020 - 2025 Bridge Capital Reserve

By way of R-2018-26 Fiscal Policies the City confirms the establishment of Capital Reserves as identified under NH RSA 34. The purpose of the Bridge Capital Reserve is for the construction, reconstruction and rehabilitation of bridges.

Proposed Capital Reserve Activity Summary

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Projected Balance - beginning of year	\$365,323	\$367,150	\$483,206	\$452,110	\$554,018	\$560,506
Funding - Current Revenues	0	137,700	99,860	99,860	109,350	109,350
Investment Earnings	1,827	1,836	2,095	2,048	2,483	3,010
Proposed Expenditure	0	(23,480)	(133,051)	0	(105,345)	(38,000)
Projected Balance At End Of Fiscal Year	\$367,150	\$483,206	\$452,110	\$554,018	\$560,506	\$634,866

Appropriation

<u>Total</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
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Proposed Capital Reserve Appropriation (raises resources for use in future projects)

Current Revenues						
Beaver Street	137,700	137,700				
Maple Avenue	199,720		99,860	99,860		
Church Street	218,700				109,350	109,350

Proposed Projects To Be Funded From The Bridge Capital Reserve

Lower Winchester Over Ash Swamp Brk	143,345				105,345	38,000
George Street Over Beaver Brook	156,531		23,480	133,051		
Total Proposed Projects Funded	\$299,876	\$0	\$23,480	\$133,051	\$0	\$105,345

Parking Fund 2020 - 2025 City Hall Parking Deck Capital Reserve

By way of R-2018-26 Fiscal Policies the City confirms the establishment of Capital Reserves as identified under NH RSA 34. The purpose of the City Hall Parking Deck Capital Reserve is for the repair and replacement of existing infrastructure, systems and equipment.

Proposed Capital Reserve Activity Summary

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Projected Balance - beginning of year	\$127,539	\$105,877	\$136,406	\$167,088	\$197,923	\$171,513
Funding - Current Revenues	30,000	30,000	30,000	30,000	30,000	35,000
Investment Earnings	638	529	682	835	990	858
Proposed Expenditure	(52,300)	0	0	0	(57,400)	0
Projected Balance at End of Fiscal Year	\$105,877	\$136,406	\$167,088	\$197,923	\$171,513	\$207,371

Appropriation

<u>Total</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
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Proposed Capital Reserve Appropriation (raises resources for use in future projects)

Current Revenues	185,000	30,000	30,000	30,000	30,000	30,000	35,000
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Proposed Projects to Be Funded from the City Hall Parking Deck Capital Reserve

Lower Deck Paving	57,400				57,400	
Structural Repairs	52,300	52,300				

Total Proposed Projects Funded	\$109,700	\$52,300	\$0	\$0	\$0	\$57,400	\$0
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Parking Fund 2020 - 2025 Wells Street Parking Deck Capital Reserve

By way of R-2018-26 Fiscal Policies the City confirms the establishment of Capital Reserves as identified under NH RSA 34. The purpose of the Wells Street Parking Facility Capital Reserve is for the repair and replacement of existing infrastructure, systems and equipment.

Proposed Capital Reserve Activity Summary

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Projected Balance - beginning of year	\$196,794	\$227,778	\$258,917	\$235,112	\$168,088	\$198,928
Funding - Wells Street TIF District	30,000	30,000	30,000	30,000	30,000	35,000
Investment Earnings	984	1,139	1,295	1,176	840	995
Proposed Expenditure	0	0	(55,100)	(98,200)	0	0
Projected Balance at End of Fiscal Year	\$227,778	\$258,917	\$235,112	\$168,088	\$198,928	\$234,923

Appropriation

<u>Total</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
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Proposed Capital Reserve Appropriation (raises resources for use in future projects)

Current Revenues	185,000	30,000	30,000	30,000	30,000	30,000	35,000
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Proposed Projects to Be Funded from the Wells Street Parking Deck Capital Reserve

Lower Deck Paving	98,200				98,200	
Structural Repairs	55,100		55,100			

Total Proposed Projects Funded	\$153,300	\$0	\$0	\$55,100	\$98,200	\$0	\$0
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Solid Waste Fund 2020 - 2025 SW Facility Capital Reserve

By way of R-2018-26 Fiscal Policies the City confirms the establishment of Capital Reserves as identified under NH RSA 34. The purpose of the Transfer/Recycling Center Capital Reserve is for the repair and replacement of existing infrastructure, systems and equipment.

Proposed Capital Reserve Activity Summary

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Projected Balance - beginning of year	\$368,304	\$135,146	\$200,822	\$191,826	\$15,785	\$80,864
Funding - Current Revenues	65,000	65,000	65,000	65,000	65,000	65,000
Investment Earnings	1,842	676	1,004	959	79	404
Proposed Expenditure	(300,000)	0	(75,000)	(242,000)	0	(145,000)
Projected Balance at End of Fiscal Year	\$135,146	\$200,822	\$191,826	\$15,785	\$80,864	\$1,268

Appropriation

	<u>Total</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
<u>Proposed Capital Reserve Appropriation (raises resources for use in future projects)</u>							
Current Revenues	390,000	65,000	65,000	65,000	65,000	65,000	65,000

Proposed Projects to Be Funded from the Transfer Station Facility Capital Reserve

Recycling Equipment Replacement	375,000	300,000		75,000			
Weight Scale Replacement	92,000				92,000		
Facility Interior Improvements	150,000				150,000		
Facility Pavement Replacement	145,000						145,000
Total Proposed Projects Funded	\$762,000	\$300,000	\$0	\$75,000	\$242,000	\$0	\$145,000

Sewer Fund 2020 - 2025 Wastewater Treatment Plant Capital Reserve

By way of R-2018-26 Fiscal Policies the City confirms the establishment of Capital Reserves as identified under NH RSA 34. The purpose of the Wastewater Treatment Plant Capital Reserve is for the repair and replacement of major components of the plant, including equipment and building.

Proposed Capital Reserve Activity Summary

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Projected Balance - beginning of year	\$904,104	\$1,028,625	\$900,772	\$890,535	\$1,029,096	\$621,241
Funding - Current Revenues	120,000	170,000	170,000	170,000	170,000	170,000
Investment Earnings	4,521	5,143	4,504	4,453	5,145	3,106
Proposed Expenditure	0	(302,996)	(184,741)	(35,892)	(583,000)	0
Projected Balance at End of Fiscal Year	\$1,028,625	\$900,772	\$890,535	\$1,029,096	\$621,241	\$794,347

Appropriation Total

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Proposed Capital Reserve Appropriation (raises resources for use in future projects)						
Current Revenues	970,000	120,000	170,000	170,000	170,000	170,000

Proposed Projects to Be Funded from the Wastewater Treatment Plant Capital Reserve

Generator Replacement	123,636	123,636				
Tunnel HVAC Insulation Replacement	35,892			35,892		
Blower Replacement	364,101	179,360	184,741			
Access Road Repavement					583,000	

Total Proposed Projects Funded	\$523,629	\$0	\$302,996	\$184,741	\$35,892	\$583,000	\$0
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Sewer Fund 2020 - 2025 Martell Court Pump Station Capital Reserve

By way of R-2018-26 Fiscal Policies the City confirms the establishment of Capital Reserves as identified under NH RSA 34. The purpose of the Martell Court Pumping Station Capital Reserve is for the repair and replacement of major components of the plant, including equipment and building.

Proposed Capital Reserve Activity Summary

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Projected Balance - beginning of year	\$417,812	\$419,912	\$290,558	\$327,196	\$371,340	\$448,582
Funding - Current Revenues	0	0	35,000	75,000	75,000	0
Investment Earnings	2,100	1,456	1,638	1,858	2,242	2,628
Proposed Expenditure	0	(130,810)	0	(32,714)	0	0
Projected Balance at End of Fiscal Year	\$419,912	\$290,558	\$327,196	\$371,340	\$448,582	\$451,210

<u>Appropriation Total</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
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Proposed Capital Reserve Appropriation (raises resources for use in future projects)

Current Revenues	185,000	0	0	35,000	75,000	75,000	0
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Proposed Projects to Be Funded from the Martell Court Pump Station Capital Reserve

Martell Court Phase 3	130,810	130,810				
Roof Replacement	32,714			32,714		

Total Proposed Projects Funded	\$163,524	\$0	\$130,810	\$0	\$32,714	\$0	\$0
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Sewer Fund 2020 - 2025 Sewer Infrastructure Capital Reserve

By way of R-2018-26 Fiscal Policies the City confirms the establishment of Capital Reserves as identified under NH RSA 34. The purpose of the Sewer Infrastructure Capital Reserve is for the repair and replacement of existing infrastructure, systems and equipment including pump stations and the collection systems.

Proposed Capital Reserve Activity Summary

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Projected Balance - beginning of year	\$377,240	\$332,825	\$959,814	\$908,280	\$964,385	\$724,368
Funding - Current Revenues	615,000	625,000	450,000	575,000	700,000	700,000
Investment Earnings	1,886	1,989	5,174	4,041	4,947	4,372
Proposed Expenditure	(661,301)	0	(506,708)	(522,936)	(944,964)	(898,993)
Projected Balance at End of Fiscal Year	\$332,825	\$959,814	\$908,280	\$964,385	\$724,368	\$529,747

Appropriation Total

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Proposed Capital Reserve Appropriation (raises resources for use in future projects)						
Current Revenues	3,665,000	615,000	625,000	450,000	575,000	700,000

Proposed Projects to Be Funded from the Sewer Infrastructure Capital Reserve

Sewer Main Improvements	3,047,802	661,301		506,708	365,336	782,664	731,793
Sewer Manhole Lining	487,100				157,600	162,300	167,200

Total Proposed Projects Funded	\$3,534,902	\$661,301	\$0	\$506,708	\$522,936	\$944,964	\$898,993
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Water Fund 2020 - 2025 Water Infrastructure Capital Reserve

By way of R-2018-26 Fiscal Policies the City confirms the establishment of Capital Reserves as identified under NH RSA 34. The purpose of the Water Infrastructure Capital Reserve is for the repair and replacement of major components of existing infrastructure, systems and equipment including wells, lift stations, tanks etc., and the distribution system.

Proposed Capital Reserve Activity Summary

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Projected Balance - beginning of year	\$289,641	\$728,156	\$1,406,797	\$1,530,603	\$551,433	\$887,455
Funding - Current Revenues	675,000	675,000	700,000	700,000	700,000	700,000
Investment Earnings	1,448	3,641	7,034	7,653	2,757	4,437
Proposed Expenditure	(237,933)	0	(583,228)	(1,686,823)	(366,735)	(796,343)
Projected Balance at End of Fiscal Year	\$728,156	\$1,406,797	\$1,530,603	\$551,433	\$887,455	\$795,549

Appropriation Total

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Proposed Capital Reserve Appropriation (raises resources for use in future projects)						
Current Revenues	675,000	675,000	700,000	700,000	700,000	700,000

Proposed Projects to Be Funded from the Water Infrastructure Capital Reserve

Water Distribution (Main) Improvements	2,298,330		107,812	1,278,233	115,942	796,343
Bridge Replacement Water Mains	47,300		47,300			
Well Field Evaluation Plan	483,590	75,000		408,590		
Black Brook Water Tank	35,000	5,000	30,000			
Fox Avenue Booster Station Upgrade	21,446	21,446				
Glenn Road Booster Station Upgrade	21,446	21,446				
Chapman Road Water Tank	79,449	25,000	54,449			
1.5 MG Water Tank Upgrade	433,708	90,041	343,667			
Emergency Generators Replacement	250,793				250,793	
Total Proposed Projects Funded	\$3,671,062	\$237,933	\$0	\$583,228	\$1,686,823	\$366,735

Water Fund 2020 - 2025 Water Treatment Facility Infrastructure Capital Reserve

By way of R-2018-26 Fiscal Policies the City confirms the establishment of Capital Reserves as identified under NH RSA 34. The purpose of the Water Treatment Facility Capital Reserve is for the repair and replacement of major components of facility including pumps, controls, chemical systems, etc., and, building components.

Proposed Capital Reserve Activity Summary

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Projected Balance - beginning of year	\$714,832	\$611,940	\$770,000	\$725,724	\$897,453	\$886,444
Funding - Current Revenues	85,000	155,000	155,000	240,000	200,000	200,000
Investment Earnings	3,574	3,060	3,850	3,629	4,487	4,432
Proposed Expenditure	(191,466)	0	(203,126)	(71,900)	(215,496)	(39,000)
Projected Balance at End of Fiscal Year	\$611,940	\$770,000	\$725,724	\$897,453	\$886,444	\$1,051,876

Appropriation

	<u>Total</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
<u>Proposed Capital Reserve Appropriation (raises resources for use in future projects)</u>							
Current Revenues	1,035,000	85,000	155,000	155,000	240,000	200,000	200,000

Proposed Projects to Be Funded from the Water Infrastructure Capital Reserve

Pavement Replacement	71,900				71,900		
Filter Media Replacement	610,088	191,466		203,126		215,496	
Instrument Upgrade	39,000						39,000
Total Proposed Projects Funded	\$720,988	\$191,466	\$0	\$203,126	\$71,900	\$215,496	\$39,000

Fleet Fund 2020 - 2025 Equipment Replacement Capital Reserve

By way of R-2018-26 Fiscal Policies the City confirms the establishment of Capital Reserves as identified under NH RSA 34. The purpose of the Fleet Equipment Capital Reserve is for the replacement of vehicles and equipment under the management of Fleet Services.

Proposed Capital Reserve Activity Summary

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Projected Balance - beginning of year	\$558,615	\$508,665	\$398,852	\$473,270	\$492,890	\$540,567
Funding - Current Revenues	665,000	700,000	700,000	625,000	625,000	625,000
Investment Earnings	2,793	2,543	1,994	2,366	2,464	2,703
Proposed Expenditure	(717,743)	(812,356)	(627,576)	(607,746)	(579,787)	(899,767)
Projected Balance at End of Fiscal Year	\$508,665	\$398,852	\$473,270	\$492,890	\$540,567	\$268,503

Appropriation Total

	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	<u>FY25</u>
Proposed Capital Reserve Appropriation (raises resources for use in future projects)						
Current Revenues	3,940,000	665,000	700,000	700,000	625,000	625,000

Proposed Projects to Be Funded from the Equipment Replacement Capital Reserve

Equipment Replacement	4,244,975	717,743	812,356	627,576	607,746	579,787	899,767
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Total Proposed Projects Funded	\$4,244,975	\$717,743	\$812,356	\$627,576	\$607,746	\$579,787	\$899,767
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Public Health and Safety – programs, activities, and projects which are intended to protect the health and safety of individuals and the community. The primary goal of these activities is the protection of the public from dangers affecting health and safety from crime, disaster, fire, and disease.

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FIRE & EMERGENCY MEDICAL SERVICE APPARATUS SCHEDULES

CITY OF KEENE AMBULANCE REPLACEMENT SCHEDULE										
2020 - 2025 Capital Improvement Program										
Vehicle #	Description	Year	Use	FY20	FY21	FY22	FY23	FY24	FY25	Later Years
19A1	Ambulance		EMS						285,000	
19A2	Ambulance	2012	EMS			260,000				
			TOTAL	\$0	\$0	\$260,000	\$0	\$0	\$285,000	

Future CIP Programs: Anticipated Replacement Costs

FY28 Ambulance (19A3) Purchased 2018 \$300,000

CITY OF KEENE FIRE APPARATUS REPLACEMENT SCHEDULE										
2020 - 2025 Capital Improvement Program										
Vehicle #	Description	Year	Use	FY20	FY21	FY22	FY23	FY24	FY25	Later Years
19L1	Ladder Truck	1997	Fire	1,100,000						
19B1	Brush Truck	2002	Fire		45,000					
19B2	Brush Truck	2003	Fire				45,000			
19T1	Tanker	2005	Fire			725,000				
19U1	Utility	2006	Fire				60,000			
19R1	Rescue	2010	Fire						756,396	
19E2	Engine	2013	Fire							2028
			TOTAL	\$1,100,000	\$45,000	\$725,000	\$105,000	\$0	\$756,396	

Future CIP Programs: Anticipated Replacement Costs

FY28 Replacement of Engine 2 (Purchased 2013) \$738,386
 FY29 Fire Alarm Truck (Purchased 2015) \$198,104
 FY31 Replacement Engine 1 (Purchased 2015) \$856,000
 FY33 Quint 19L2 (Purchased 2017) \$1,550,000

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Ambulance Replacement**
 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 a need to rely on other back-up services. Vehicle costs are projected to continue to increase as material and equipment costs continue to rise. Updates to national and state standards for ambulance requirements also impact costs. The replacement schedule for units during this CIP cycle includes replacement of 19A2 in FY22 and 19A1 in FY25.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition				260,000			285,000	545,000
TOTAL	\$0	\$0	\$0	\$260,000	\$0	\$0	\$285,000	\$545,000
FUNDING								
Current Revenue								0
Capital Reserve				260,000			285,000	545,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$260,000	\$0	\$0	\$285,000	\$545,000

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

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Apparatus Replacement**
 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 including the replacement of Ladder 1 currently scheduled for FY20.

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 overall schedule is reviewed annually. 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. The apparatus that serves us today, much like your vehicles, is much more complicated with varying systems. The emission systems as an example, that are required on our apparatus, have lead to increased maintenance and down time of units. This fund provides resources that will allow the City to replace all apparatus at the appropriate time assuring a reliable fleet.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		1,100,000	45,000	725,000	105,000		756,396	2,731,396
TOTAL	\$0	\$1,100,000	\$45,000	\$725,000	\$105,000	\$0	\$756,396	\$2,731,396
FUNDING								
Current Revenue								0
Capital Reserve		1,100,000	45,000	725,000	105,000		756,396	2,731,396
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$1,100,000	\$45,000	\$725,000	\$105,000	\$0	\$756,396	\$2,731,396

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Create efficiencies
Multi-year

PROJECT STATUS:

Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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

The portable radio communications project is replacing 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 for replacement of all units started in FY17 and will continue through FY20.

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 will allow us to maintain emergency preparedness and personnel safety by having units that are reliable and serviceable as needed for the next ten years. The department currently operates and maintains sixty-five portable radios. The goal is to replace remaining units in FY20.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		52,500						52,500
TOTAL		\$52,500	\$0	\$0	\$0	\$0	\$0	\$52,500
FUNDING								
Current Revenue		52,500						52,500
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL		\$52,500	\$0	\$0	\$0	\$0	\$0	\$52,500

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Create efficiencies
Multi-year

PROJECT STATUS:

Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Self Contained Breathing Apparatus**
 Department: **Fire Department**
 Physical Location:
 Federal Mandate: **OSHA 42 CFR Respiratory Protection Devices**
 State Regulation or Law:
 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

Firefighter respiratory protection is critical for firefighters' safety and to be able to enter toxic atmospheres for the protection of life and property. Toxic atmospheres related to building fires, hazardous materials incidents, and oxygen deficient atmospheres require the use of self contained breathing apparatus to protect our staff. The service life of our units expires in FY24, at which time the units will be 15 years old. This project is required to maintain compliance and certification with The National Institute for Occupational Safety and Health (NIOSH) and Occupational Safety and Health Administration (OSHA) Code of Federal Regulations 42 CFR Part 84 Respiratory Protective Devices.

The Self Contained Breathing Apparatus (SCBA) Project will replace 58- SCBA's; 125- face pieces; 95- SCBA bottles (30 minute); 10- SCBA bottles (60 minute); and 4- Rapid Intervention SCBA. The units will meet the NFPA 1981 Standards for Breathing Apparatus and all OSHA 42 CFR requirements.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition						847,676		847,676
TOTAL	\$0	\$0	\$0	\$0	\$0	\$847,676	\$0	\$847,676
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded						847,676	0	847,676
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$847,676	\$0	\$847,676

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Create efficiencies
Multi-year

PROJECT STATUS:

Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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: **To improve emergency and non-emergency operations 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 will 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.

Pricing has been updated by Motorola as of 10/17/18 to reflect current cost. This pricing has been further updated to reflect an estimated increase of 3% in FY20 and another 3% in FY21.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		86,796	89,400					176,196
TOTAL	\$0	\$86,796	\$89,400	\$0	\$0	\$0	\$0	\$176,196
FUNDING								
Current Revenue		86,796	89,400					176,196
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$86,796	\$89,400	\$0	\$0	\$0	\$0	\$176,196

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Multi-year

PROJECT STATUS:

Ongoing CIP

Solid Waste

The Keene Solid Waste Division is focused on protection of human health and the environment through the activities and actions required to manage waste from its inception to its final disposal. This includes collection, transport, treatment, and disposal of waste together with monitoring and regulation. Proper management of waste prevents the spread of disease and reduces air and water pollution associated with disposal of waste material.

The City of Keene Solid Waste Division operates under a public/private partnership. The Solid Waste Division employs 7 full time and 4 part-time employees to manage the operations of the Transfer Station and Recycling Center. The Solid Waste Division sub-contracts the transportation and disposal of refuse from the Transfer Station and transportation of commodities from Recycling Center. Residential collection service is performed by private contractors under a permit system administered by the City. Commercial collection service is performed by private contractors, but the City does not have a permit system for commercial collection.

The City of Keene Solid Waste Division is structured as a special revenue fund where fees for services and revenue from the sale of commodities cover the majority of the expenses. The Solid Waste Division is able to continue operating in this manner due to a combination of a flow control ordinance which directs all waste generated in Keene to the Solid Waste Facility, a business relationship with Waste Management of New Hampshire to transport and dispose of the refuse from the Transfer Station in addition to a contracted tonnage brought to the facility by Waste Management of New Hampshire from outside Keene at a set tipping fee. The sale of commodities has generated over \$400,000 of income each year as well as avoiding the cost of disposing these commodities. No property tax revenue supports the Solid Waste Division. The Solid Waste Division operates 8 cost centers with revenues and expenses in excess of \$4.1M.

The Keene Transfer Station processes over 30,000 tons of solid waste and the Keene Recycling Center sorts over 6,000 tons of recyclable material per year. The mission of the City of Keene Solid Waste Division is to provide solid waste facilities that maximize diversion of the waste stream in an efficient, economical, and environmentally sensitive manner. To support that mission, City Council voted to support a hierarchy of disposal practices to guide future solid waste operations in Keene by emphasizing diversion of waste to the greatest extent possible.

The Solid Waste Division operations supports a quality built environment for our future by fostering renewable energy and efficient use of resources through reduction, reuse, recycling, and composting as well as promoting recycling services for both commercial and residential users. The City's waste diversion efforts also support a unique natural environment by being a leader in promoting and supporting initiatives that work toward community sustainability through reducing community greenhouse gas emissions through waste reduction promotion, recycling, management of landfill gas, and installation of a biofuel generator for electricity at the Solid Waste Facility to meet climate action plan targets, and moving towards a carbon neutral community.

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Recycling Equipment Replacement**
 Department: **Public Works - Solid Waste Fund**
 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 2019 the Keene Recycling Center will be 25 years old. The solid waste division currently contracts scheduled/preventative maintenance on all equipment to extend the life of it 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), cross belt magnet (for steel cans), and horizontal baler.

The following equipment will be replaced in 2020 (the cost listed includes installation)- horizontal baler \$300,000. The solid waste division conducts an annual assessment of equipment to determine if the replacement can be delayed or needs replacement sooner. An established capital reserve account funds the repair/replacement of major pieces of equipment at the Recycling Center. It is expected that within the next several years, assuming operations continue using dual stream recycling technology, that the cross belt magnet and eddy current separator will require replacement. A comprehensive inspection will be performed as part of regular O & M in FY20 to determine where the replacement is anticipated. However a placeholder for these two pieces of equipment has been retained in FY22.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		300,000		75,000				375,000
TOTAL	\$0	\$300,000	\$0	\$75,000	\$0	\$0	\$0	\$375,000
FUNDING								
Current Revenue								0
Capital Reserve		300,000		75,000				375,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$300,000	\$0	\$75,000	\$0	\$0	\$0	\$375,000

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Weight Scale Replacement**
 Department: **Public Works - Solid Waste Fund**
 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: **Accurately weigh inbound and outbound material to ensure cost of services are properly accounted**



PROJECT DESCRIPTION/JUSTIFICATION

A properly functioning scale is critical to the solid waste division operation. The existing in-ground weight scale will have over 20 years of service in 2023. While the scale is regularly serviced, there are components that simply wear out over time. All inbound and outbound material is weighed including waste and recycling. It is these weights that determine the revenue the City receives from customers, as well as the expenses the City pays to vendors. The State of New Hampshire Bureau of Weights and Measures provides the City's certifications that the scale is operating properly, and consistently calibrated to ensure accuracy. Replacement of the scale will ensure continued certification and accuracy in weighing material.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design					5,000			5,000
Construction/Implementation					87,000			87,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$92,000	\$0	\$0	\$92,000
FUNDING								
Current Revenue								0
Capital Reserve					92,000			92,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$92,000	\$0	\$0	\$92,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Minimal \$5,001 to \$25,000
One time

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Refurbish Interior Facility**
 Department: **Public Works - Solid Waste Fund**
 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: **Provide clean, safe facilities for employees to perform their duties**



PROJECT DESCRIPTION/JUSTIFICATION

The Keene Recycling Center was built in 1994. In 2023 it will be 29 years old. In its existence, there have been no interior updates. The facility is in need of flooring replacement, along with updates to the entire office layout, sanitary facilities, locker rooms, and break rooms to include the installation of shower facilities for staff. The operations control center located above the existing balers, also needs to be re-worked to reflect the administrative services required. The cost for interior renovations has been updated through an estimate from a private contractor to perform the work required. The cost estimate will be further refined as a design is developed (the design cost has been moved up a year to allow for the time consuming process of design development and permitting).

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design				7,000				7,000
Construction/Implementation					150,000			150,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$7,000	\$150,000	\$0	\$0	\$157,000
FUNDING								
Current Revenue				7,000				7,000
Capital Reserve					150,000			150,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$7,000	\$150,000	\$0	\$0	\$157,000

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Transfer Station Roof Repair**
 Department: **Public Works - Solid Waste Fund**
 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, including removal of sediment in the detention pond, and re-setting and cleaning catch basins to provide adequate drainage. One of the pressing long-term capital needs identified, is a replacement of the roof on the solid waste facility building. Small leaks are beginning to appear in the roof and are patched as necessary, but the overall integrity of the roof, which was designed to last 20 years, is expected to become compromised. The roof will be 26 years old at the scheduled time of replacement, but will be evaluated every year to determine if the project needs to be accelerated or can be deferred.

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		166,750						166,750
Property/Equip. Acquisition								0
TOTAL	\$0	\$166,750	\$0	\$0	\$0	\$0	\$0	\$166,750
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded		166,750						166,750
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$166,750	\$0	\$0	\$0	\$0	\$0	\$166,750

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Pavement Replacement**
 Department: **Public Works - Solid Waste Fund**
 Physical Location: **55 Old Summit 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: **Maintain safe access to Solid Waste facilities**



PROJECT DESCRIPTION/JUSTIFICATION

The 89,000 square feet of asphalt surfaced areas at the solid waste facility will be 30 years old in 2024 and are already showing signs of deterioration. Spot repair has been effective to date, however, the wear and tear placed on the paved surfaces continues to further deteriorate them to the point where spot repair is no longer feasible. This project proposes to mill, shim, and overlay the paved surfaces at the solid waste facility to provide safe access to the public using the facility. Projections are based on a \$1.60 per square foot cost for 2" mill, shim and overlay in 2017. This figure is inflated 3% per year for the 2025 project.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation							145,000	145,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$0	\$145,000	\$145,000
FUNDING								
Current Revenue								0
Capital Reserve							145,000	145,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$0	\$145,000	\$145,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Create efficiencies
One time

PROJECT STATUS:

New Project

Water Fund

The residents, businesses, and industries in Keene use an average of 1.9 million gallons of clean, potable water every day for everything from tooth brushing, washing, food preparation, cleaning, fire protection, landscape watering, commercial uses, and industrial processes.

To meet this water demand, the City's has three separate water supplies – none of which can meet the City's daily needs alone. Combined though, the supplies are adequate for current demand under average precipitation conditions. Two surface water reservoirs, located in Roxbury, can store a total of 600 million gallons of water and the City owns approximately 2,400 acres of the reservoirs' watershed land. The water in the wellfields on West and Court Streets are re-supplied by more than 300 square miles of watershed. This CIP includes an evaluation of the City's water needs in the FY20 Water Supply Master Plan project.

Previous CIP budgets included funding for a major rehabilitation to the 1931-era dam at Babbidge Reservoir that began in the fall of calendar year 2017 and will be completed by the fall of calendar year 2018. Design work to address deficiencies to the 1910-era Woodward dam began in the spring of 2017 and construction is expected to begin in the summer of 2020. A failure of one or both of these dams would cause a significant community-wide water shortage because they provide more than half of the City's daily water supply.

Although the raw water from all of the City's sources is very clean, regulations require disinfection and chemical addition to make the water less acidic. The well buildings were constructed in an era with fewer treatment requirements so current treatment options are limited due to the small size of the facilities. The buildings are in need of repair and this CIP includes an evaluation of the buildings and equipment at both wellfields. The evaluation will include recommendations that will improve the future reliability and flexibility as the City responds to water quality regulations and plans for the likelihood of frequent periods of regional drought as a result of climate change. Future CIP programs will include upgrades and replacements that are identified through the evaluation process.

The City's Drinking Water Treatment Facility turned 25 in 2018 and this CIP includes routine filter media changes, pavement repair, and equipment replacement. Changes in water quality regulations have forced changes in treatment techniques that results in more costly process operations and future CIP will include an evaluation of upgrades at the Facility.

Although the water sources are separate and each receives onsite chemical treatment, the treated water is comingled in one large water distribution system where more than 100 miles of water main delivers water to homes and businesses. The water mains range in age from brand new (less than a year old) to more than 100 years old.

The current CIP funds improvement (either lining or replacement) of water mains at the rate of about a half mile per year. With no changes to this rate, all of the City's water mains will be replaced or lined over the next 218 years. The expected useful life of a new water main is between 80 and 120 years, depending on material and while mains can remain in service well past their expected life, older mains are more prone to leaks, poor flow and breakage. When a main breaks, the effect can be significant and during a repair, entire neighborhoods may be without water, fire protection can be affected, roads can become undermined, and basements may be flooded. Without an increase in the repair/replacement budget, an increasing number of these disruptions should be expected as the distribution system ages past its expected life.

The goal of the water main rehabilitation and replacement program is to minimize main failures and to improve customers' water quality and pressure by systematically and cost effectively rehabilitating or replacing the City's most critical water mains.

To maximize the benefit received from current funding levels, the Public Works Department developed a Water Main Asset Management Plan (AMP) in 2016 that numerically ranks each section of main based on its criticality, history of breaks, and the potential financial, social or environmental impact of a failure. Individual projects are selected based upon this ranked list, in conjunction with other planned utility and roadway improvements.

The AMP includes a 100-year rehabilitation schedule designed to keep pace with the aging infrastructure and allow staff to address the highest risk mains first. The current CIP addresses 1.8 miles of the three highest-priority water main improvement projects identified by this plan: Marlboro Street, a portion of Main Street, and a portion of Court Street. The current 6-year CIP also includes cleaning and lining 2.1 miles of mains that are in the top 15 percent of at risk mains. Portions of Elm Street, Roxbury Street, Main Street, Meadow Road and West Street will all be lined between FY20 and 25. To support the proposed 100-year rehabilitation schedule, investment in the water mains would have to increase to \$1.3M from the current funding level of \$0.7M.

This CIP includes funding for the ongoing gate valve replacement project. Gate valves are required to facilitate water main operation and maintenance and to control water loss during a main break. Valve failure results in an increased number of affected customers and can limit the water supply to critical assets in an emergency. Some of Keene's existing valves have been in operation for more than 100 years and cannot be relied on to function in an emergency because the functional life of a water valve is around 50 years. The current rate of funding valve replacement results in a 154 year replacement cycle. Therefore, over the long term, additional investment should be made to keep pace with the rate of valve failure.

The City's water supply is also used for fire protection, and to meet that need, our mains and storage tanks are oversized compared to the community's daily demand for water. The system has more than 850 fire hydrants. Previous CIP programs included funding to bring most of the hydrants up to current standards and stragglers continue to be replaced through ongoing water main projects and with in-house personnel using operating budget funds.

Storing more than 5 million gallons of water, the City has six water storage tanks, most of which have had repair or replacement projects in previous CIP programs that were scheduled for FY22 and later. The Drummer Hill tank failed in March 2018, and its replacement was emergency-funded in FY19 out of capital reserves. Emergency work was performed on the 1.5 MG tank in late summer 2018 because repairs were required that couldn't wait until the complete project is funded in FY22. These incidents indicate that while the community is planning repair and replacement of the infrastructure on a schedule that keeps Keene's water rates lower than the state average, the infrastructure deterioration continues on a schedule of its own.

The two largest tanks, with a combined capacity of 4.5 million gallons, are located on Beech Hill – one built in 1924 the other in 1962. Because the tanks provide water pressure and fire protection for most of the community, preserving their reliable function is a department priority. They have had routine repairs and painting over the years, but they do not meet current

standards and require maintenance. This CIP includes funds to correct deficiencies and perform evaluations including options to repair or replace the tanks.

The current CIP includes funding for projects at two of the smaller storage tanks including repairs at the Black Brook and Chapman Road storage tanks. A third project for the Drummer Hill tank that had been scheduled for FY24 was moved up to FY19 because of the tank failure in March 2018.

The City's water assets have an estimated value of more than \$115 million and an ongoing investment into their maintenance, repair, and replacement will assure that future generations enjoy safe, high quality drinking water. The current CIP request of \$12.4 M over 6 years represents an average investment of 1.8% of the asset value per year, down from 2.2% investment anticipated in the FY20-25 CIP.

Water Storage Tank Projects

The City owns and operates 6 water storage tanks throughout the distribution system. In 2013, Tighe and Bond Engineering performed an external evaluation of the water storage tanks. In 2015, Liquid Engineering, a team of specialized divers performed an inspection of the interior of the water storage tanks.

As proposed in the CIP, FY 20 funds the design for improvements of three of the City's water storage tanks, which includes the Blackbrook, Chapman Road and the 1.5 million gallon tank located at the Water Treatment Facility. Even though the tanks are listed as independent projects, the projects will be combined to take advantage of the cost and administrative efficiencies with having one large project.

In 2018, the Blackbrook tank was taken offline and completely refurbished inside and out. However, the electrical equipment was not moved above ground as part of the refurbishing project and still needs to be completed.

Chapman Road tank also has an underground vault with electrical utilities that need to be moved above ground. Repairs to the interior coating system as well as the exterior of the tank need to be performed as well.

The 1.5 MG tank is a large tank that is 112 feet in diameter and 21 feet deep. It's a buried, cast in place tank that was constructed in 1924 and will be nearly 100 years old by the time the improvements are complete. This project funds a new, impermeable roof cover that will be sloped appropriately to divert water away from the top of the tank which constitutes much of the work.

Combining all three projects into one project;

- FY20 \$120,041 for evaluation and design services
- FY22 \$428,116 for construction and implementation

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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: **Healthy Community**
 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, precast concrete water storage tank, constructed in 1996, provides water for fire suppression and helps maintain stable water pressure in the Black Brook pressure zone. The 2013 tank evaluation recommended the existing tank vault be discontinued and all underground utilities be re-located above ground. The electrical panels are in good condition and relocating them to an above ground station will extend their useful life by providing a drier environment. An above ground station would have the added benefit of allowing a single staff member to check critical components without the hazards, equipment, and additional personnel required to perform a confined space entry.

This project coincides with the Chapman tank and 1.5 million gallon tank repairs. The evaluation, design, and construction work on the three tanks will be performed at the same time to take advantage of the cost and administrative efficiencies associated with having one larger project versus several smaller projects. The scope of this project is smaller than described in previously published CIPs because in September 2017, the City Council approved moving ahead with the tank repairs to address the tank deterioration on an accelerated schedule, leaving the electrical upgrade to be performed in FY22 as scheduled. The FY22 budget was adjusted accordingly.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design		5,000						5,000
Construction/Implementation				30,000				30,000
Property/Equip. Acquisition								
TOTAL	\$0	\$5,000	\$0	\$30,000	\$0	\$0	\$0	\$35,000
FUNDING								
Current Revenue								0
Capital Reserve		5,000		30,000				35,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$5,000	\$0	\$30,000	\$0	\$0	\$0	\$35,000

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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: **Healthy Community**
 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, precast concrete water storage tank was constructed in 1993. This project includes tank repairs identified in the November 2013 Tighe and Bond "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. The 2013 evaluation recommended discontinuing the existing vault and relocating all existing underground utilities above ground to provide a drier environment for the electrical and analytical equipment. An above-ground station would also allow a single staff member to inspect critical components without the hazards, assistance, and equipment associated with a regulated confined space entry.

FY20 funds a detailed evaluation of the tank, development of repair specifications and electrical upgrade design. FY22 funds the tank repairs and electrical work. This project coincides with the Blackbrook tank and 1.5 million gallon tank repairs to take advantage of the cost and administrative efficiencies associated with having one larger project versus several smaller projects.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design		25,000						25,000
Construction/Implementation				54,449				54,449
Property/Equip. Acquisition								0
TOTAL	\$0	\$25,000	\$0	\$54,449	\$0	\$0	\$0	\$79,449
FUNDING								
Current Revenue								0
Capital Reserve		25,000		54,449				79,449
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$25,000	\$0	\$54,449	\$0	\$0	\$0	\$79,449

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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: **Healthy Community**
 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 the design to correct deficiencies including a new membrane roof cover, regrading the soil over the tank, installation of a mixing system, and installation of 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 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	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design		90,041						90,041
Construction/Implementation				343,667				343,667
Property/Equip. Acquisition								0
TOTAL	\$0	\$90,041	\$0	\$343,667	\$0	\$0	\$0	\$433,708
FUNDING								
Current Revenue								0
Capital Reserve		90,041		343,667				433,708
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$90,041	\$0	\$343,667	\$0	\$0	\$0	\$433,708

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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: **Healthy Community**
 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. FY18 funded a more detailed evaluation of current and future water storage requirements and helped the City Council determine whether it was 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; corrosion on the tank wall; interior rust nodules on the floor of the tank; 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. 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 scheduled for FY23.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation					2,275,882			2,275,882
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$2,275,882	\$0	\$0	\$2,275,882
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded					2,275,882	0	0	2,275,882
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$2,275,882	\$0	\$0	\$2,275,882

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: No impact
Ongoing

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Dam Improvements**
 Department: **Public Works - Water Fund**
 Physical Location: **Roxbury, NH**
 Federal Mandate: **No**
 State Regulation or Law: **Yes - letter of deficiency (admin rule)**
 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: **Protection of the City's main water supply and compliance with the State Dam Safety regulations**



PROJECT DESCRIPTION/JUSTIFICATION

In 2012, the City completed a *Dam Master Plan* to address the deficiencies identified by the NH Department of Environmental Services (NHDES) concerning our dams ability to withstand severe flood events. The Master Plan also included discussion about the importance of the dams as the City's primary water supplies. Both of the City's water supply dams (Babbidge and Woodard) 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.

Funding for the upgrades to 86-year-old Babbidge Dam were provided in prior CIPs. Construction of these improvements began in the fall of 2017.

Design of the improvements required at the 107-year-old Woodward Dam began during the summer of 2017. Construction is scheduled for the Spring of 2020. To meet the requirements for a high hazard dam, the outlet channel will be enlarged, straightened, and armored, to protect against erosion during extreme flows. In addition, the height of the dam will be raised approximately 2 feet to prevent overtopping. The work will also include new pipes and valves to manage the flow of water from Woodward Pond to the Babbidge Reservoir.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		1,797,030						1,797,030
Property/Equip. Acquisition								0
TOTAL	\$0	\$1,797,030	\$0	\$0	\$0	\$0	\$0	\$1,797,030
FUNDING								
Current Revenue								0
Capital Reserve	80,000							80,000
Debt Funded		1,717,030						1,717,030
Federal or State Grants								0
Other Sources								0
TOTAL	\$80,000	\$1,717,030	\$0	\$0	\$0	\$0	\$0	\$1,797,030

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

High \$50,001 or more
One time

PROJECT STATUS:

Ongoing CIP

WATER DISTRIBUTION IMPROVEMENTS

In 2015 The Public Works Department hired a consultant to prepare a Water Mains Asset Management Plan (AMP). The Plan was completed in June of 2016. The AMP prioritizes water mains that should be replaced or rehabilitated over the next century. Each length of water main throughout the City was evaluated for both probability and consequence of failure. Criteria used to identify probability of failure include age, material, and breakage history. Criteria used to determine the consequence of failure include regulatory compliance, social cost, collateral damage, and environmental cost. A weighted calculation was used to combine these ratings into a risk score for each water main throughout the City. Mains with the highest risk score are prioritized for replacement or rehabilitation in the CIP. Mains with lower risk scores will be identified for replacement or rehabilitation in future years.

Street	Scope of work	Length (feet)	2018 estimated cost**	Construction year	Inflation adjust. (3% per year)	Construction year estimated cost**
-	No work planned to allow adequate funding for FY19 projects	-	-	2020	-	-
-	No work planned to allow adequate funding for FY22 & FY23 projects	-	-	2021	-	-
Main Street	Replace 6" cast iron pipe with 8" ductile iron pipe from Central Square to Church Street	372	\$93,000	2022	\$14,812	\$107,812
Court Street	Replace 10" cast iron pipe with 10" ductile iron pipe from East Surry Road to Maple Avenue	2,832	\$1,102,615	2023	\$175,618	\$1,278,233
Island Street	Prepare designs for FY25 project.	-	\$97,100	2024	\$18,842	\$115,942
Island Street	Replace 6" cast iron pipe with 8" ductile iron pipe from West Street to the bridge over the Ashuelot River	1,850	\$647,500	2025	\$148,843	\$796,343
Hastings Avenue	Prepare designs for FY26 project.	-	\$120,000	2026	\$32,012	\$152,012
Hastings Avenue	Replace 8" cast iron pipe with 12" ductile iron pipe from Hurricane Road to Summit Road to improve available fire flows	3388	\$967,266	2027	\$294,797	\$1,262,063
Maple Avenue	Prepare designs for FY26 project.	-	\$141,885	2028	\$48,797	\$190,682
Maple Avenue	Replace 10" cast iron pipe with 12" ductile iron pipe from Hastings Avenue to Rt. 12.	3,313	\$945,900	2029	\$363,447	\$1,309,347

** All costs include 10% for construction contingencies, 10% for engineering design, 10% for construction administration, and 1% for supervision

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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: **Improve water quality and system reliability**



PROJECT DESCRIPTION/JUSTIFICATION

In 2015 the public works department hired a consultant to prepare a Water Mains Asset Management Plan (AMP). The AMP was completed in June of 2016, and outlines an informed process to identify water mains that should be replaced or rehabilitated over the next century. Each length of water main throughout the City was evaluated for both probability and consequence of failure. Criteria used to identify probability of failure include age, material, and breakage history. Criteria used to determine the consequence of failure include regulatory compliance, social cost, collateral damage, and environmental cost. A weighted calculation was used to combine these ratings into a risk score for each water main throughout the City. The current CIP addresses three high-priority water mains on Court Street, Main Street, and Island Street. Mains with lower risk scores will be identified for replacement or rehabilitation in future years.

This program is also used to fund the replacement of under-sized water mains. These projects often have lower risk scores because the mains may not be as old or prone to breakage. However, they are important in terms of system reliability, and our ability to provide adequate fire flows. Two such projects are currently planned for FY27 and FY29. The timing of these upgrades may be re-evaluated as circumstances demand.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design					191,735	115,942		307,677
Construction/Implementation				107,812	1,086,498		796,343	1,990,653
Property/Equip. Acquisition								
TOTAL	\$0	\$0	\$0	\$107,812	\$1,278,233	\$115,942	\$796,343	\$2,298,331
FUNDING								
Current Revenue								0
Capital Reserve				107,812	1,278,233	115,942	796,343	2,298,331
Debt Funded								0
Federal or State Grants								0
Use of Surplus / Retained Earnings								0
TOTAL	\$0	\$0	\$0	\$107,812	\$1,278,233	\$115,942	\$796,343	\$2,298,331

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Reduce - will reduce operating costs
N/A

PROJECT STATUS:

Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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: **Healthy Community**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Improve water quality and system reliability**



PROJECT DESCRIPTION/JUSTIFICATION

This project will renew water mains through cleaning and lining to extend their life and improve water quality. It will occur in areas where water mains are adequately sized but need attention, and the other utilities do not require replacement.

Prior capital improvement programs have budgeted for cleaning and lining based on the price for spray-applied cement lining. An analysis of recent water main breaks indicates that our most critical need is structural lining of Cast Iron Universal (CIU) pipes. This type of pipe has joints held together by two bolts. Over time, these bolts corrode and cause the pipe to separate at the joint. Unfortunately, cement lining does not address this type of deficiency. Specific projects currently planned include:

FY19 & FY20: Elm Street (from Court Street to North Street - 4100 LF of 6" main)

FY21: Roxbury Street (Reservoir Street to Oak Street - 1,000 LF of 12" main);

FY22: Main Street (from Eagle Court to Winter Street - 1,922 LF of 12" main) - Funding split over FY21 and FY22 to moderate rate impact.

FY23: Meadow Road (1,320 LF of 12" main)

FY24 & FY25: West Street (from Symonds Place to Bradford Road - 3,030 LF of 12" main)

FY26-FY28: Water Street (4,930 LF of 16" main) - Work will be completed in 3 phases.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		544,000	174,800	356,500	237,700		596,200	1,909,200
Property/Equip. Acquisition								0
TOTAL	\$0	\$544,000	\$174,800	\$356,500	\$237,700	\$0	\$596,200	\$1,909,200
FUNDING								
Current Revenue	268,325	275,675	174,800	181,500	237,700		296,200	1,434,200
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Use of Surplus / Retained Earnings				175,000			300,000	475,000
TOTAL	\$268,325	\$275,675	\$174,800	\$356,500	\$237,700	\$0	\$596,200	\$1,909,200

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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: **Improve water quality and system reliability**



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.

FY22: George Street over Beaver Brook

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation				47,300				47,300
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$47,300	\$0	\$0	\$0	\$47,300
FUNDING								
Current Revenue								0
Capital Reserve				47,300			0	47,300
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$47,300	\$0	\$0	\$0	\$47,300

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Water Valve Replacement**
 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: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Improve Water distribution system reliability**



PROJECT DESCRIPTION/JUSTIFICATION

This project replaces gate valves in water mains that are not scheduled for replacement through other infrastructure improvement projects. Properly functioning gate valves are required to isolate water mains in the event of a break, routine repair, or system contamination. More than one third of the City's water gate valves are sixty years or older and present maintenance issues because they are difficult to open and close, or cannot be operated at all. Problems 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. Individual valves are selected for replacement based on inspections performed during the bi-annual flushing program, with priority given to poor-condition valves in areas scheduled for road work.

In recent years, roadway rehab projects have required extensive preparatory work from public works staff to replace unserviceable curb stops and service laterals before resurfacing the roadways. To date, the Water & Sewer division has completed this work as an operating budget item. This practice has resulted in other division work being delayed or left undone. Beginning in FY20, funds will be budgeted through the Water Valve Replacement Project to cover the cost of curb stop and lateral replacement, where required.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Main Line Valves		79,700	82,100	84,600	87,100	89,700	92,400	515,600
Curb Stops and Laterals		13,500	13,900	14,300	14,700	15,100	15,600	87,100
TOTAL	\$0	\$93,200	\$96,000	\$98,900	\$101,800	\$104,800	\$108,000	\$602,700
FUNDING								
Current Revenue		93,200	96,000	98,900	101,800	104,800	108,000	602,700
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$93,200	\$96,000	\$98,900	\$101,800	\$104,800	\$108,000	\$602,700

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Ongoing

PROJECT STATUS:

Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **WTF Pavement Replacement**
 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: **Maintain Infrastructure**



PROJECT DESCRIPTION/JUSTIFICATION

The Water Treatment Facility (WTF) became operational in 1993 and will be 30 years old in 2023. Since 1993 the City has performed repairs on the access road and parking lot areas to maintain and extend the useful life of the pavement. The November 2013 "Water Facilities Evaluation" performed by Tighe and Bond indicated the bituminous pavement has a lifespan of 20 years. The report noted that the access road and parking area were in fair condition, but many spider cracks, longitudinal cracks, and spalled areas were observed. The overall pavement condition and type of cracking, indicate that crack sealing will no longer prolong the pavement life. This project funds repaving the access road and parking areas including adjustments to manhole covers, rims, catch basin frames, and grates. This work is scheduled for FY23 because the 2013 Tighe and Bond evaluation recommended the deficiencies be corrected by 2019 to prevent the need for additional repairs and further degradation of the pavement. Further pavement degradation can result in a more extensive and expensive project in the future. This project will provide an access road and parking areas that, with proper maintenance, will have a useful life of 20 to 30 years.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation					71,900			71,900
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$71,900	\$0	\$0	\$71,900
FUNDING								
Current Revenue								0
Capital Reserve					71,900			71,900
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$71,900	\$0	\$0	\$71,900

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Water Booster Stations**
 Department: **Public Works - Water Fund**
 Physical Location: **Fox Ave & Glen Rd**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 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: **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 precast concrete water pumping stations. The stations are equipped with online monitoring instrumentation that continuously monitor and trend water quality parameters using the plant's Supervisory Control and Data Acquisition System (SCADA). This project funds the FY20 replacement of the turbidity, chlorine, and pH online analyzers in both stations.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		42,892						42,892
TOTAL	\$0	\$42,892	\$0	\$0	\$0	\$0	\$0	\$42,892
FUNDING								
Current Revenue								0
Capital Reserve		42,892						42,892
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$42,892	\$0	\$0	\$0	\$0	\$0	\$42,892

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Well Field Upgrades**
 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: **Healthy Community**
 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 City's surface water supply is supplemented by 4 groundwater wells located on West and Court Streets. The West Street and Court Street well facilities include four well buildings that were constructed between 1965 and 1977, and two corrosion control buildings, constructed in 1988 that house chemical feed equipment. The November 2013 "Water Facilities Evaluation" performed by Tighe and Bond, cited many deficiencies for the facilities including replacement of chemical storage tanks, chemical feed pumps, well pumps, electrical circuit breaker and panel boards, Parco valves, building heaters, structural improvements, and the addition of electrical generators to provide emergency power.

This project funds an in-depth, detailed evaluation of these facilities in FY20. It will provide recommendations for repair/replace/relocation of the City's well facilities and will assist the City Council to determine the best approach to move forward with well resource improvements. The evaluation will also consider 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. FY23 funds the design for either rehabilitation of current assets or construction of a new well facility. FY25 funds either rehabilitation of the West or Court Street facilities, or construction of a new supply well and corrosion control facility.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design		75,000			408,590			483,590
Construction/Implementation							1,226,000	1,226,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$75,000	\$0	\$0	\$408,590	\$0	\$1,226,000	\$1,709,590
FUNDING								
Current Revenue								0
Capital Reserve		75,000			408,590			483,590
Debt Funded							1,226,000	1,226,000
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$75,000	\$0	\$0	\$408,590	\$0	\$1,226,000	\$1,709,590

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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: **Healthy Community**
 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, each with three layers of filter media. Since its installation in 1993, the media has been renewed, but not replaced, and shows signs of wear. 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 found the anthracite media does not meet specifications and recommends its replacement to improve filter performance and efficiency. Tighe and Bond recommend removing and discarding the existing media to perform the underdrain evaluation and repair. When the underdrain work is complete, all 3 layers of media will be replaced with fresh material.

This project funds the inspection and repair of the underdrain system and filter media for each unit, on a phased schedule, to minimize operational and budget impacts. This CIP includes funding for one unit every two years, beginning in FY20.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design/construction oversight		17,575						17,575
Construction/Implementation		173,891		203,126		215,496		592,513
Property/Equip. Acquisition								0
TOTAL	\$0	\$191,466	\$0	\$203,126	\$0	\$215,496	\$0	\$610,088
FUNDING								
Current Revenue								0
Capital Reserve		191,466		203,126		215,496		610,088
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$191,466	\$0	\$203,126	\$0	\$215,496	\$0	\$610,088

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

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Water Supply Master Plan**
 Department: **Public Works - Water 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: **Policy**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Map out a plan to assure the community's current and future water needs are met**



PROJECT DESCRIPTION/JUSTIFICATION

The current water supply master plan is based on work performed more than 25 years ago. Changes in climate, property ownership, and drinking water regulations indicate the benefit of an update. The City updated its groundwater model in 2016-2017 when the Monadnock region experienced moderate drought conditions. That update showed the future White Brook well site is supplied by the same watershed as the existing well fields, suggesting it is a redundant, not an additional supply. Other potential well sites exist, and a new planning document would evaluate their capacity and quality. This work is scheduled in FY20 using existing funding in the water supply protection project.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design		100,000						100,000
Construction/Implementation								0
Property/Equip. Acquisition								0
TOTAL	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Project Balance	100,000							100,000
TOTAL	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Create efficiencies
One time

PROJECT STATUS:

New Project

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Emergency Generators**
 Department: **Public Works - Water Fund**
 Physical Location: **Chapman Rd, Wells 2, 3 and 4**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 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: **To have a reliable supply of emergency power that will allow to remain in operation in the event of a power outage**



Steep Chapman Rd driveway



Steep Chapman Rd driveway and curve at top of the hill



Water Treatment Facility generator

PROJECT DESCRIPTION/JUSTIFICATION

This project will purchase 3 new generators: a 100 KW generator and automatic transfer switch at the Chapman Road Water Booster Station; a 200 KW generator and transfer switch for Wells 2,3 and 4; and replacement of the 1985 30 KW portable generator that is used at remote stations as needed. The City has seven other sites without generators, including Well 1, where the new portable equipment will be used in conjunction with an existing 200 KW portable generator when line power fails.

Backup power generators are of paramount importance for a public water system. Two of Keene's key sites do not have permanently located automatic generators that allow continued water service when line power is lost. Seven other sites rely solely on portable generators. The Court Street well field, capable of producing up to 1,700 gallons of water per minute, and the water booster station that fills the 200,000 gallon Chapman Road water storage tank, both rely on the ability of staff to shuffle around 2 portable generators, shared with 7 other remote sites, to allow uninterrupted water service during a power outage. A 200 KW generator located at the Court Street well field, sized to operate two wells at a time, would allow consistent production and treatment of up to 1.6 million gallons of portable water a day, for drinking and fire protection. A permanently located generator at the Chapman Road water booster station would allow the Chapman Road area and the Branch Road neighborhoods to continue to receive water during a power outage. Using a portable generator at Chapman Road is challenging because it is a steep, curving driveway that is difficult to maneuver in good weather, and dangerous or impossible during storm conditions. The 7 other sites do not have space or need for onsite emergency power generation.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design						25,000		25,000
Construction/Implementation								0
Property/Equip. Acquisition						225,793		225,793
TOTAL	\$0	\$0	\$0	\$0	\$0	\$250,793	\$0	\$250,793
FUNDING								
Current Revenue								0
Capital Reserve						250,793		250,793
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$250,793	\$0	\$250,793

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Create efficiencies
One time

PROJECT STATUS:

New Project

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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 online monitoring equipment that allows 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 data generated by this equipment allows staff to make process changes and optimize the water treatment process. This project funds the replacement of the online total organic carbon (TOC) analyzer in FY25.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation							39,000	39,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$0	\$39,000	\$39,000
FUNDING								
Current Revenue								0
Capital Reserve							39,000	39,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$0	\$39,000	\$39,000

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

PROJECT STATUS: Ongoing CIP

Sewer Fund

Every day the City of Keene transports and treats about 3 million gallons of sewage from homes, businesses, and industries. The sewer system and wastewater treatment plant (WWTP) are intended to treat wastewater from sinks, toilets, showers, washers, and industrial processes, but are not large enough to collect and treat rain or groundwater. The wastewater system handles an average of a million more gallons a day than is produced through the drinking water sources; reflecting groundwater infiltration through joints or cracks in sewer mains and inflow from illegal roof drain and sump pump connections.

Whatever its source, all of the City's wastewater drains through more than 90 miles of sewer mains and must pass through the City's main pump station located on Martell Court before it reaches the WWTP, located on Airport Road in Swanzey. The WWTP removes more than 99% of the pollutants from the wastewater before discharging it to the Ashuelot River where it must be safe for aquatic life and recreational uses.

Like any asset, Keene's sewer system requires maintenance, upgrade, and replacement to keep it functioning properly and in compliance with environmental regulations. This CIP contains projects funded by sewer rate payers that are designed to keep the City's wastewater flowing reliably and adequately treated.

Collection System: sewer mains and manholes

The City's oldest sewer mains date back to the late 1800's – when the community first decided to install a set of pipes to collect and remove sewage. Over time, sewers were installed as the community grew with materials that were intended to last 50-75 years. Approximately 25% of Keene's 90-plus miles of sewer mains are older than 75 years and are past the point of reliable service.

When a main reaches the end of its useful life, water can leak through breaks or cracks and cause the main to collapse. Cracks allow roots to grow inside the sewer mains and create a blockage and can turn into holes that provide a path for the surrounding soil to enter, creating a sinkhole above and blockage in the main. When that happens, sewage can back up into homes and businesses or spill out on to the ground.

In response to an EPA Order in 2004, the City increased its sewer main repair and replacement program and as a result, has seen a decrease in the amount of groundwater entering the sewers and decreases in the numbers of sewer main failures, blockages, and sewage overflows. The rate of forward progress seen during the work performed under EPA's Order has slowed. At the current rate of investment reflected in this CIP, the City will replace its sewer mains in 321 years. Without a significant increase in funding, the City's sewer collection system will continue to deteriorate and failures will again become more common.

Collection system improvements proposed through this CIP include correction of significant deficiencies in the sewers on Blossom Street and Colony Court where overflows occurred in 2016 and 2017. Additionally, funds are included to replace old mains as part of the downtown revitalization project. In FY23 and 24, the sewer force main that connects our pump station on Martell Court to the treatment plant will be inspected and repaired as necessary.

Shorter lengths of main replacement, in conjunction with State of NH infrastructure projects on the bypass and the Winchester Street bridge are also included.

For more than a decade, the CIP has included funds for the ongoing effort to repair deficiencies identified through a comprehensive video inspection of the sewer system performed between 2008 and 2010 and many of these deficiencies have been corrected. In the fall of 2018, the City prepared an Asset Management Plan (AMP) for our sewer mains. The AMP assigns a numerical risk score to each section of sewer main based on age, material, history of breakage and repairs, as well as the potential social, economic and environmental consequences of a failure. These risk scores, in conjunction with other planned utility and roadway projects are used to select and prioritize individual projects.

Sewage may pass through one of three smaller pump stations enroute to the treatment plant, but it all ultimately passes through the main pump station located at the end of Martell Court on the bank of the Ashuelot River. This building houses 4 large pumps that pump the wastewater almost 2 miles to the WWTP through a 30" ductile iron Force Main that was installed over 30 years ago.

The average flow at Martell Court pump station is about 2,100 gallons per minute, with peaks up to 7,000 gallons per minute in severe storm events. At those rates of flow, a breakdown at the pump station or a blockage in the force main would quickly result in sewage backing up in the mains, in the streets, in homes and businesses, and ultimately into the Ashuelot River. In FY23 funds are requested to complete a detailed inspection of the force main. It is anticipated that some repairs will be necessary, but the scope of those repairs will be determined through the inspection and will be included in future CIP. Previous estimates for replacement of the force main were about \$6 million.

In 2014, energy efficient pumps and controls replaced 29-year old pumping equipment at Martell Court to assure equipment reliability and a new screen to remove wipes and other materials that damage equipment at the WWTP was funded in FY19. The FY20-25 CIP funds a new transformer and general maintenance on the 33 year old building – a new roof and repairs to insulation that protects interior ductwork.

Wastewater is treated at the WWTP, located at the end of Airport Road in Swanzey, where advanced chemical and biological treatment techniques are used to remove materials that are harmful to the environment. It was built in the early 1980's and is subject to increasingly stringent EPA regulations. To comply with new permit limits and replace aging, inefficient equipment, the first two phases of upgrades at the WWTP were completed in 2015 and 2017, and funding for phase three begins in FY21 and continues through FY25. It includes upsizing the emergency generator and replacing ductwork insulation, blowers and plant water systems.

At a cost to our average sewer customer of \$707 per year in 2018, Keene ranks below NH's 2015 average annual sewer cost of \$712. To keep pace with the aging of all of its sewer infrastructure, Keene should continue this level of investment. A healthy community and environment are dependent on a reliable and fully functional sewage collection and treatment systems and investment in this infrastructure is important for its continued reliability.

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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: **Healthy Community**
 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 emergency backup generator, both of which were installed when the station was built in 1985. The generator provides power to keep the station's four large raw sewage pumps operating when line power is interrupted and a generator failure would result in significant sewage overflows. The pump station would flood. Sewage would back up into buildings, into Beaver Brook, the Ashuelot River, and City streets within several hours of losing line power. The transformer converts high voltage power from the emergency generator to the lower voltage power that the pump station's equipment requires to operate when line power is interrupted.

In FY19, the transformer will be 34 years old and approaching the end of its reliable life. FY18 funded the design of the 15 KVA transformer replacement and FY19 funds the purchase and installation of a new transformer. FY19 also funds electrical design to replace the station's emergency generator and FY21 funds the purchase and installation of a new backup generator. 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	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation			130,810					130,810
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$130,810	\$0	\$0	\$0	\$0	\$130,810
FUNDING								
Current Revenue								0
Capital Reserve			130,810					130,810
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$130,810	\$0	\$0	\$0	\$0	\$130,810

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Negligible<\$5,001
One time

PROJECT STATUS:

Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Martell Court Roof Replacement**
 Department: **Public Works - Sewer Fund**
 Physical Location: **176 Martell Court**
 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: **Prevent costly repairs to roof surface in the future**



PROJECT DESCRIPTION/JUSTIFICATION

This project replaces the original asphalt roof at the Martell Court Pump Station. A local roofing contractor evaluated the roof and determined that it may last another 5 years, or longer. Because asphalt roofs are no longer an industry-accepted roof material, the roof will be replaced with a rubber membrane. The integrity of the roof will be evaluated each year to determine if this project needs to be accelerated or pushed out.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation					32,714			32,714
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$32,714	\$0	\$0	\$32,714
FUNDING								
Current Revenue								0
Capital Reserve					32,714			32,714
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$32,714	\$0	\$0	\$32,714

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

Ongoing CIP

SEWER IMPROVEMENTS

The Sewer Improvement program is used to fund replacement or upgrade of sanitary sewer mains that are not suitable candidates for lining or spot repairs. Generally, this includes sewer mains that are undersized for current flow, do not have adequate slope, or are prone to freezing due to shallow depth. Sewers may be replaced in conjunction with other infrastructure work or as stand-alone projects.

Street	Scope of work	2017 estimated cost ⁽¹⁾	Construction year	Inflation adjust.	Construction year estimated cost ⁽¹⁾
Blossom Street	Reconstruct a shallow 10-inch sewer main to improve flow characteristics.	\$553,829	2020	\$107,472	\$661,301
Colony Court	Replace sewer with adverse slope that causes backups. Costs include reconstruction of roadway and sidewalk.	\$1,183,465	2021	\$272,048	\$1,455,513
Main Street	Sewer replacements and upgrades required as part of the Downtown Revitalization Project ⁽²⁾	\$400,000	2022	\$106,708	\$506,708
	Sewer force main inspection	\$280,000	2023	\$85,336	\$365,336
	Sewer force main rehabilitation ⁽³⁾	\$600,000	2024	\$182,664	\$782,664
George St.	Replace 760 feet of 6-inch sewer mains with significant structural defects	\$152,000	2025	\$40,349	\$731,793
Sullivan St	Replace 2,130 feet of 6-inch sewer mains with significant structural defects	\$426,000		\$113,444	

Notes:

1) All costs include 10% for construction contingencies, 10% for engineering design, 10% for construction administration, and 1% for supervision. Future year construction assumes 3% inflation per year.

2) The exact scope of work has not been determined. It is anticipated that some relocations and replacements will be required, however, many of the mains in this area were lined in 2004 and are currently in good condition.

3) The scope of work for this project will be developed through the detailed inspection planned for FY23. It is anticipated that repair or replacement of some deteriorated segments will be required.

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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: **Healthy Community**
 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

The Sewer Improvement Program is used to fund replacement or upgrade of sanitary sewer mains that are not suitable candidates for lining or spot repairs. Generally, this includes sewer mains that are undersized for current needs, do not have adequate slope, or are prone to freezing due to shallow depth.

In FY22, funds are requested to address sewer system needs in conjunction with the ongoing Downtown Revitalization Project. Although the scope of this work cannot be determined until the current planning work progresses, some improvements and/or relocations of the sewer main are anticipated, due to the age and condition of the mains. In FY25, this program will replace 1920's era sewer mains on Sullivan and George Streets.

In FY23, the public works department will undertake a detailed inspection of the City's 2-mile long force main that conveys sewerage under pressure to the wastewater treatment plant. This 30-inch diameter ductile iron pipe was installed in 1985. Because there is no redundant system for conveying wastewater, it is not possible to interrupt flows for the inspection. A consultant will use a variety of remote sensing technologies to evaluate the pipeline for leaks, corrosion, gas pockets, and other defects while the pipeline remains in service.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design		45,771	205,395					251,166
Construction/Implementation		615,530	1,250,118	506,708	365,336	782,664	731,793	4,252,150
Property/Equip. Acquisition								0
TOTAL	\$0	\$661,301	\$1,455,513	\$506,708	\$365,336	\$782,664	\$731,793	\$4,503,316
FUNDING								
Current Revenue								0
Capital Reserve		661,301		506,708	365,336	782,664	731,793	3,047,803
Debt Funded			1,455,513					1,455,513
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$661,301	\$1,455,513	\$506,708	\$365,336	\$782,664	\$731,793	\$4,503,316

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Multi-year

PROJECT STATUS:

Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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: **Healthy Community**
 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 spot repairs to correct minor deficiencies to sewer mains. The project includes funds for engineering, construction, and inspection of the construction. In addition to the spot repairs, this project also funds lining in locations on roads that have very old sewers and are scheduled to be rehabilitated.

In previous years, spot repairs were prioritized based on the findings of the Priority Inspection Program (PIP) completed in 2011. Many of the highest ranking deficiencies have now been corrected. A variety of minor deficiencies identified through the 2017 "smoke testing" program have been addressed with FY19 funding.

In FY20, the City will line approximately 2,600' of the Beaver Brook Interceptor. This 16" asbestos-cement sewer main runs parallel to Beaver Brook and was installed in 1956. Work in future years will be prioritized based on the results of the department's Sewer Main Asset Management Plan, which is expected to be completed in the winter of 2018/2019.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		179,100	184,500	190,000	195,700	201,600	207,600	1,158,500
Property/Equip. Acquisition								0
TOTAL	\$0	\$179,100	\$184,500	\$190,000	\$195,700	\$201,600	\$207,600	\$1,158,500
FUNDING								
Current Revenue		179,100	184,500	190,000	195,700	201,600	207,600	1,158,500
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$179,100	\$184,500	\$190,000	\$195,700	\$201,600	\$207,600	\$1,158,500

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Sewer Manhole 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: **Healthy Community**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Eliminate groundwater infiltration into the treatment system and wastewater exfiltration through defects in deteriorated brick manholes**



PROJECT DESCRIPTION/JUSTIFICATION

The City has an inventory of over 200 brick manholes. Typically, the bricks retain their structural integrity for many years however, the mortar in between can deteriorate and create pathways for groundwater to infiltrate into the system, allowing bricks to fall into the mains, creating a source of blockage. Infiltration results in increased costs for pumping and treating clean water; and blockages result in sanitary sewer overflows where untreated waste is released into the environment.

This project will provide funding to rehabilitate the structures, by lining the interior surface with an epoxy-based mortar. Funding levels assume that all brick manholes will be lined over a period of 5 years, beginning in FY23. The requested funds assume that an estimated 20% of the manholes will not be in suitable condition for lining and will be replaced with new pre-cast concrete structures.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation					157,600	162,300	167,200	487,100
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$157,600	\$162,300	\$167,200	\$487,100
FUNDING								
Current Revenue								0
Capital Reserve					157,600	162,300	167,200	487,100
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$157,600	\$162,300	\$167,200	\$487,100

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

New Project

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **WWTP Access Road Repaving**
 Department: **Public Works - Sewer Fund**
 Physical Location: **420 Airport 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: **Maintain Infrastructure**



PROJECT DESCRIPTION/JUSTIFICATION

The Wastewater Treatment Plant (WWTP) became operational in 1985 and will be 40 years old in 2025. A 1.5 mile long access road provides vehicle access to the plant. Since 1985, the City has performed repairs to the road including crack sealing and spot repairs. However, the road has never been resurfaced. The overall pavement condition indicates that crack sealing will no longer prolong the life of the pavement and further degradation can result in a more extensive and expensive project in the future.

This project funds the in-place recycling of the existing asphalt with a new wearing surface from the gate located by the airport to the treatment plant, including the parking areas and roads surrounding the wastewater plant itself. The project will be completed in coordination with the proposed Force Main rehabilitation.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation						583,000		583,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$583,000	\$0	\$583,000
FUNDING								
Current Revenue								0
Capital Reserve						583,000		583,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$583,000	\$0	\$583,000

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

PROJECT STATUS: New Project

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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: **Healthy Community**
 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 four blowers, originally installed in 1985, with more energy efficient equipment. These four blowers include two 75 horse power (HP) blowers (pictured above) that aerate the septage holding tanks, grit chamber, and final effluent; and two 40 HP blowers that aerate the sludge storage tank.

FY21 funds the replacement of the two 40 HP blowers and FY22 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. It is expected that the blower condition will dictate their replacement in FY21 and FY22.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design		61,076						61,076
Construction/Implementation			179,360	184,741				364,101
Property/Equip. Acquisition								0
TOTAL	\$0	\$61,076	\$179,360	\$184,741	\$0	\$0	\$0	\$425,177
FUNDING								
Current Revenue								0
Capital Reserve			179,360	184,741				364,101
Debt Funded								0
Federal or State Grants								0
Other-2014 Cap Reserve	61,076							61,076
TOTAL	\$61,076	\$0	\$179,360	\$184,741	\$0	\$0	\$0	\$425,177

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Reduce - will reduce operating costs
Ongoing

PROJECT STATUS:

Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Duct Insulation Replacement**
 Department: **Public Works - Sewer Fund**
 Physical Location: **Wastewater Plant**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 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: **Refurbish old equipment to maintain current level of operation and defer replacement cost**



PROJECT DESCRIPTION/JUSTIFICATION

This project will replace the heating, ventilation, and air conditioning (HVAC) ductwork insulation at the Wastewater Treatment Plant (WWTP). The ductwork is important for fresh air exchange for equipment and personnel safety. The insulation protects the metal ductwork from corrosion resulting from the hydrogen sulfide gas present in wastewater. The ductwork is located directly over the raw wastewater as it first enters the plant. Therefore access for repair or cleaning is difficult. The ductwork insulation will be 38 years old at the time of replacement and is already beginning to fail as shown in the photo.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation					35,892			35,892
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$35,892	\$0	\$0	\$35,892
FUNDING								
Current Revenue								0
Capital Reserve					35,892			35,892
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$35,892	\$0	\$0	\$35,892

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Create efficiencies
One time

PROJECT STATUS:

Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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: **Healthy Community**
 CMP Vision/Strategy: **Emergency Preparedness**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 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 Wastewater Treatment Plant's (WWTP) standby generator that was installed in 1985. The generator was designed to provide backup power to the WWTP's critical equipment to allow treatment to continue when line power is interrupted. Generator replacement is recommended to retain reliability in FY20 when it is 35 years old because component failure is more likely and replacement parts are becoming harder to procure. The new generator will be larger than the current one because the existing generator is too small to handle the full equipment loading and currently some equipment must be either turned off or turned down to prevent overloading its capacity.

The WWTP's federal discharge permit requires backup power because electricity is required to maintain biological treatment and disinfection. A failure of either of these systems would result in significant violations of the discharge permit, exposing the City to legal actions and economic penalties. FY19 funds the design and FY21 funds the purchase and installation of a new, adequately sized, generator.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation			123,636					123,636
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$123,636	\$0	\$0	\$0	\$0	\$123,636
FUNDING								
Current Revenue								0
Capital Reserve			123,636					123,636
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$123,636	\$0	\$0	\$0	\$0	\$123,636

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Wastewater SCADA radio**
 Department: **Public Works - Sewer Fund**
 Physical Location: **City Wide**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **N/A**
 CMP Vision/Strategy: **Connectivity**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **To replace outdated equipment**



PROJECT DESCRIPTION/JUSTIFICATION

This project will replace the existing SCADA radios and antennas that were installed in 2002. These radios communicate from five (5) remote stations to the main SCADA system at the water plant, and can no longer be repaired; only replaced at a more expensive cost for the new radio and programming.

The radios will have upgraded routers, omni antennas for repeater sites, Yagi antennas for remote sites and wastewater sites, licensing, installation and SCADA programming.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design							44,182	44,182
Construction/Implementation								0
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$0	\$44,182	\$44,182
FUNDING								
Current Revenue							44,182	44,182
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$0	\$44,182	\$44,182

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **WWTP Laboratory Renovation**
 Department: **Public Works - Sewer Fund**
 Physical Location: **420 Airport Road**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 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: **Maintain Infrastructure**



PROJECT DESCRIPTION/JUSTIFICATION

The wastewater treatment came online in 1985 and treats approximately 3 million gallons of wastewater every day. The Laboratory Division of Public Works is located at the Wastewater Treatment Plant and is responsible for analyzing the required compliance and processing control samples. The laboratory is vintage, early 1980's, with minimal changes occurring to the interior since the plant was built. The laboratory has continued to keep up with industry standards with regards to its analytical equipment, but the cabinets, benches, and shelving are original to the plant and have reached the end of their useful life. This project will fund a complete laboratory renovation including electrical, mechanical, HVAC, new cabinets, shelving, bench tops, sinks, fixtures, fume hood, ceiling tiles, and a new coat of paint.

This project will be funded using money remaining from the Wastewater Treatment Plant, Phase 2 Upgrade.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design			10,000					10,000
Construction/Implementation			100,000					100,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$110,000	\$0	\$0	\$0	\$0	\$110,000
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other - Project Balance			110,000					110,000
TOTAL	\$0	\$0	\$110,000	\$0	\$0	\$0	\$0	\$110,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

Ongoing CIP

Transportation – programs, activities, and projects which are intended to facilitate the safe and efficient movement of people and things within the City, and to connect the local community with Monadnock Region, the state, and the world. The primary goal of these activities is to provide that roads, bridges, sidewalks, bike paths, and other transportation infrastructure are in good condition and meet the needs of the community.

Project Name	Page
Consolidated Infrastructure- All Years	125-127
Roadway Preservation/Rehabilitation	130
Bridge Repair/Replacement	132
Curb Repair/Replacement	133
Guardrail Replacement	134
Sidewalk Repair/Replacement	135
State Bypass Improvement Program	137
Traffic Signal Replacement Program	138

Transportation

The City's transportation system is comprised of 126 centerline miles of streets, 32 bridges, over 52 miles of sidewalks, 14,900 linear feet of guard rail, 8 traffic control signals, 5 flashing traffic signals and over 10 miles of multi-use trails. The transportation system provides critical links within the City, to the region, to the State, and ultimately to the world. The transportation system is how people get to work and school, buy groceries, and access recreational activities. For businesses it is their lifeline to receive and provide goods and services. A strong transportation system will set a positive tone and drives a community to success and a failing or struggling system will retard a community's ability flourish and compete.

The assets of the City's transportation system have been in place from the founding of the City, the 1750's, up to current times. This has resulted in components that were designed and built for very different needs, horse drawn carriages and wagons, but are expected to meet the demands of today; multi-generational pedestrians, vehicle, and bicycle operators; multi-passenger vehicles, tractor trailer trucks, electric cars, and autonomous vehicles in the near future.

The City invests in its transportation system through different ways. The City works to maintain and keep components functioning through its maintenance and repair projects. Through the Capital Improvement Program and this is accomplished through the Bridge Replacement, Road Rehabilitation, Curbing, Sidewalk, Traffic Signals, and Guard Rail Repair Projects. To determine the needs for these projects the Public Works Department performs inventory and condition surveys of the various assets. The surveys collect information on the condition (how much cracking, potholing, deterioration to components), on use (vehicle trips), and types of uses (is it a school route, residential collector or pathway to commercial centers). This information is reviewed to determine the types and methods of repair strategies, priority, and timing. Also layered into the review is the timing and need for work on other infrastructure components (water and sewer), work by private utilities, and larger developments within the community.

The City also invests in its transportation system through projects that improve functionality and/or capacity to meet increased demands or changes in function. Through the Capital Improvement Program this is accomplished through the Street Reconstruction Program, Upper and Lower Winchester Street Reconstruction, and Marlboro Street Corridor Improvements. These projects are identified through various avenues including the City's Comprehensive Master Plan, special commissions or review committees, development changes, and evaluation of data collected during the street survey.

Overall the City works to balance the need to maintain the functionality and operations of its transportation system and the cost of the system to the property owners.

CONSOLIDATED INFRASTRUCTURE REPORT							FY20	
STREET	Roadway	Curbing	Sidewalk	Drainage	Sewer	Water	Other	Total
Adams Court	\$ 9,321							\$ 9,321
Adams Street	68,492			10,000				78,492
Arch Street - (Park to Hurricane)	139,300			15,478				154,778
Avalon Place	15,450							15,450
Blossom Street				10,000	661,301			671,301
Elliot Street	29,307			10,000				39,307
Elm Street (Water Main Lining)						514,300		514,300
Gates Street	21,946			5,000				26,946
Main Street (Route 101 to Marlboro St)	199,200			5,000				204,200
Moore Farm Road	30,900							30,900
No Name Road	15,450							15,450
Proctor Court	20,600							20,600
South Street	25,103			10,000				35,103
Sullivan Road (Route 9 to town line)	89,237							89,237
River Street	66,893							66,893
Roxbury Street	200,000	65,478	65,478	502,608				833,564
Winchester Street (Rt. 101 to Island St.)	4,270,020							4,270,020
Preservation (various locations)	30,000							30,000
Drain Cleaning (various locations)				66,800				66,800
Sewer Repair & Lining (various locations)					179,108			179,108
Wastewater Treatment Facility Upgrades					179,360			179,360
Gate Valves (various locations)						93,200		93,200
Guardrails (various locations)							44,024	44,024
Water Storage Tanks						120,041		120,041
Fox Ave. Booster Station						42,892		42,892
Water Treatment Facility Upgrades						191,466		191,466
Wellfield Upgrades						75,000		75,000
Woodward Dam Improvements						1,797,030		1,797,030
Parking Improvements							52,300	52,300
Detail: FY 2020 Projects	5,231,219	65,478	65,478	634,886	1,019,769	2,833,929	96,324	9,947,083
Contingency, Design, Admin. & Inflation	270,774							270,774
Program Funding Request: 2020	\$ 5,501,993	\$ 65,478	\$ 65,478	\$ 634,886	\$ 1,019,769	\$ 2,833,929	\$ 96,324	\$ 10,217,857

CONSOLIDATED INFRASTRUCTURE REPORT							FY21	
STREET	Roadway	Curbing	Sidewalk	Drainage	Sewer	Water	Other	Total
Cady Street	\$ 25,750							\$ 25,750
Chapman Road	97,462							97,462
Cobb Street	15,450							15,450
Colony Court					1,455,513			1,455,513
Concord Road	258,530			10,000				268,530
Hooper Street	26,533							26,533
Lamson Street	26,790	15,000	14,752	10,000				66,542
Main Street (Rt. 101 to Silent Way)	97,600	35,000	22,000	10,000				164,600
Martin Street	33,086							33,086
Martin Street	33,086							33,086
Roxbury Street	200,000			371,492		174,800		746,292
Salisbury Road	54,739							54,739
School Street (West to Emerald)	46,350		22,000	10,000				78,350
Speaker Street	20,600							20,600
St. James Street	46,350	18,752	10,000	10,000				85,102
Washington Street	75,000							75,000
Drain Cleaning (various locations)				68,800				68,800
Sewer Repair & Lining (various locations)					184,481			184,481
Martel Court Pump Station					130,810			130,810
Wastewater Treatment Facility Upgrades					308,377			308,377
Gate Valves (various locations)						96,000		96,000
Parking Improvements								-
Detail: FY 2021 Projects	1,057,326	68,752	68,752	490,292	2,079,181	270,800	-	4,035,103
Contingency, Design & Admin. & Inflation	272,236							272,236
Program Funding Request: 2021	\$ 1,329,562	\$ 68,752	\$ 68,752	\$ 490,292	\$ 2,079,181	\$ 270,800	\$ -	\$ 4,307,339

CONSOLIDATED INFRASTRUCTURE REPORT							FY22	
STREET	Roadway	Curbing	Sidewalk	Drainage	Sewer	Water	Other	Total
Church Street				259,325				\$ 259,325
Darling Road	151,128							151,128
Dickinson Road	\$ 124,137							124,137
Main Street / Downtown				577,300	506,708	356,500		1,440,508
Maple Avenue	339,800							339,800
Meetinghouse Road	167,000							167,000
North Lincoln Street	202,500							202,500
Pearl Street	7,164							7,164
Timberlane Drive	242,200							242,200
Victoria Street Extension	1,703,000				208,669	347,782		2,259,451
West Street (West of Park)	89,900							89,900
Winchester Street (South of Rt. 101)	343,801							343,801
Curb Installation (location TBD)		70,815						70,815
Sidewalk Replacement (location TBD)			70,815					70,815
Stormwater Spot Repairs (location TBD)				70,815				70,815
George Street Bridge over Beaver Brook						47,300	782,651	829,951
Sewer Repair & Lining (various locations)					190,015			190,015
Gate Valves (various locations)						98,900		98,900
Water Treatment Facility Upgrades						203,126		203,126
Water Storage Tank Upgrades						428,116		428,116
Parking Improvements							106,400	106,400
Detail: FY 2022 Projects	3,370,630	70,815	70,815	907,440	905,392	1,481,724	889,051	7,695,867
Contingency, Design & Admin. & Inflation	293,692							293,692
Program Funding Request: 2022	\$ 3,664,322	\$ 70,815	\$ 70,815	\$ 907,440	\$ 905,392	\$ 1,481,724	\$ 889,051	\$ 7,989,559

CONSOLIDATED INFRASTRUCTURE REPORT							FY23	
STREET	Roadway	Curbing	Sidewalk	Drainage	Sewer	Water	Other	Total
Court Street (Westview to Maple)	\$ 462,000					1,278,233		\$ 1,740,233
Emerald Street				116,400				116,400
Summit Road (Hastings to Park)	109,200							109,200
Main Street (Silent Way to City limit)	128,600							128,600
Meadow Road (Water Main Lining)						237,700		237,700
Washington Street	44,100							44,100
Preservation (various locations)	105,100							105,100
Curb Installation (location TBD)		72,939						72,939
Sidewalk Replacement (location TBD)			72,939					72,939
Stormwater Spot Repairs (location TBD)				72,939				72,939
Drain Cleaning (various locations)				73,000				73,000
Sewer Repairs & Lining (various locations)					353,316			353,316
Wastewater Treatment Facility Upgrades					35,892			35,892
Martel Court Pump Station					32,714			32,714
Sewer Force Main Rehab					365,336			365,336
Gate Valves (various locations)						101,800		101,800
Water Treatment Facility Upgrades						71,900		71,900
Water Storage Tank Upgrades						2,703,998		2,703,998
Well Field Upgrades						408,590		408,590
Parking Improvements							348,200	348,200
								-
								-
Detail: FY 2023 Projects	849,000	72,939	72,939	262,339	787,258	4,802,221	348,200	7,194,896
Contingency, Design & Admin. & Inflation	332,846							332,846
Program Funding Request: 2023	\$ 1,181,846	\$ 72,939	\$ 72,939	\$ 262,339	\$ 787,258	\$ 4,802,221	\$ 348,200	\$ 7,527,742

CONSOLIDATED INFRASTRUCTURE REPORT							FY24	
STREET	Roadway	Curbing	Sidewalk	Drainage	Sewer	Water	Other	Total
Airport Road	\$ 163,800						\$ 160,000	\$ 323,800
Central Square							160,000	160,000
Charles Street				102,800				102,800
Church Street / Probate Street				760,500				760,500
Emerald Street				112,800				112,800
Marlboro Street (East of Eastern)	203,900							203,900
West Street (School to Park)	649,000							649,000
Winchester Street (South of Rt. 101)	180,779							180,779
Preservation (various locations)	82,000							82,000
Curb Installation (location TBD)		75,128						75,128
Sidewalk Replacement (location TBD)			75,128					75,128
Stormwater Spot Repairs (location TBD)				75,128				75,128
Drain Cleaning (various locations)				75,200				75,200
Sewer Repair & Lining (various locations)					363,915			363,915
Sewer Force Main Rehab					782,864			782,864
Water Main Lining (various locations)						250,000		250,000
Gate Valves (various locations)						104,800		104,800
Water Treatment Facility Upgrades						466,289		466,289
Water Storage Tank Upgrades						614,764		614,764
Beaver Brook Flood Mitigation				500,000				500,000
Parking Improvements							57,400	-
Robin Hood Park Dam						83,200		83,200
Detail: FY 2024 Projects	1,279,479	75,128	75,128	1,626,428	1,146,779	1,519,053	377,400	6,099,395
Contingency, Design & Administration	358,827							358,827
Program Funding Request: 2024	\$ 1,638,306	\$ 75,128	\$ 75,128	\$ 1,626,428	\$ 1,146,779	\$ 1,519,053	\$ 377,400	\$ 6,458,222

CONSOLIDATED INFRASTRUCTURE REPORT							FY25	
STREET	Roadway	Curbing	Sidewalk	Drainage	Sewer	Water	Other	Total
Preservation TBD	\$ 150,000							\$ 150,000
Road Rehab TBD	481,660							481,660
Central Square							200,000	200,000
Island Street	194,300					796,343		990,643
Marlboro Street (East of Eastern)	203,900							203,900
West Street (Water Main Lining)						596,200		596,200
Winchester Street (South of Rt. 101)	3,151,617							3,151,617
Curb Installation (location TBD)		77,382						77,382
Sidewalk Replacement (location TBD)			77,381					77,381
Stormwater Spot Repairs (location TBD)				77,381				77,381
Drain Cleaning (various locations)				77,400				77,400
Sewer Repair & Lining (various locations)					207,600			207,600
Gate Valves (various locations)						108,000		108,000
Water Treatment Facility Upgrades						39,000		39,000
Beaver Brook Flood Mitigation				500,000				500,000
Parking Improvements							53,000	53,000
Ashuelot River Dam							495,300	495,300
								-
Detail: FY 2025 Projects	4,181,477	77,382	77,381	654,781	207,600	1,539,543	748,300	7,486,464
Contingency, Design & Administration	375,581							375,581
Program Funding Request: 2025	\$ 4,557,058	\$ 77,382	\$ 77,381	\$ 654,781	\$ 207,600	\$ 1,539,543	\$ 748,300	\$ 7,862,045

ROAD PRESERVATION AND REHABILITATION LIST

2020

2021

2022

PRESERVATION	EST. COST
Grant	\$ 6,200
Douglas	\$ 6,800
Franklin	\$ 5,900
Brook	\$ 4,100
Gurnsey	\$ 3,300
Edwards	\$ 3,700
Subtotal - Preservation	\$30,000

PRESERVATION	EST. COST
Washington Street	\$ 75,000
Subtotal - Preservation	\$ 75,000

PRESERVATION	EST. COST
West Street (West of Park)	\$ 89,900
Pearl	\$ 7,164
Subtotal - Preservation	\$97,064

MINOR REHABILITATION	EST. COST
Main Street (Route 101 to Marlboro)	\$ 199,200
Arch Street - (Park to Hurricane)	\$ 139,300
Subtotal - Minor Rehab.	\$ 338,500

MINOR REHABILITATION	EST. COST
Main Street (101 to Silent)	\$ 97,600
Subtotal - Minor Rehab.	\$ 97,600

MINOR REHABILITATION	EST. COST
Maple Avenue	\$ 185,000
Subtotal - Minor Rehab.	\$ 185,000

MAJOR REHABILITATION	EST. COST
Adams Court	\$ 9,321
Adams Street	\$ 68,492
Avalon Place	\$ 15,450
Elliot Street	\$ 29,307
Gates Street	\$ 21,946
Moore Farm Road	\$ 30,900
No Name Road	\$ 15,450
Proctor Court	\$ 20,600
South Street	\$ 25,103
Sullivan Road (Route 9 to town line)	\$ 89,237
River Street	\$ 66,893
Roxbury Street	\$ 200,000
Subtotal - Major Rehab.	\$ 592,699

MAJOR REHABILITATION	EST. COST
Cady Street	\$ 25,750
Chapman Road	\$ 97,462
Cobb Street	\$ 15,450
Concord Road	\$ 258,530
Hooper Street	\$ 26,533
Lamson Street	\$ 26,790
Martin Street	\$ 33,086
Roxbury Street	\$ 200,000
Salisbury Road	\$ 54,739
School Street (West to Emerald)	\$ 46,350
Speaker Street	\$ 20,600
St. James Street	\$ 46,350
Subtotal - Major Rehab.	\$ 851,640

MAJOR REHABILITATION	EST. COST
Darling Road	\$ 151,128
Dickinson Road	\$ 124,137
Meetinghouse Road	\$ 167,000
Old Walpole Road	\$ 92,416
Timberlane Drive	\$ 242,200
Subtotal - Major Rehab.	\$ 776,881

Subtotal	\$ 961,199
10% Contingency	\$ 96,120
Construction Total	\$ 1,057,319
Design, Construction, Administration	\$ 70,573
2017 Cost	\$ 1,127,892
Inflation adjustment	\$ 68,689
(2 years x 3% x project total)	
Total Rehabilitation Cost	\$ 1,196,581

Subtotal	\$ 1,024,240
10% Contingency	\$ 102,424
Construction Total	\$ 1,126,664
Design, Construction, Administration	\$ 51,267
2017 Cost	\$ 1,177,931
Inflation adjustment	\$ 109,226
(3 years x 3% x project total)	
Total Overlay Cost	\$ 1,287,157

Subtotal - All Methods	\$ 1,058,945
10% Contingency	\$ 105,895
Construction Total	\$ 1,164,840
Design, Construction, S&OH	\$ 11,648
2017 Cost	\$ 1,176,488
Inflation adjustment	\$ 147,660
(4 years x 3% x project total)	
Total Rehabilitation Cost	\$ 1,324,147

ROAD PRESERVATION AND REHABILITATION LIST

2023

2024

2025

PRESERVATION	EST. COST
Hurricane Road (Arch to Dickinson)	\$ 19,600
Washington Street	\$ 44,100
Center	\$ 1,200
Middle	\$ 1,200
Summer	\$ 2,700
Winter	\$ 3,700
Subtotal - Preservation	\$ 72,500

PRESERVATION	EST. COST
Grove Street	\$ 24,300
Pearl Street	\$ 6,000
Ralston Street	\$ 23,000
Roxbury Road	\$ 21,000
Swansey Factory Road	\$ 7,700
School Street	\$ 76,700
Subtotal - Preservation	\$158,700

PRESERVATION	EST. COST
TBD ⁽¹⁾	\$ 150,000
Subtotal - Preservation	\$150,000

MINOR REHABILITATION	EST. COST
Main Street (Silent Way to City Limit)	\$ 128,600
Subtotal - Minor Rehab.	\$ 128,600

MINOR REHABILITATION	EST. COST
Airport Road (Rt. 32 to WWTP Access)	\$ 163,800
Subtotal - Minor Rehab.	\$ 163,800

MINOR REHABILITATION	EST. COST
Greenwood Avenue	\$ 116,400
Lynnwood Avenue	\$ 42,260
Old Homestead Highway	\$ 23,000
Subtotal - Minor Rehab.	\$ 181,660

MAJOR REHABILITATION	EST. COST
Court Street (Westview to Maple)	\$ 462,000
Summit Road (Hastings to Park)	\$ 109,200
North Lincoln Street	\$ 202,500
Maple Avenue (#90 to Pako Ave)	\$ 154,800
Subtotal - Major Rehab.	\$ 928,500

MAJOR REHABILITATION	EST. COST
Elm Street (Mechanic to Cross)	\$ 50,900
West Street (School to Park)	\$ 649,000
Subtotal - Major Rehab.	\$ 699,900

MAJOR REHABILITATION	EST. COST
Island Street	\$ 194,300
Marlboro (East of Eastern)	\$ 203,900
TBD ⁽¹⁾	\$ 300,000
Subtotal - Major Rehab.	\$ 698,200

Subtotal	\$ 1,129,600
10% Contingency	\$ 112,960
Construction Total	\$ 1,242,560
Design, Construction, S&OH	\$ 12,426
2017 Cost	\$ 1,254,986
Inflation adjustment (5 years x 3% x project total)	\$ 199,887
Total Rehabilitation Cost	\$ 1,454,872

Subtotal	\$ 1,022,400
10% Contingency	\$ 102,240
Construction Total	\$ 1,124,640
Design, Construction, S&OH	\$ 11,246
2017 Cost	\$ 1,135,886
Inflation adjustment (6 years x 3% x project total)	\$ 220,421
Total Overlay Cost	\$ 1,356,308

Subtotal	\$ 1,029,860
10% Contingency	\$ 102,986
Construction Total	\$ 1,132,846
Design, Construction, S&OH	\$ 11,328
2017 Cost	\$ 1,144,174
Inflation adjustment (6 years x 3% x project total)	\$ 222,030
Total Overlay Cost	\$ 1,366,204

1) The specific scope of work for FY25 will be determined based on the proposed FY21 condition survey.

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Roadway Preservation & 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: **Transportation**
 Council Initiative: **Policy**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Provide a transportation network that meets the communities expectations at the lowest possible life-cycle cost**



PROJECT DESCRIPTION/JUSTIFICATION

The City maintains 127 miles of roads, of which 125 miles are paved. These roads are in various states of repair. Based on an assessment of roadway conditions and traffic volumes, the roads were ranked from good to poor. Conditions include cracks, potholes, delamination of pavement, and roughness. Roadways scheduled for improvements are selected based upon their condition. As appropriate, other required infrastructure improvements such as drainage, curbing, and sidewalk repairs, are coordinated to take advantage of contractor mobilization costs.

The Road Program for FY20-25 continues to invest the majority of funds into roadway rehabilitation. This includes traditional "major rehabilitation" methods (e.g., mill/shim/overlay) as well as some lower-cost "minor rehabilitation" approaches (e.g., in-place recycling, ultra-thin wearing surfaces, etc.). No complete reconstruction projects are proposed during the FY20-25 CIP. This year's program continues the adoption of a formal "Preservation" strategy that was first presented in FY19. These are low cost maintenance tasks performed on roads that are in good condition with the intention of extending the useful life of the pavement, at the lowest life-cycle cost. Examples completed during the previous construction season include the slurry-applied sealant on Court Street and a spray-applied sealant on Optical Avenue.

In FY20, funds are requested to replace the department survey total station. This equipment, used extensively in the design and construction of road improvement projects, was purchased in 1999. Finally, funds are requested to perform a detailed road condition survey in FY21.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design			40,000					40,000
Construction/Implementation		1,196,581	1,287,157	1,324,147	1,454,872	1,356,308	1,366,204	7,985,269
Property/Equip. Acquisition		60,000						60,000
TOTAL	\$0	\$1,256,581	\$1,327,157	\$1,324,147	\$1,454,872	\$1,356,308	\$1,366,204	\$8,085,269
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded		1,256,581	1,327,157	1,324,147	1,454,872	1,356,308	1,366,204	8,085,269
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$1,256,581	\$1,327,157	\$1,324,147	\$1,454,872	\$1,356,308	\$1,366,204	\$8,085,269

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

PROJECT STATUS: Ongoing CIP

Bridge Rehabilitation and Replacement Program

The City is responsible for 43 bridges, including 33 vehicular bridges and 10 bicycle/pedestrian bridges. They provide critical transportation links throughout the City. The bridges range in age from new to nearly 100 years old. The New Hampshire Department of Transportation (NHDOT) inspects these bridges on a bi-annual basis. 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 include insufficient lane width and deterioration of deck surfaces and supporting members. The City has 11 bridges that are on the State’s Red List⁽¹⁾. To prioritize the repair of these bridges, the Engineering Division weighs the bridge condition, the type of deficiencies, the amount of traffic that uses the bridge, the potential impacts if weight restrictions or closure occurs, and availability of a reasonable detour. Staff recommends that bridge repair/replacement be prioritized as follows:

- | | |
|--|--|
| (1) Roxbury Street over Beaver Brook ⁽²⁾ | (7) Church Street over Beaver Brook |
| (2) Island Street over Ashuelot River ⁽²⁾ | (8) Ferry Brook Road over Ferry Brook |
| (3) George Street over Beaver Brook ⁽²⁾ | (9) Whitcomb Mills Road over White Brook |
| (4) Winchester Street/Rte.10 over Ash Swamp Brook | (10) Summit Road over Black Brook |
| (5) Beaver Street over Beaver Brook | (11) Spring Street over Beaver Brook |
| (6) Maple Avenue over Black Brook | |

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 the City must prove that it has appropriated its 20% share. Contributions to the Bridge Capital Reserve are planned so that the City may request State funding for one bridge every two years. There is no guarantee that State funds will be approved in accordance with the schedule listed below. However, by having our share appropriated, we will be in a position to utilize any additional State funds that may become available (e.g., if a programmed project is cancelled).

Roadway	Waterway	Description	Design Year	Anticipated Construction Year	Construction Cost Estimate
Roxbury Street ⁽²⁾	Beaver Brook	Design is underway for the replacement structure.	2018	2019	\$920,000
Island Street ⁽²⁾	Ashuelot River	Design is underway for the replacement structure.	2018	2020	*See costs for State Bypass Program
George Street ⁽²⁾	Beaver Brook	The State accepted this bridge into the NH DOT Ten Year Transportation Improvement Plan, dated June 2016.	2021	2022	\$782,651
Winchester Street / Rt. 10	Ash Swamp Brook	Design of this project has been suspended due to NHDOT funding shortfall. Bridge replacement will be incorporated into the FY25 Lower Winchester Street Corridor Reconstruction Project. The recently completed Engineering Study estimated the replacement cost at \$3,511,500. ⁽³⁾ The City’s 20% Match will be \$702,300. Currently, the Bridge Capital Reserve includes approx. \$143,300 for this project. Therefore, an additional \$559,000 will be appropriated	2015	2025	\$3,511,500
Beaver Street	Beaver Brook	The NHDOT estimated the replacement cost at \$655K in 2009 ⁽⁴⁾ . The City previously appropriated \$92,000 for our City’s 20% match. An additional \$137,700 will be required to match the construction-year estimated cost. Appropriations to the Bridge Capital Reserve in FY20 and FY21 will allow us to request funding through the 2023-2032 TYP.	2024	2028	\$1,148,546
Maple Avenue	Black Brook	The estimated replacement cost is \$998,600 ⁽⁵⁾ . Appropriations to the Bridge Capital Reserve in FY22 and FY23 will allow us to request funding through the 2025-2034 TYP.	2030	2031	\$998,600
Church Street	Beaver Brook	The estimated replacement cost for this structure is \$1,267,700 ⁽⁶⁾ . Therefore, the City will require matching funds of \$218,700 by the Fall of 2024 in order to request inclusion in the NHDOT’s 2027-2036 TYP. The requested appropriations to the Bridge Capital Reserve in FY24 & FY25 will achieve that goal.	2033	2034	\$1,267,700
Ferry Brook Road	Ferry Brook	A detailed cost estimate for this bridge has not been prepared. For planning purposes, we estimate the cost will be approximately \$600,000 in current dollars. With inflation, the estimated cost will be \$1,052,100. Therefore, the City will require matching funds of \$210,420 by the Fall of 2026 in order to request inclusion in the NHDOT’s 2029-2038 TYP. Capital Reserve appropriations will be requested in FY26 & FY27.	2036	2037	\$1,052,100

Notes:

- 1) Harrison Street Bridge, which has been discontinued for vehicle traffic, is not included.
- 2) These projects have been funded by both the State and City and are scheduled for construction.
- 3) The replacement cost for Winchester Street was estimated at \$2,855,150 in 2018. With inflation, the construction-year estimated cost will be \$3,511,474.
- 4) The replacement cost for Beaver Street was estimated at \$655,000 in 2009. With inflation, the construction-year estimated cost will be \$1,148,546.
- 5) The replacement cost for Maple Avenue was estimated at \$680,000 in 2018. With inflation, the construction-year estimated cost will be \$998,603.
- 6) The replacement cost for Church Street was estimated at \$790,000 in 2018. With inflation, the construction-year estimated cost will be \$1,267,718.

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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: **Maintain critical infrastructure**



PROJECT DESCRIPTION/JUSTIFICATION

This project provides funding for the City to rehabilitate and replace red-listed bridges. The City participates in the Municipal Bridge Aid 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 prove that it has appropriated the local match.

The project schedule below has been updated from previous years based on the NHDOT Ten Year Plan, 2019-2028, published on July 2, 2018. The state plan provides funding for George Street in FY22. The City has been notified by the NHDOT that the Winchester Street replacement must be postponed due to funding limitations. The project is now scheduled for construction as part of the Lower Winchester Street reconstruction in FY25. The funding plan listed below reflects use of the current Capital Reserve balance, plus additional debt to cover the City's share.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design			117,398			526,725		644,123
Construction/Implementation				649,600			2,914,545	3,564,145
Property/Equip. Acquisition				15,653			70,230	85,883
TOTAL	\$0	\$0	\$117,398	\$665,253	\$0	\$526,725	\$2,984,775	\$4,294,151
FUNDING								
Current Revenue								0
Capital Reserve			23,480	133,051		105,345	38,000	299,876
Debt Funded							558,955	558,955
Federal or State Grants			93,918	532,202		421,380	2,387,820	3,435,320
Other Sources								0
TOTAL	\$0	\$0	\$117,398	\$665,253	\$0	\$526,725	\$2,984,775	\$4,294,151

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Reduce - will reduce operating costs
Ongoing

PROJECT STATUS:

Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Curb 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: **Maintain critical infrastructure**



PROJECT DESCRIPTION/JUSTIFICATION

This project provides funds for repair or replacement of curbs throughout the City. The City coordinates this work with roadway rehabilitation projects. The 2018 cost to install granite curb was approximately \$40 per linear foot. Therefore, current funding levels allow us to replace approximately 1,600 linear feet per year. In many cases, existing curb can be cleaned and reset at the proper elevation. The cost for this type of repair is approximately \$15 per linear foot.

Granite curb will be installed for complete street reconstruction projects. The City adopted granite as the standard material for all new curbs. Section 70-126 of the City Code states that 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 commerce, central business, industrial, and both medium and high density residential zones. Granite curb is more costly than asphalt but has a longer life expectancy. Bituminous curb will be installed on roadway rehabilitation projects where existing bituminous curb has deteriorated and requires replacement. The Public Works Department anticipates that in FY20 the majority of these funds will be used as part of the Roxbury Street Rehabilitation Project. In FY21 the funds will be distributed between Park Avenue, St. James St., and Lamson St.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		65,478	68,752	70,815	72,939	75,128	77,382	430,494
Property/Equip. Acquisition								0
TOTAL	\$0	\$65,478	\$68,752	\$70,815	\$72,939	\$75,128	\$77,382	\$430,494
FUNDING								
Current Revenue		65,478	68,752	70,815	72,939	75,128	77,382	430,494
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$65,478	\$68,752	\$70,815	\$72,939	\$75,128	\$77,382	\$430,494

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: No impact
N/A

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Guardrail Replacement**
 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: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Necessary safety maintenance**



PROJECT DESCRIPTION/JUSTIFICATION

The City owns and maintains approximately 14,900 linear feet of guardrail along its roadways. Guardrail is used to protect traveling vehicles from obstacles such as utility poles, streams, drainage structures, and steep slopes. Over time wet weather, erosion, and vehicular impacts compromise the ability of the guardrail to function and protect as intended. In 2016 the Highway Division conducted a survey of the guardrails throughout the City to determine their condition. Approximately 33% of the guardrails were found to be in poor condition, 38% in fair condition, and 29% in good condition.

In FY20 the division will complete this 3-year effort to replace all guardrails in poor or fair condition. Once all City guardrails are rated in good condition, maintenance will shift to the operating budget.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		44,024						44,024
Property/Equip. Acquisition								0
TOTAL	\$0	\$44,024	\$0	\$0	\$0	\$0	\$0	\$44,024
FUNDING								
Current Revenue		44,024						44,024
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$44,024	\$0	\$0	\$0	\$0	\$0	\$44,024

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Sidewalk 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: **Maintain critical infrastructure**



PROJECT DESCRIPTION/JUSTIFICATION

This project provides funds for repair or replacement of sidewalks throughout the City. For repair projects, concrete sidewalks will be installed where there are existing concrete sidewalks. Asphalt sidewalks will be installed where there are existing asphalt sidewalks. Work includes complete replacement of the concrete sidewalk; or milling the existing asphalt and providing an asphalt overlay. The City generally coordinates this work with roadway rehabilitation projects. In FY20 the City expects most of the requested funding to be used as part of the Roxbury Street Improvement Project.

In 2017, Engineering Division staff completed an updated survey of sidewalk conditions throughout the City. As funds allow, the results of the condition survey will be used to prioritize spot repairs in areas where no road rehabilitation project is pending.

The need for maintaining and replacing existing sidewalks exceeds currently available resources. The 2018 cost to install a five-foot wide concrete sidewalk (including design, construction administration, and project overhead) was approximately \$47 per linear foot. Asphalt sidewalk costs approximately \$23 per linear foot. At current funding levels, the City can replace approximately 1,400 feet of concrete sidewalk or 2,800 feet of asphalt sidewalk.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		65,478	68,752	70,815	72,939	75,128	77,381	430,494
Property/Equip. Acquisition								0
TOTAL	\$0	\$65,478	\$68,752	\$70,815	\$72,939	\$75,128	\$77,381	\$430,494
FUNDING								
Current Revenue		65,478	68,752	70,815	72,939	75,128	77,381	430,494
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$65,478	\$68,752	\$70,815	\$72,939	\$75,128	\$77,381	\$430,494

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: No impact
Ongoing

PROJECT STATUS: Ongoing CIP

KEENE/SWANZEY BY-PASS IMPROVEMENT PROGRAM SCHEDULE

This project includes the reconstruction of Winchester Street from the NH route 101 roundabout to the bridge over the Ashuelot River. It includes reconstruction of the Winchester Street intersections with Key Road, Pearl Street, Island Street, and replacement of the red-listed Island Street Bridge. The City entered into a Local Public Agency Project Agreement with NHDOT in 2014 to begin the design process for this complicated project. This project is in the NHDOT 2019-2028 Ten Year Plan. Preliminary Engineering is underway, with construction scheduled for FY19 and FY20.

The reconstruction of Lower Winchester Street from the NH Route 101 Roundabout to the Swanzey Town Line is also in the NHDOT Ten Year Plan. Preliminary Engineering is scheduled for FY22, Right-of-Way acquisition for FY24, and Construction for FY25. Both projects require a 20% cost match from the City.

Description	Phase	Amount	Program Year (FY)
Reconstruction of Winchester Street from NH route 101 to the bridge over the Ashuelot River includes reconstruction of the Winchester Street intersections with Key Road, Pearl Street, Island Street, and replacement of the Island Street Bridge.	R	\$380,000	2014
	P	\$937,000	2017
	C	\$6,600,000	2019-2020
Reconstruction of Winchester Street from Route 101 to the Swanzey Town Line	P	\$343,801	2022
	R	\$180,779	2024
	C	\$3,151,617	2025

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

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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: **Improve gateway/corridor into the City**



PROJECT DESCRIPTION/JUSTIFICATION

A traffic analysis performed by the state identified the need to alleviate increased traffic congestion at key intersections along the Keene-Swanzey bypass. These projects will 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 bypass network (NH 9/10/12/101). The state has completed a number of interim improvements including the widening of NH Route 9 from the T-intersection to Base Hill Road, widening of NH Route 9/10/12 at the T-intersection, and the construction of a multi-lane roundabout at Winchester Street and NH Route 101.

In the state's proposed 2019-2028 Ten Year Plan, the Winchester Street Reconstruction Project is being pushed to FY19 and FY 20 for construction from FY17 and FY18. The project begins at the Route 101 roundabout 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 is 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. In August 2018, the NHDOT approved an increase in the project budget based on current cost estimates. Therefore, the City's FY20 matching funds have been increased from \$525,680 to \$854,004.

The second component of the Keene-Swanzey Bypass Project is the reconstruction of lower Winchester Street from NH Route 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	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design	261,800			343,801				605,601
Construction/Implementation	3,016,680	4,270,020					3,151,617	10,438,317
Property/Equip. Acquisition	368,500					180,779		549,279
TOTAL	\$3,646,980	\$4,270,020	\$0	\$343,801	\$0	\$180,779	\$3,151,617	\$11,593,197
FUNDING								
Current Revenue	126,060							126,060
Capital Reserve				68,760		36,156		104,916
Debt Funded	603,336	854,004					630,323	2,087,663
Federal or State Grants	2,917,584	3,416,016		275,041		144,623	2,521,294	9,274,558
Other Sources								0
TOTAL	\$3,646,980	\$4,270,020	\$0	\$343,801	\$0	\$180,779	\$3,151,617	\$11,593,197

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Minimal \$5,001 to \$50,000
Ongoing

PROJECT STATUS:

Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Traffic Signal Replacement Program**
 Department: **Public Works - General Fund**
 Physical Location: **Various**
 Federal Mandate: **Manual of Uniform Traffic Control Devices**

State Regulation or Law: **Yes -RSA 47:17, VIII(a)**

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: **Maintain critical infrastructure**



PROJECT DESCRIPTION/JUSTIFICATION

The City owns and operates 8 traffic signals and 5 flashing traffic signals. These signals are critical to the safe, efficient, and effective operation of the City's transportation network, and range in age from approximately 8 years old to over 30 years old. The current components (signal heads, cross arms, pedestrian crossing signals, etc.) are not in compliance with the latest edition of the Manual or Uniform Traffic Control Devices (MUTCD). The signal controllers use old technology (such as wire loops for detection); only allow for basic timing programming; do not allow for connectivity between signals; or allow for the efficient collection of data. The City's transportation system sees a higher volume of traffic at different periods and experiences a greater mix of users (older operators, higher levels of pedestrians and bicyclists) than was originally envisioned when many of these signals were installed.

Today's traffic control technology allows for signals to communicate with each other for the establishment of different time settings for different hours of the day, days of the week, and times of year. These controllers use wireless technologies (such as optical, blue tooth, WIFI, and radio) to control signal operations and relay information. Signal systems can now be remotely accessed for diagnostics or adjustments. The signals can be programmed to send their own reports when problems occur resulting in more efficient responses and higher levels of availability. It is proposed that the City embark on a phase replacement program. This will allow the City to establish the technology it wants to use and spread the cost out. It is estimated that the cost for the replacement of a full traffic signal system is between \$140,000 - \$160,000 a calendar year (2017 cost). It is anticipated that signal replacement would start with Central Square.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design						20,000		20,000
Construction/Implementation						140,000	200,000	340,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$160,000	\$200,000	\$360,000
FUNDING								
Current Revenue								0
Capital Reserve						160,000	200,000	360,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$160,000	\$200,000	\$360,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Minimal \$5,001 to \$50,000 Ongoing

PROJECT STATUS: New Project

Traffic Signal and Flashing Signal Replacement Program

Location	Fiscal Years							Total
	24	25	26	27	28	29	30	
Traffic Signals								
Central Square	\$160,000	\$200,000						
West St @ School St			\$140,000					
West St @ Gilbo Ave/Ashuelot St					\$145,000			
West St @ Island St								
West St @ West St Plaza						\$145,000		
School St @ Gilbo								
Winchester St @ Key Rd*								
Ashbrook Rd @ Asbrook Ct							\$145,000	
Flashing Signals								
Court St @ Vernon St		\$35,000						
Washington St @ Vermont St**		\$5,000						
Washington St @ Gilsum St				\$40,000				
Park Ave @ Arch St				\$40,000				
Maple Ave @ Melody Ave						\$40,000		
Total	\$160,000	\$240,000	\$140,000	\$80,000	\$145,000	\$185,000	\$145,000	\$1,095,000

Notes: * Winchester Street @ Key Road will be replaced with a roundabout during the reconstruction of Winchester Street in FY20-21
 ** Winchester Street @Vernon Street was replaced in 2010 and may only need the controllers to be upgraded.

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Economic Development and Vitality – programs, activities, and projects which are intended to promote the retention and expansion of existing businesses and to encourage and attract new business development in the City of Keene. The primary goal of these activities is enhance overall quality of life and sustainability of the community.

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CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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: **Review the downtown area and develop long term plans for updating and providing space for desired activities for the next 30 years along with necessary downtown infrastructure improvements**



PROJECT DESCRIPTION/JUSTIFICATION

The downtown area is an economic engine for the community and represents the spirit and place of Keene. It is important to continue investment to keep the area relevant and vibrant. The last major downtown revitalization occurred in 1988. Downtown has expanded into the Railroad Square area and is projected to expand into Roxbury Street and Gilbo Avenue. The features that give the downtown its unique spirit need to be considered when expanding the downtown area. This project provided initial funding for a consultant to work with the community to assess function and aesthetics interest. This work was completed in February 2018 and provided some conceptual ideas for themes in the downtown. The work proposed in FY20 would pick up where the initial work left off involving the community in discussions on treatments, activities, and functions, providing community decision makers with options and alternatives to meet the needs of the citizens and visitors to Keene. The FY20 funding would also include preliminary design, with final design and contract documents to be completed in FY21. Construction has been initially set for FY22, 23 and 24. Funding of the downtown revitalization in FY 22, 23 and 24 will allow implementation to be completed concurrently with the proposed utility projects in Central Square. The estimated cost for improvements will be adjusted based on the outcome of the planning work.

Funding also includes implementing the improvements beyond Central Square. In addition to infrastructure replacement and other improvements, the funding may also include improvements to existing treatments along Main Street or expanding the "Downtown Vibe" into new areas, as well as infrastructure replacement and improvements. The specific scope and cost of these improvements will be determined through the continued downtown revitalization review. Dependent upon the scope of the selected project, it may be necessary to request additional resources to fund the approved project, with funding anticipated to be raised (if necessary) through a bond issue not included in the proposed CIP.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design		180,000	100,000		50,000	100,000		430,000
Construction/Implementation				500,000	500,000	450,000	550,000	2,000,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$180,000	\$100,000	\$500,000	\$550,000	\$550,000	\$550,000	\$2,430,000
FUNDING								
Current Revenue								0
Capital Reserve		180,000	100,000	500,000	550,000	550,000	550,000	2,430,000
Debt Funded								
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$180,000	\$100,000	\$500,000	\$550,000	\$550,000	\$550,000	\$2,430,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Minimal \$5,001 to \$50,000
Ongoing

PROJECT STATUS:

Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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: **Make the City owned property available for potential development**



PROJECT DESCRIPTION/JUSTIFICATION

Until 1976, 560 Main Street was the site of a number of waste disposal activities for the City. 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 delineated the three dimensional extents of soil contamination. The prior year project funds provided for the creation of a remedial action plan (RAP). This included a preliminary cost estimate for the remediation of approximately 100,000 tons of material. The final cost of remediation will be determined once the RAP is complete and City Council determines an ultimate goal for the site. Funds previously appropriated, evaluated the limits and concentration of soil contamination. This can be used to reduce the remediation area and its associated cost. The cost estimate below is based on the treatment and removal of approximately 100,000 tons of soil.

It is anticipated that this project will not proceed until a redevelopment plan is brought forward.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design	65,000							65,000
Construction/Implementation		1,000,000						1,000,000
Property/Equip. Acquisition								0
TOTAL	\$65,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$1,065,000
FUNDING								
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
TOTAL	\$65,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$1,065,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: No impact
One time

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Comprehensive Master Plan Update**
 Department: **Community Development**
 Physical Location: **City Wide**
 Federal Mandate: **N/A**

State Regulation or Law: **RSA 674:1-5**

Master Plan (CMP) Focus Area: **Vibrant Economy**

CMP Vision/Strategy: **Collaborative Community Planning**

Council Initiative: **Resolution**

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

Departmental Objective: **Development and implementation of the City's Master Plan is the highest priority. These plans set forth the community's vision for the future and lay the groundwork for the policies and programs intended to achieve that vision.**



PROJECT DESCRIPTION/JUSTIFICATION

Keene's Comprehensive Master Plan (CMP) adopted in 2010, began in 2008 with an award winning "Community Vision". The CMP embodies the community's vision of how the City and region could, and should be, for future generations. This plan is a guide to assist the community and City government in making decisions to move the community forward toward a more sustainable Keene. The 2010 CMP covers a broad scope of twenty-one topic areas, which range from "Community Sustainability" to "Economic Development", "Community Health & Wellness" to "Climate Change". The process to develop this plan involved extensive public outreach and engagement, through which over 2,000 people participated in community forums, focus groups, and/or study circles.

It is now nine years later and many aspects of our economic, environmental, and social context have changed. It is time to revisit and update this plan, which provides a guide for our community's collective efforts. Per NH RSA 674:3(II) revisions to the plan are recommended every 5 to 10 years.

This update will focus on strategic areas. An initial renewal and/or update of Keene's Community Vision will be conducted following a series of facilitated community meetings and period of public input and engagement. An update of the community snapshot section of the plan, will provide an overview of Keene's socioeconomic and demographic profile through the use of current data and trend analysis. Each of the plan's multiple topic-oriented chapters will be examined and updated to reflect current community priorities. Throughout the process, citizens and community partners will be asked to join with the City to identify priorities and establish a list of action steps for implementation. This input will inform the development of an implementation section that will outline and prioritize strategies for achieving the plan's updated goals and objectives.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation					30,000	30,000		60,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$30,000	\$30,000	\$0	\$60,000
FUNDING								
Current Revenue					30,000	30,000	0	60,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$30,000	\$30,000	\$0	\$60,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Minimal \$5,001 to \$50,000 Multi-year **PROJECT STATUS:** New Project

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Five & Ten Year Aerial Imagery Updates**
 Department: **Community Development**
 Physical Location: **City Wide**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 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: **Keep up to date geographic data available for informed organizational decision making, emergency services and assistance as well as quality asset management practices**



PROJECT DESCRIPTION/JUSTIFICATION

Up-to-date base maps are the most necessary component and foundation of an accurate GIS. Keene's last digital base map and aerial photography update gap was close to 15 years, creating confusion among users as to what was actually on the ground when overlaying data and conducting analysis. In 2015 the City completed a full orthogrammetric project and set the stage for a comprehensive schedule that will be outlined here. Municipalities commonly do full updates on a 10-year or less cycle with 5-year imagery updates in between. In order to keep the City's GIS an effective up-to-date tool and source of record, this CIP strives to keep a regular schedule of imagery and full orthogrammetric mapping. For the **10-year (FY25) project**, accurate digital data derived from ortho-imagery will be gathered including: buildings, roads, topography, utilities, water bodies, other natural and man-made features, and LiDAR. Keene's GIS supports a wide array of City departments through it's data interfaces such as ArcGIS and the cartegraph system which depend on this data. The City Council, Planning Board, and other citizen decision makers benefit from accurate imagery and basemaps along with public utilities, regional, state and federal agencies, construction, development, and real estate industries in addition to the general public.

The 5-year (FY20) project is an imagery update, and not a full ortho rectification and interpretation project, as it includes only four specific feature groups - buildings, decks, pools and driveways. City staff will be able to utilize the imagery collected to observe and update changes to data in-house as well as be incorporated in the public Parcel Mapping Application, a one stop tool for economic development in the City. This project will help the assessing department complete their 2021 re-valuation project of the entire city by allowing them to pre-evaluate properties across the city based on up-to-date imagery and lot features previously mentioned. The State of New Hampshire is considering a state wide flyover schedule. The GIS Technician has provided feedback and participated in the planning forums for this initiative. The City will consider all flyover options for interim updated imagery on the 5-year cycles as the state makes that information available, and will attempt to leverage those opportunities as they present themselves. The state project does not however, contain the project components that would provide full orthoimagery and planimetric updates for our 10-year full photogrammetric update though the product may work for the 5-year (FY20) project.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		55,000						55,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$55,000	\$0	\$0	\$0	\$0	\$0	\$55,000
FUNDING								
Current Revenue						0	0	0
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		55,000						55,000
TOTAL	\$0	\$55,000	\$0	\$0	\$0	\$0	\$0	\$55,000

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

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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 to City parking facilities**



PROJECT DESCRIPTION/JUSTIFICATION

The City of Keene owns six surface parking lots. These are located at Gilbo Avenue (East and West), Wells Street/Roxbury Plaza, Commercial Street, Elm Street, and the Library Annex. These lots are continually assessed for their condition. This project provides rehabilitation of the lots to maintain their function.

Funds are budgeted to perform crack sealing and surface sealing on the Gilbo West and Commercial Street lots in FY22. At that time, the pavement in Gilbo West will be 11 years old and Commercial Street lot will be 7 years old.

A similar treatment is proposed for the Library Annex, Elm Street, Wells Street/Roxbury Plaza and Gilbo East lots in FY25. At that time, the pavement in these lots will range from 7 years old to 10 years old.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation				51,300			53,000	104,300
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$51,300	\$0	\$0	\$53,000	\$104,300
FUNDING								
Current Revenue				51,300	0		53,000	104,300
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$51,300	\$0	\$0	\$53,000	\$104,300

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **City Hall Parking Structure Maint.**
 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 to City parking facilities**



PROJECT DESCRIPTION/JUSTIFICATION

Experience over time has shown that capital improvements beyond normal maintenance, are required approximately every four years, in order to maintain the structures in good condition. This project provides periodic maintenance to extend the life of the City Hall parking structure.

In 2018, the City completed an evaluation and prepared an Operations and Maintenance Plan for the structure. That analysis identified an estimated \$52,300 in needed repairs. Items to be addressed with this project include: replacing worn structural beam bearing pads; repairing miscellaneous concrete spalls and cracks; connecting roof drains to the storm drain system; cleaning and painting steel (where required); sealing expansion joints; and installing an emergency lighting system in the egress stairs. These repairs will be completed in FY20.

In FY24, the City proposes to resurface the asphalt pavement on the lower deck of the City Hall parking structure.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		52,300				57,400		109,700
Property/Equip. Acquisition								0
TOTAL	\$0	\$52,300	\$0	\$0	\$0	\$57,400	\$0	\$109,700
FUNDING								
Current Revenue								0
Capital Reserve		52,300				57,400	0	109,700
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$52,300	\$0	\$0	\$0	\$57,400	\$0	\$109,700

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Wells St. Parking Structure Maint.**
 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

Experience over time has shown that capital improvements beyond normal maintenance, are required approximately every four years, in order to maintain the structures in good condition. This project provides periodic maintenance to extend the life of the Wells Street parking structure

In 2018, the City completed an evaluation and prepared an Operations and Maintenance Plan for the structure. That analysis identified an estimated \$55,100 in needed repairs. Items to be addressed during this project include: miscellaneous concrete spall and crack repairs; leaking expansion joints; cleaning and painting metal surfaces (where needed); spot repair of decking membrane; and replacing stairwell lighting with LED fixtures. These repairs are planned for FY22.

In FY23, the City proposes to resurface the asphalt pavement on the lower deck of the Wells Street parking structure.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation				55,100	98,200			153,300
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$55,100	\$98,200	\$0	\$0	\$153,300
FUNDING								
Current Revenue								0
Capital Reserve				55,100	98,200			153,300
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$55,100	\$98,200	\$0	\$0	\$153,300

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020- 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Smart Meters**
 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 to City parking facilities**



PROJECT DESCRIPTION/JUSTIFICATION

Technology, combined with convenience and efficiency, is rapidly changing the way municipalities conduct business. In FY24 the replacement of coin-only parking with smart parking meters, will allow the public to use either credit cards or coins to pay for parking. Advanced technology through wireless communication will report each meter activity to a central back office terminal. This will provide the City with financial information by meter, as well as sending alerts for meter malfunctions- minimizing meter repair down time and lost revenue. The projected cost of replacing the estimated 470 coin fed meters with smart meters is between \$225,000 and \$250,000. The next parking meter rate increase will be forwarded to City Council for consideration in FY19. Taking into consideration this project with the next rate increase, the City will be able to anticipate the costs and plan accordingly to avoid revenue shortfalls.

At the present time, City staff is investigating various technologies to determine what type of smart meter will fit the needs of the City. Once staff has completed their research, the results will be brought forward to the City Council for consideration.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition						250,000		250,000
TOTAL	\$0	\$0	\$0	\$0	\$0	\$250,000	\$0	\$250,000
FUNDING								
Current Revenue						250,000	0	250,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$250,000	\$0	\$250,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: No impact
N/A

PROJECT STATUS: Ongoing CIP

Airport

The Dillant-Hopkins Airport was dedicated on October 31, 1943 and had its first jet land in 1948. In 1963, instrument landing systems were installed as well as other airplane guidance systems and today, the airport is home to 80 aircraft and more than 28,000 aircraft operations annually; from small aircraft to corporate and charter jets. Keene airport has the third longest runway in the state (Pease International and Manchester-Boston Regional are first and second in runway length, respectively) and through landing fees, services, land leases and airplane hangar rentals raises approximately \$500,000 in revenue for the City. The airport is required by federal regulation to be open at all times, day or night. Keene is one of two airports defined by the government as a National airport in the future airport system that provides the highest level of air access for aviation users. The airport is a key transportation facility for the City of Keene and the region.

Marketing and developing the airport has been a part of the City of Keene Comprehensive Master Plan for more than a decade. As a result of new management and new broad public and political support, there is a consistent effort at the airport to improve the tax base for the Town of Swanzey as well as provide revenue for the City of Keene from land leases, utilities and perhaps other services. Over the past two years, nearly 30 companies have received focused marketing information about the airport in an effort to draw them to this region as they create their corporate strategies for short and long-term growth. Development does happen quickly. Our development efforts will continue to make the attributes of the region known throughout the country.

The airport has approximately 50 acres available for development for either aviation or non-aviation purposes. An additional 300 acres is available on adjacent land. In calendar year 2018-2019, we expect to break ground on one new hangar, privately financed and two existing hangars have had major renovation. Virtually every day corporate and private jets land in Keene to conduct business and extend economic roots into this region. The Fixed Based Operator, Monadnock Aviation has welcomed a significant increase in her business activity over the past few years. As a result of the increase in airport business, Monadnock Aviation will be making substantial capital improvements in their building and has increased the square footage of buildings rented from the City. The terminal building of 10,500 square feet is fully occupied with tenants and there is a frequent waiting list for hangar space.

In 2015, the NH Department of Transportation estimated that between the direct and indirect airport-related activities, the Keene airport creates \$7.3 million in regional payroll and a regional economic benefit of \$21.44 million. This employment base is made up of restaurant workers, airplane mechanics, private corporate pilots and aviation support staff and employees that work at local companies, such as C&S Wholesalers, who are in this region **because of** the airport. The convenience and capacity of this airport makes this region unique in the State of New Hampshire. We hope that the City Council will join the development efforts by funding economic development outreach efforts in the coming years. It is an investment worth making.

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Beacon Replacement**
 Department: **Airport**
 Physical Location: **Keene Dillant-Hopkins Airport**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Vibrant Economy**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **To maintain compliance with FAA safety regulations regarding the maintenance and operation of Aviation Hazard Beacons**



PROJECT DESCRIPTION/JUSTIFICATION

The airport infrastructure includes at least 12 hazard beacons whose purpose is to mark obstructions and hilltops for planes arriving at, and departing the airport. We are embarking on a plan to replace two beacons over the next 6 to 8 years so that no beacon is more than 20 years old. In 2011 we replaced two beacons; in 2012 we replaced one beacon. The remainder are at or beyond 20 years of age. Federal/state cost sharing is available for this and the City will have a 5% match for funding.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation					500,000			500,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$500,000	\$0	\$0	\$500,000
FUNDING								
Current Revenue					25,000			25,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants					475,000			475,000
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$500,000	\$0	\$0	\$500,000

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Pavement Maintenance & Marking**
 Department: **Airport**
 Physical Location: **Keene Dillant-Hopkins Airport**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Vibrant Economy**
 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

MAINTENANCE: Nearly all pavement at the airport was constructed with the assistance of various federal grant programs. These grants historically provided up to 95% of the cost of construction. The City agreed to maintain the pavement to federal standards for safety as a condition of accepting these grants. Through regular pavement maintenance, the City can assure maximum pavement life. Maintenance includes the routine repair of defective, deteriorated, or otherwise failing pavement on aircraft movement areas. Defects include cracks of varying widths. Estimated costs (2016) are provided below. Costs are adjusted 3% per year for inflation. Small cracks between 1/4" and 3/4" wide can be filled with sealant. Estimated costs are \$0.30 per linear foot (LF). Cracks larger than 3/4" wide can be filled with backing rod or sealant or filled with a mixture of emulsified asphalt and aggregate. Estimated costs are \$3 per LF. For larger cracks or areas of pavement failure, the existing pavement must be saw-cut and removed. The pavement is reconstructed to the full depth along the length of the crack or failure. Estimated costs are \$30 per LF.

MARKING: 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 debris from landing aircraft tires. Routine repainting of these markings is essential for safety. It is recommended that the Airport perform this maintenance every four years. The project includes the repainting 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 are approximately 75,000 square feet of pavement markings. Estimated costs per square foot (SF) for 2016 are provided below. Costs are adjusted 3% per year for inflation. Scrub rubber and debris from existing pavement markings to prepare surface for painting: \$1.60 per SF. Paint new pavement markings to meet FAA guidelines: \$1.20 per SF. Total estimated cost = \$2.80 per SF. This project is eligible for FAA and NH DOT funding pursuant to 49 USC § 47102(3)(H).

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction		148,500	66,600	48,600	112,860	74,666		451,226
Property/Equip. Acquisition								0
TOTAL	\$0	\$148,500	\$66,600	\$48,600	\$112,860	\$74,666	\$0	\$451,226
FUNDING								
Current Revenue		0	2,418	2,430	5,643	3,733		14,224
Capital Reserve								0
Debt Funded								0
Federal or State Grants		141,075	63,270	46,170	107,217	70,933	0	428,665
Other - Project Balance	8,337							8,337
TOTAL	\$8,337	\$141,075	\$65,688	\$48,600	\$112,860	\$74,666	\$0	\$451,226

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Perimeter Fence**
 Department: **Airport**
 Physical Location: **Keene Dillant-Hopkins Airport**
 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: **To reduce the potential for accidents involving wildlife, increasing runways safety**



PROJECT DESCRIPTION/JUSTIFICATION

This project is intended to add perimeter fencing to fully enclose the entire airport. Presently only the northern, eastern, and partial southern boundaries are fenced. The presence of wildlife on the runways creates the most significant safety issues because of the unexpected behavior of animals when startled. Wildlife enter the safety zones of the runways daily, and staff must make multiple wildlife inspections checking for deer, moose, turtles, fox, and coyote. In 2016 two deer on one of the runways caused an airplane to crash. The plane was destroyed, and over \$15,000 of damage was done to the airport equipment and landing lights. The funding for the fencing project will be covered by 90% federal, 5% state, and 5% city funds.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation			1,350,000					1,350,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$1,350,000	\$0	\$0	\$0	\$0	\$1,350,000
FUNDING								
Current Revenue			67,500					67,500
Capital Reserve								0
Debt Funded								0
Federal or State Grants			1,282,500					1,282,500
Other Sources								0
TOTAL	\$0	\$0	\$1,350,000	\$0	\$0	\$0	\$0	\$1,350,000

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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: **Vibrant Economy**
 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 FAA and the NHDOT 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	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design					20,000			20,000
Construction/Implementation								0
Property/Equip. Acquisition					40,000			40,000
TOTAL	\$0	\$0	\$0	\$0	\$60,000	\$0	\$0	\$60,000
FUNDING								
Current Revenue					3,000			3,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants					57,000			57,000
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$60,000	\$0	\$0	\$60,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Snow Removal Equipment**
 Department: **Airport**
 Physical Location: **Dillant-Hopkins Airport**
 Federal Mandate: **Title 49, US Code, Subtitle VII**
 State Regulation or Law: **FAA AC-5200-30C**
 Master Plan (CMP) Focus Area: **Vibrant Economy**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **To keep the Airport operational and safe during winter operations**



Truck-mounted engine for Sweepster

Sweepster broom

6-wheeled dump truck

PROJECT DESCRIPTION/JUSTIFICATION

The Dillant-Hopkins Airport is part of the National Plan of Integrated Airport Systems. As such, the City of Keene receives federal and state assistance for use in maintaining the safety, security, and operational readiness of the Airport. This includes the winter maintenance of the runways, taxiways, and aprons. The equipment used at the Airport for snow and ice removal is specialized for large surfaces and operational considerations. This project includes replacement of "AP 4", the Airport's 1995 6-wheeled dump truck and the 1995 Sweepster broom with attachments. In FY 22, both of these pieces of equipment will be 27 years old.

Completion of this project is subject to receipt of grants from the FAA and the NHDOT Bureau of Aeronautics at 90% and 5% respectively. The final 5% funding will be the responsibility of the City.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design/Administration								0
Construction/Implementation								0
Property/Equip. Acquisition				555,556				555,556
TOTAL	\$0	\$0	\$0	\$555,556	\$0	\$0	\$0	\$555,556
FUNDING								
Current Revenue				27,778				27,778
Capital Reserve								0
Debt Funded								0
Federal or State Grants				527,778				527,778
Other Sources								0
TOTAL	\$0	\$0	\$0	\$555,556	\$0	\$0	\$0	\$555,556

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Taxiway A Reconstruction/Extension**
 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: **Vibrant Economy**
 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 FAA runway/taxiway separation requirements**



PROJECT DESCRIPTION/JUSTIFICATION

This project included a study that determined that the best location for the Automated Weather Observation System (AWOS) is in its current location. We are currently in the middle stages of the engineering, design and permitting, for the extension of Taxiway A, and possibly, the re-construction of Taxiway A in addition to its extension. The extension will add approximately 1,390 feet. Taxiway A serves the airport's primary runway 2/20. The current taxiway was constructed in 1989. The taxiway will remain in the same location with the extension continuing to the south. The extension will provide a path to the end of runway 2. It will eliminate the dangerous practice of planes backing up (back-taxiing) in order to take off. Completion of this project is subject to the receipt of grants from the FAA and the NHDOT at 90% and 5%, respectively. The final 5% of funding is the responsibility of the City. This will be accomplished in three phases: 1. The now completed AWOS Study, 2. The on-going design and permitting, and 3. construction as soon as federal/state funding becomes available.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
AWOS Study								0
Design & Permitting	390,000							390,000
Construction		2,600,000						2,600,000
TOTAL	\$390,000	\$2,600,000	\$0	\$0	\$0	\$0	\$0	\$2,990,000
FUNDING								
Current Revenue	19,500	130,000						149,500
Capital Reserve								0
Debt Funded								0
Federal or State Grants	370,500	2,470,000						2,840,500
Other Sources								0
TOTAL	\$390,000	\$2,600,000	\$0	\$0	\$0	\$0	\$0	\$2,990,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Terminal Apron Expansion**
 Department: **Airport**
 Physical Location: **Keene Dillant-Hopkins Airport**
 Federal Mandate: **Title 49, US Code, Subtitle VII**
 State Regulation or Law:
 Master Plan (CMP) Focus Area: **Vibrant Economy**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **To expand airside capacity at the airport terminal**



PROJECT DESCRIPTION/JUSTIFICATION

The airport terminal parking apron, covering an area of approximately 8,200 square yards, has, depending on size, the capacity to hold 15 to 19 aircraft. The larger the aircraft, the more difficult to maneuver and park, causing challenges for the fixed base operator (FBO) as well as pilots. The area is frequently congested and is projected to get more congested as air traffic increases due to airport marketing efforts. The airport owns ample space to expand the apron by adding pavement and tie downs in the area between the current apron and the unused taxi lane. This expansion will double the area available for use. Completion of this project is subject to receipt of grants from the FAA and the NHDOT Bureau of Aeronautics, at 90% and 5% respectively. The final 5% of funding will be the responsibility of the City.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation				1,300,000				1,300,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$1,300,000	\$0	\$0	\$0	\$1,300,000
FUNDING								
Current Revenue				65,000				65,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants				1,235,000				1,235,000
Other Sources								0
TOTAL	\$0	\$0	\$0	\$1,300,000	\$0	\$0	\$0	\$1,300,000

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Fuel Tank Removal & Replacement**
 Department: **Airport**
 Physical Location: **Keene Dillant-Hopkins Airport**
 Federal Mandate: **Title 49, US Code, Subtitle VII**
 State Regulation or Law:
 Master Plan (CMP) Focus Area: **Vibrant Economy**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **To expand airside capacity at the airport terminal**



PROJECT DESCRIPTION/JUSTIFICATION

The airport has two underground fuel storage tanks that are in excess of 20-years old. While the tanks are able to pass inspection annually, we were given an ultimatum that the tanks need replacement, or else we will not be able to acquire liability insurance. In 2018, we experienced a cancellation of coverage due to age, but were able to pay a premium to extend coverage. At this point, we propose removing and replacing the tanks in the same general area. The new tanks would be above-ground tanks. We have received an estimate from a vendor with whom we have done similar business in the past, and the estimate to remove the tanks, conduct soil testing and required analysis/reporting, and install new tanks that meet the containment standards, is estimated at \$515,000. There is virtually no likelihood that this project would score well enough to get federal/state funding (19 out of 100 points). THIS IS A VERY HIGH PRIORITY AS INSURANCE COVERAGE IS AT RISK. THE FUEL SYSTEM IS ESSENTIAL FOR AIRPORT OPERATIONS.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation			515,000					515,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$515,000	\$0	\$0	\$0	\$0	\$515,000
FUNDING								
Current Revenue								-
Capital Reserve								0
Debt Funded			515,000					515,000
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$515,000	\$0	\$0	\$0	\$0	\$515,000

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

PROJECT STATUS: New Project

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Easement Acquisition**
 Department: **Airport**
 Physical Location: **Keene Dillant-Hopkins Airport**
 Federal Mandate: **Title 49, US Code, Subtitle VII**
 State Regulation or Law:
 Master Plan (CMP) Focus Area: **Vibrant Economy**
 CMP Vision/Strategy:
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **To expand airside capacity at the airport terminal**



PROJECT DESCRIPTION/JUSTIFICATION

Over the period 2016-2018, the airport has removed trees from properties around the airport. Trees that get too tall within the flight approach areas create significant safety issues for planes approaching and leaving the airport. The airport has been fortunate to acquire permission to remove trees on private property from the property owners, hence the purchase of avigation easements has been necessary. Going forward, there is a much higher likelihood that remaining property owners will request compensation in exchange for us removing trees on their property. This project will set the stage to utilize federal/state funding for easement acquisition so that the airport can continue to meet its safety obligations for the management of obstructions. The costs associated with easement acquisition include property surveys, redundant property appraisals, drafting of deeds and recording of deeds. Once an easement is obtained, then obstruction removal would begin. Obstruction removal is a separate project in the CIP.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition				300,000				300,000
TOTAL	\$0	\$0	\$0	\$300,000	\$0	\$0	\$0	\$300,000
FUNDING								
Current Revenue				15,000				15,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants				285,000				285,000
Other Sources								0
TOTAL	\$0	\$0	\$0	\$300,000	\$0	\$0	\$0	\$300,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001 Ongoing **PROJECT STATUS:** New Project

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Flood and Stormwater Management – programs, activities, and projects which are intended to prevent and remediate conditions leading to localized flooding due to more frequently occurring major precipitation events through preventative maintenance, drainage system improvements, and comprehensive storm water infrastructure planning.

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Flooding and Stormwater Management

The City of Keene sits on the valley floor at the bottom of a glacial lakebed. There are 5 watersheds that intersect the City with many brooks and streams. These brooks and streams receive stormwater from City streets and private properties. The City has attempted to manage stormwater and flood waters since the mid-1800's. As it developed, the City constructed open ditches to convey this stormwater. Over time the City enclosed some of these open ditches and added structures and pipes. This created a complex network of ditches and pipes that merges with streams to move stormwater through the City. Today this system contains over 6,000 structures, over 80 miles of drainage pipes, over 10 miles of open ditches, and three high-hazard dams. The community has also modified Ash Swamp Brook, Beaver Brook, and Black Brook to allow for more use and development of land.

The City and State of New Hampshire are subject to changing weather patterns. Intense storm events are occurring at a greater frequency with higher amounts of precipitation. This has stressed the City's 175-year-old stormwater system. The City manages the system through maintenance and improvement of existing components. This is done through the Capital Improvement Program (CIP). Current CIP projects to maintain the existing system include Drainage Cleaning, Stormwater Spot Repairs, and Drainage Pipe Lining.

The City also develops new projects to reduce flooding problems. Current CIP projects to reduce flooding include the Beaver Brook Hydrologic and Hydraulic Analysis, Stormwater Management System Analysis, Flood Management, and the Ashuelot River and Robin Hood Park Dam Improvement Projects.

Priority for projects is based on the condition and criticality of system components. Projects are also coordinated with other planned utility and roadway projects. The City works to balance the maintenance of the existing system, new solutions to reduce flooding, and the cost of these to property owners.

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Beaver Brook Flood Mitigation**
 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: **Maintain critical infrastructure**



PROJECT DESCRIPTION/JUSTIFICATION

The Beaver Brook flows along the east side of the City through residential neighborhoods. It then empties into the Ashuelot River near the intersection of Main Street and Route 101. This brook has a history of overflowing its banks and causing significant flood damage. In 2005, 2012, and 2013 large areas of the City along the brook were impacted by flood waters. The City also experiences impacts from climate change with more intense and more frequent rain events. This project will perform a hydrologic and hydraulic analysis of the Beaver Brook watershed for various storm events (5, 10, 50, 100, and 500 year). The City will use the latest rain data to perform this analysis. This project will allow the City to develop a flood management master plan for Beaver Brook. Strategies within this plan may include: the creation of flood water storage areas; identification of obstructions that need to be removed; and upgrade of properties that could be considered for flood proofing, or removal to address flooding. This will also support a number of high-priority projects in the City's 2013 Hazard Mitigation Plan.

In 2016, City staff met with the Army Corps of Engineers (USACE) to discuss a collaborative project. Under this arrangement, the USACE will perform this analysis with the City being responsible for a 50% match in consulting fees after the first \$100,000. The City will benefit from a more detailed analysis and recommendations for future flood mitigation projects.

Prior CIP's have authorized funds for the detailed hydrologic and hydraulic analysis. This work is expected to be completed by the end of 2019. The City anticipates that the project will result in recommendations for projects designed to decrease the frequency and severity of flooding along Beaver Brook. Funds are requested in FY24 & FY 25 to begin implementing the recommended projects.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation						500,000	500,000	1,000,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$500,000	\$500,000	\$1,000,000
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded						500,000	500,000	1,000,000
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$500,000	\$500,000	\$1,000,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

No impact
Ongoing

PROJECT STATUS:

Ongoing CIP

FLOOD MANAGEMENT PROJECTS

The table below outlines approximate priorities and costs for planned flood management projects.

Street	Objective and Scope of Work	2018 estimated cost ⁽²⁾	Planned Construction year	Inflation adjust. (3% per year)	Construction year estimated cost**
Roxbury Street ⁽¹⁾	Reduce localized street flooding in the Vernon St. / Elm St. area. Replace the existing brick drainage pipe along Roxbury St. between Central Sq. and Beaver Brook with a larger-diameter pipe.	\$799,897	2021	\$74,172	\$874,100
Central Square	Reduce localized street flooding on Court St. and side Streets from Central Sq. to Mechanic St. Replace the existing drainage pipe along Central Sq. between Court St. and Roxbury St. with a larger-diameter pipe.	\$336,490	2022	\$42,232	\$378,700
Main Street	Reduce localized street flooding on Main St. Replace the existing 8" clay drain pipe between Eagle Ct. and Water St. with a larger-diameter pipe.	\$176,490	2022	\$22,151	\$198,600
Carpenter Street / Church Street	Reduce localized street flooding in the Church St. area. Construct new larger-diameter drainage pipe between Beaver Brook in Carpenter Park, then along Carpenter St. to Church St. Phase 1 of several phases in this neighborhood.	\$319,168	2024	\$61,935	\$381,100
Key Road	Existing 48" diameter corrugated metal pipe that crosses Key Rd. has deteriorated in several locations and is causing roadway sinkholes. Replace the existing pipe and repair the roadway.	\$86,099	2024	\$16,708	\$102,800
Charles Street	Reduce drainage issues to properties west and downhill of Charles Street. Extend a new drainage pipe from George St. along Charles St.	\$132,295	2024	\$25,672	\$158,000
Probate Street / Church Street	Reduce localized street flooding in the Church St., Probate St., and Roxbury St. area. Replace existing drain pipe with a larger-diameter pipe along Church St. and Probate St. between Carpenter St. and Roxbury St. Phase 2 of several phases in this neighborhood.	\$600,326	2026	\$160,149	\$760,500
Edwards Street / Church Street	Reduce localized street flooding in the Church St., Edwards St., and Roxbury St. area. Replace existing drain pipe with a larger-diameter pipe along Church St. and Edwards St. between Carpenter St. and Roxbury St. Phase 3 of several phases in this neighborhood.	\$522,221	2028	\$179,600	\$701,800
Colonial Drive	Reduce localized street flooding. Replace existing corrugated metal drainage pipes between Colonial Dr. and the Tenant Swamp behind Keene Middle School.	\$350,000	2030	\$149,016	\$499,000
Court Street	An existing stone and corrugated metal drainage pipe underneath the roadway between Evergreen Ave. and Windsor Ct. has deteriorated in several locations and is causing undermining of the roadway and a critical water main. Replacement is difficult due to limited access and traffic control. Replace the existing deteriorated pipe using trenchless technology.	\$200,000	2030	\$85,152	\$285,200

Notes:

1) Funding for the Roxbury Street Project is spread over two years (FY 20 & FY21). Construction will be in FY21.

2) All costs include 10% for construction contingencies, 10% for engineering design, 10% for construction administration, and 1% for supervision.

CITY OF KEENE, NEW HAMPSHIRE 2020 - 2025 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: **Maintain critical infrastructure**



PROJECT DESCRIPTION/JUSTIFICATION

The City is experiencing changes in its weather patterns. Severe weather events are occurring at a higher frequency. Keene is experiencing rainfall events that are of short duration and high intensity. The storm water system was 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 cannot handle the resulting flows. This causes localized street flooding that impacts the community and individual properties. The City is addressing the changing patterns and its impacts through a series of short-term and long-term goals. These include: ongoing 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.

Based on recent experience, these larger drainage projects require a year or more to plan, design, and obtain required permits. Therefore, for each of the construction projects listed on the preceding page, design costs are planned for the year prior.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design		131,115	86,595		96,285		114,075	428,070
Construction/Implementation		371,493	371,492	490,705		545,615		1,779,305
Property/Equip. Acquisition								0
TOTAL	\$0	\$502,608	\$458,087	\$490,705	\$96,285	\$545,615	\$114,075	\$2,207,375
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded		502,608	458,087	490,705	96,285	545,615	114,075	2,207,375
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$502,608	\$458,087	\$490,705	\$96,285	\$545,615	\$114,075	\$2,207,375

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: No impact
Multi-year

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Drainage Cleaning**
 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: **Maintain transportation network and 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. Funding levels provide for approximately 16 miles of drain lines to be inspected each year, resulting in all drain lines being inspected and cleaned as necessary every 5 years. Design costs include 10 days each year to record video and 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	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design		15,900	16,400	16,900	17,400	17,900	18,400	102,900
Construction/Implementation		50,900	52,400	54,000	55,600	57,300	59,000	329,200
Property/Equip. Acquisition								0
TOTAL	\$0	\$66,800	\$68,800	\$70,900	\$73,000	\$75,200	\$77,400	\$432,100
FUNDING								
Current Revenue		66,800	68,800	70,900	73,000	75,200	77,400	432,100
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$66,800	\$68,800	\$70,900	\$73,000	\$75,200	\$77,400	\$432,100

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

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Stormwater Spot Repairs**
 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: **Maintain transportation network and 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 funding request. This includes removing blockages and addressing isolated deficiencies to ensure the system works at capacity.

Work under this program is typically coordinated with roadway rehabilitation projects in order to correct problems with the drains before the road is resurfaced. In FY 20, funds are planned to address minor problems on several streets in the southeast Keene neighborhood as well as Arch Street.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		65,478	68,752	70,815	72,939	75,128	77,381	430,493
Property/Equip. Acquisition								0
TOTAL	\$0	\$65,478	\$68,752	70,815	\$72,939	\$75,128	\$77,381	\$430,493
FUNDING								
Current Revenue		0	68,752	70,815	72,939	75,128	77,381	365,015
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other - Project Balance	65,478							65,478
TOTAL	\$65,478	\$0	\$68,752	\$70,815	\$72,939	\$75,128	\$77,381	\$430,493

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: Stormwater Management System Analysis
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: Maintain critical infrastructure



PROJECT DESCRIPTION/JUSTIFICATION

This project provides funds to perform hydraulic analysis of the various watersheds throughout the City. It also provides funding for analysis of flood-prone areas. The analysis will provide information to help identify 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 or operating budgets depending on the scope of the improvement.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design		41,200	42,400	43,700	45,000	46,400	47,800	266,500
Construction/Implementation								0
Property/Equip. Acquisition								0
TOTAL	\$0	\$41,200	\$42,400	\$43,700	\$45,000	\$46,400	\$47,800	\$266,500
FUNDING								
Current Revenue		0	0	43,700	45,000	46,400	47,800	182,900
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other - Project Balance	83,600							83,600
TOTAL	\$83,600	\$0	\$0	\$43,700	\$45,000	\$46,400	\$47,800	\$266,500

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: No impact
N/A

PROJECT STATUS: Ongoing CIP

DRAINAGE LINING PROJECTS

The table below outlines approximate priorities and costs for planned drainage pipe lining projects.

Street	Objective and Scope of Work	2018 estimated cost**	Planned Construction year	Inflation adjust. (3% per year)	Construction year estimated cost**
Emerald Street - Phase 1	The existing corrugated metal pipe between Mill Creek and Wilson St. has deteriorated and is causing roadway settlement. Line the existing drainage pipes between Mill Creek and Ralston St. Phase 1 of Drainage pipe lining on Emerald St.	\$100,400	2023	\$15,991	\$116,400
Emerald Street - Phase 2	The existing corrugated metal pipe between Mill Creek and Wilson St. has deteriorated and is causing roadway settlement. Line the existing drainage pipes between Ralston St. and Wilson St. Phase 2 of Drainage pipe lining on Emerald St.	\$94,500	2024	\$18,338	\$112,800
Maple Avenue	A deteriorated 24-inch diameter corrugated metal pipe crosses from Dale Dr. across private property, underneath Maple Ave., and across the Keene Middle School property before discharging into the Tenant Swamp. Line the pipes and limit disturbance to private properties and the school.	\$93,600	2025	\$21,516	\$115,100
Colony Court	An existing corrugated metal pipe that runs between the homes on Colony Ct. and Gilsum St. has deteriorated. Line the pipes and limit disturbance to private properties.	\$79,500	2026	\$21,208	\$100,700

** All costs include 10% for construction contingencies, 10% for engineering design, 10% for construction administration, and 1% for supervision

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Drainage Pipe Lining**
 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: **Maintain critical infrastructure**



PROJECT DESCRIPTION/JUSTIFICATION

The City currently has an inventory of approximately 20.2 miles of metal drainage pipes. Over 17 miles were installed before 1980. The majority of these pipes have now exceeded their anticipated 30-year service life and will need to be replaced or repaired. The total cost to replace these pipes exceeds \$3.2 million.

In the summer of 2017, a short section of metal drainage pipe near the Baker Street bridge over Beaver Brook collapsed, causing the closure of the west-bound lane for several months. We can expect this type of disruptive failure to continue.

The proposed funding would allow the pre-1980 pipes to be lined in place over a period of 30 years. It is likely that some segments will be unsuitable for lining due to advanced deterioration. In these cases, more costly replacement or spot repairs will be needed. Therefore, the actual time to complete this work will likely exceed 40 years.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation					116,400	112,800	115,100	344,300
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$116,400	\$112,800	\$115,100	\$344,300
FUNDING								
Current Revenue					116,400	112,800	115,100	344,300
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$116,400	\$112,800	\$115,100	\$344,300

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Ashuelot River Dam Repair or Removal**
 Department: **Parks & Recreation**
 Physical Location: **West St. / Ashuelot River Park**
 Federal Mandate: **N/A**
 State Regulation or Law: **Yes (RSA 482:12 and Env-Wr 300)**
 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: **Rehabilitate or remove the historic dam to comply with NH dam safety regulations**



PROJECT DESCRIPTION/JUSTIFICATION

The Ashuelot River Dam near West Street is a stone masonry dam constructed prior to 1920. In 2009 the City received a letter of deficiency (LOD) from the NH Department of Environmental Services about safety and maintenance items to be addressed at the dam. The dam is classified by the Bureau as "Low Hazard", meaning its failure would not result in loss of life, but could damage some private property and roads with potential economic impacts. The issues at the dam included erosion, grading, tree clearing, seepage control, and repair of the low-level outlet gates at the dam. Some of those items were addressed at the time by City staff.

In 2011 the city hired a consultant to evaluate costs to repair the dam. The more extensive and expensive repairs were placed on hold at that time, due to a proposal by a private entity to rehabilitate the dam for hydroelectric power. After significant study and regulatory review, the entity has recently decided to abandon their project.

The City is now responsible to address the remaining issues identified in the 2009 LOD. Removal of the dam is also an option. The City will embark on a thorough public engagement process to determine the preferred alternative. Projected costs are estimated to be adequate to cover either repair or removal scenarios.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design						87,400		87,400
Construction/Implementation							495,300	495,300
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$87,400	\$495,300	\$582,700
FUNDING								
Current Revenue						87,400	495,300	582,700
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$87,400	\$495,300	\$582,700

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: No impact
One time

PROJECT STATUS: New Project

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Robin Hood Dam Repairs**
 Department: **Parks & Recreation**
 Physical Location: **Robin Hood Park**
 Federal Mandate: **N/A**

State Regulation or Law: **Yes (RSA 482:12 and Env-Wr 300)**

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: **Repair the dam to comply with NH dam safety regulations**



PROJECT DESCRIPTION/JUSTIFICATION

The Robin Hood Dam was reconstructed in 2013 to bring it into compliance with NH Department of Environmental Services (NHDES) safety regulations. The dam is classified as "High Hazard", meaning its failure could result in loss of life and significant environmental and economic damage.

Since the dam was reconstructed, some items are in need of maintenance-- most notably the erosion of the slope along the edges of the auxiliary spillway. The NHDES has identified other items in need of maintenance or repair, including an anchor for the spillway blocks, cracks in mortar, and minor re-grading.

The mortar and anchor repair will be most effectively repaired by a specialized concrete contractor. While the eroded slope can be repaired by City staff, it will recur without modifications to the shape of the roadway across the dam. We believe that re-shaping the asphalt roadway to slope towards the pond will eliminate the concentrated flows that cause the erosion. The funding request will cover costs for roadway re-shaping, concrete repairs, and erosion repair.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation						83,200		83,200
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$83,200	\$0	\$83,200
FUNDING								
Current Revenue						83,200		83,200
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$83,200	\$0	\$83,200

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: No impact
One time

PROJECT STATUS: New Project

Community Development - programs, activities, and projects which are intended to add to or significantly expand the capacity of community infrastructure or facilities. The primary goal of these activities is to improve the quality of life in the community and to meet the needs of a changing community.

Project Name	Page
Patricia T. Russell Park	174
Skate Park	175
Municipal Park Improvements	177
Campground Repurposed	178
Open Space and Trails	179

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Patricia T. Russell Park**
 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**



PROJECT DESCRIPTION/JUSTIFICATION

Patricia T. Russell Park, located outside the downtown footprint along Beaver Brook and the Cheshire Rail Trail, plays a significant role 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 for recreation. 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 would remain the centerpiece of the park, and would require 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 utilizing the "Building a Spirit of Place" initiative.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design		125,000						125,000
Construction/Implementation				1,275,000				1,275,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$125,000	\$0	\$1,275,000	\$0	\$0	\$0	\$1,400,000
FUNDING								
Current Revenue		125,000						125,000
Capital Reserve								0
Debt Funded				1,275,000				1,275,000
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$125,000	\$0	\$1,275,000	\$0	\$0	\$0	\$1,400,000

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Skate Park**
 Department: **Parks & Recreation**
 Physical Location: **Gilbo Ave**
 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 2017, a new group of skate park enthusiasts came forward to work toward the goal of fundraising for a new skate park. Dedicated and energetic, the group has moved the meter on progressing through the challenges of raising the necessary funds to build a new skate park downtown. Building on the efforts of the 2015 group's marketing plan and communication outreach to local and national businesses, they have been making progress toward their goal. The group has revised the design to fit the 9800 square foot location on Gilbo Avenue. In addition, the recommendations of the 2010 Ad-Hoc Skateboard Park Relocation Committee were considered in conjunction with those advanced by the Active and Passive Recreation Management Plan throughout the process. Advocates for the new facility look to have the campaign completed for anticipation of construction in 2020.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		300,000						300,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$300,000	\$0	\$0	\$0	\$0	\$0	\$300,000
FUNDING								
Current Revenue		25,000						25,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		275,000						275,000
TOTAL	\$0	\$300,000	\$0	\$0	\$0	\$0	\$0	\$300,000

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

PROJECT STATUS: Ongoing CIP

In 2012, the City adopted the Active and Passive Recreation Management Plan which outlined the need to create a comprehensive capital improvement program. In addition, in 2013 the City hired EMG Corporation to perform a survey of all City facilities. The survey provides an organized management tool for the City to maintain and improve its facilities. The report reflects the present condition and the expected life of various system components. Combined these two documents provided a prioritization for projects needing to be placed in the CIP cycle:

Year	Location	Scope of Work	Estimated Cost	Total Cost for Fiscal Year
2020	Wheelock Park	Durling Field Fencing	\$15,000	\$50,000
	Robin Hood and Wheelock	Pool Improvements	\$20,000	
	Wheelock Park	Restroom Improvements	\$5,000	
		EMG UPDATE	\$10,000	
2021	Wheelock Park	Irrigation Systems – Adult Fields	\$50,000	\$50,000
2022	Robin Hood Park	Playground Building Improvements	\$35,000	\$50,000
	Water Street	Resurfacing Basketball Courts	\$15,000	
2023	Wheelock Park	Ball Field Fencing	\$23,500	\$75,000
	Wheelock Park	Tennis Court Resurfacing	\$9,000	
	Robin Hood Park	Tennis Court Resurfacing	\$18,500	
	Legion fields	Restroom Improvements	\$4,000	
	Wheelock Park	Restroom Improvements	\$10,000	
2024	Wheelock Park	Replace Playground Structure	\$40,000	\$75,000
	Robin Hood Park	Playground Building Roof	\$35,000	
2025	Robin Hood and Wheelock	Pool Resurfacing	\$90,000	\$90,000
2026	Robin Hood and Wheelock	Replace Pool Roofs	\$75,000	\$75,000
2027	Wheelock Park	Playground Building Improvements	\$25,000	\$75,000
		Replace Playground Structure	\$50,000	
2028	Fuller Park	Replace Playground Structure	\$75,000	\$75,000
2029	Wheelock Park	Maintenance Building/Restroom Improvements	\$75,000	\$75,000
2030	Wheelock	Hockey Rink Improvements	\$20,000	\$75,000
		Replace Playground Structure	\$50,000	

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Municipal Park Improvements**
 Department: **Parks & Recreation**
 Physical Location: **Various**
 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 # 4 - Develop a comprehensive capital equipment and park asset replacement plan**



PROJECT DESCRIPTION/JUSTIFICATION

The parks system within the City of Keene has aged well with a high level of attentive maintenance. Now, almost 60 years later, most of the facilities need attention beyond routine maintenance, or need to be replaced. In 2012, the City adopted the Active and Passive Recreation Management Plan which outlined the need to create a comprehensive capital improvement plan. This plan resulted in specific focuses including the Patricia T. Russell Park Project, the skate park, pool filters, and pool and tennis court resurfacing. These projects have been planned or implemented. However, the need for routine maintenance on many park features is not only recommended, but needed, especially given the climate of New Hampshire.

The City of Keene identifies itself as having well maintained parks and trails for all ages to enjoy. In order to continue this level of service, necessary improvements need to be met for the purpose of maintaining a community that is attractive for those who want to live, work, and play in the city. A prioritization plan has been put forth based on routine and needed maintenance. In addition to the 2012 Management Plan, in 2013 the EMG report provided a blueprint for park and cemetery facilities. These recommendations were also integrated into the project schedule. As part of the FY19 CIP, Ashuelot River Park and the Cal Ripken Fields in Wheelock Park now have new irrigation systems.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		50,000	50,000	50,000	75,000	75,000	90,000	390,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$50,000	\$50,000	\$50,000	\$75,000	\$75,000	\$90,000	\$390,000
FUNDING								
Current Revenue		50,000	50,000	50,000	75,000	75,000	90,000	390,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Trust Funds								0
TOTAL	\$0	\$50,000	\$50,000	\$50,000	\$75,000	\$75,000	\$90,000	\$390,000

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Campground Repurposed**
 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: **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 advance of the summer of 2018, following discussions with the municipal services, facilities and infrastructure committee, Wheelock Park camping was re-aligned to be offered as an option available in conjunction with bookings of other park facilities for multi-day events. Camping by the general public was not supported during the 2018 season, recognizing a need to re-evaluate current and future needs, today's camping demographic, operating, and infrastructure conditions. When opened in the early 1960's, with the support of a local camping association, the facility served as camping location for those passing through the region to stay a few days. But campers, and their expectations have evolved, and the amenities and infrastructure provided by the City's 1960's style facility has limited appeal to modern campers. Minimal public pass through traffic, in recent years, impacts negatively development of a business case that supports significant infrastructure investment to position continued public operation as a viable option in today's marketplace. As a business operation, direct revenues associated with camping provided in conjunction with the Keene Horseshoe Club's annual tournament are the most significant and sustainable use. This additional amenity is an important component to this weekend event, the second largest horseshoe tournament in the nation, generating considerable off-site economic impact within the City. Adjusting the facility to support an event based business model through this project responds to and supports current activity by creating a multi-use recreational area. The project would include removing out of date and decaying facilities, including the administration building and shed, as well as obsolete utilities supporting improved sites. An area to support "rv style" camping that includes basic campsites, with picnic tables, campfire rings, and restrooms, will remain available for use in conjunction with other organized park focused activities.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation			40,000					40,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$40,000	\$0	\$0	\$0	\$0	\$40,000
FUNDING								
Current Revenue			40,000					40,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$40,000	\$0	\$0	\$0	\$0	\$40,000

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

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Open Space and Trails**
 Department: **Parks & Recreation**
 Physical Location: **Various**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Healthy Community**
 CMP Vision/Strategy: **Trails & Bike Pathways**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Master Plan Recommendation # 12 - Improve the level of service in parks, facilities, trails and open space**



PROJECT DESCRIPTION/JUSTIFICATION

The open space and trails system in the City of Keene plays a vital role in maintaining the work, live, and play for the future of our community. Along with the well-built multi-use trails, Keene's open space offers a significant resource to our culture and history. The Active and Passive Recreation Management Plan identified in key issue #3, the need to manage and sustain our natural resources. The recommendation was to engage our community with additional outdoor and environmental activities. In 2018, the Conservation Commission moved forward with a Goose Pond Stewardship Plan. The plan highlights the need for an improved trail network in the greater Goose Pond forest. These recommendations can only further the need for an asset management program to keep our resources well maintained and create opportunities across the city in our other natural areas. This project would focus on trail rehabilitation and maintenance needed across our current rail networks.

Additional funds would be sought through the State of NH Recreational Trails Grant program.

- 2021 – Trail improvements on Jonathan Daniels Trail & rail trail clearing
 - 2022 – Trail improvement in Greater Goose Pond Forest & rail trail clearing
 - 2023 – Trail Improvements in Greater Goose Pond Forest & rail trail clearing
 - 2024 – Repave Appel Way
 - 2025 – Trail Improvements in Robin Hood Park and Beech Hill Preserve
 - 2026 – Trail Improvements for trail network
- Since 2010, the City has made a cumulative investment of \$2,582,990.51

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation			25,000	25,000	25,000	85,000	25,000	185,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$25,000	\$25,000	\$25,000	\$85,000	\$25,000	\$185,000
FUNDING								
Current Revenue			25,000	25,000	25,000	85,000	25,000	185,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Trust Funds								0
TOTAL	\$0	\$0	\$25,000	\$25,000	\$25,000	\$85,000	\$25,000	\$185,000

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

PROJECT STATUS: New Project

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General Operations Facilities and Infrastructure - programs, activities, and projects which are intended to maintain and provide facilities, infrastructure, and equipment necessary for the provision of basic governmental services. The primary goal of these activities is to maintain City operational assets in good working order in an environmentally friendly and economically efficient manner.

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MUNICIPAL BUILDING IMPROVEMENTS

In 2013 The City hired EMG Corporation to perform a survey of all City facilities. The survey provides an organized management tool for the City to maintain and improve its facilities. The report reflects the present condition and the expected life of various system components. The City prioritized the following projects for the current CIP cycle:

Year	Location	Scope of Work	Estimated Cost	Total Cost for Fiscal Year
2020	Multiple Facilities	Replace carpet and flooring.	\$20,000	\$100,000
	Parks and Recreation Center	Multipurpose room floor replacement	\$45,000	
	Multiple Facilities	Update EMG report	\$10,000	
		Held in reserve for new priorities	\$25,000	
2021	Multiple Facilities	Replace carpet and flooring.	\$20,000	\$100,000
	City Hall	Upgrade Elevator: refurbish hydraulic system, controls, sensors	\$30,000	
	City Hall	Prep and paint exterior of building trim work	\$30,000	
		Held in reserve for new priorities	\$20,000	
2022	Public Works building	Replace VCT flooring.	\$25,000	\$100,000
	Parks and Recreation Center	1st floor restroom remodel	\$20,000	
	Central Fire Station	Overhaul garage doors	\$20,000	
	Parks and Recreation Center	Replace generator	\$25,000	
		Held in reserve for new priorities	\$20,000	
2023	Public Works building	Replace EPDM roof over Admin	\$66,000	\$100,000
		Held in reserve for new priorities	\$34,000	
2024	Parks and Recreation	Replace Boilers two (2) with 2 condensing high efficiency gas boilers	\$80,000	\$100,000
		Held in reserve for new priorities	\$20,000	
2025	City Hall	Asbestos removal 1 st floor IT in ceilings new ceiling grid	\$40,000	\$100,000
	Central Fire Station	Resurface apparatus floors	\$30,000	
		Held in reserve for new priorities.	\$30,000	
2026	Library	Prep and Paint exterior trim	\$20,000	\$100,000
	City Hall	Replace ballasted EPDM roof 4 th floor with PVC	\$75,000	
		Held in reserve for new priorities.	\$5,000	
2027	City Hall	Repoint Brickwork	\$62,000	\$100,000
	Public Works building	Replace Hot water tank/pumps	\$12,000	
		Held in reserve for new priorities.	\$16,000	
2028	City Hall	Replace 4 th floor rooftop package unit HVAC system gas	\$25,000	\$100,000
	Parks and Recreation Center	Replace PVC roof system over Multipurpose room	\$45,000	
		Held in reserve for new priorities.	\$30,000	
2029	Central Fire Station	Repoint brickwork	\$30,000	\$100,000
	Police Department	Replace rooftop package HVAC unit gas Heat, 20 ton cooling	\$35,000	
		Held in reserve for new priorities.	\$35,000	

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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

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 determined. 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 and heating consumption. In the future the Municipal Services Complex will need heat pumps replaced and the Recreation Center will need a new boiler system.

Therefore, in FY 2020 the priority will be the replacement of carpet and flooring in multiple facilities and the replacement of the VCT tile in the multipurpose room at the Recreation Center. In addition, Parks and Facilities will update the EMG report for future planning purposes.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		100,000	100,000	100,000	100,000	100,000	100,000	600,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$600,000
FUNDING								
Current Revenue		100,000	100,000	100,000	100,000	100,000	100,000	600,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$600,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Ongoing

PROJECT STATUS:

Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Welcome Center**
 Department: **Facilities**
 Physical Location: **Gilbo Avenue**
 Federal Mandate: **Some**
 State Regulation or Law: **Some**
 Master Plan (CMP) Focus Area: **Healthy Community**
 CMP Vision/Strategy: **Vibrant Downtown**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Value Everyone**
 Departmental Objective: **Provide safe and accessible public facilities**



PROJECT DESCRIPTION/JUSTIFICATION

In May 2018, a group of concerned citizens approached the MSFI Committee regarding the need to revisit having public restrooms in the downtown footprint. In 2011, the City closed the restrooms as a result of ongoing vandalism and crime. These actions by the public moved the City to close the facility and repurpose the space for commercial rental opportunities. Through a series of meetings with the concerned group, a consensus was that there is a need to establish a downtown facility for the public to use. The location identified was along the Gilbo Avenue corridor in the existing Transportation Center off the bike path, near the skate park and farmers' market. As the City continues to reassess the downtown footprint and the need to increase its impact to the economic health of the community, it is important to understand the need for such an amenity that should be connected to a welcome center and a desired potential revitalization of a commercial bus route.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		134,000						134,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$134,000	\$0	\$0	\$0	\$0	\$0	\$134,000
FUNDING								
Current Revenue								0
Capital Reserve		134,000						134,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$134,000	\$0	\$0	\$0	\$0	\$0	\$134,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Minimal \$5,001 to \$25,000 Ongoing

PROJECT STATUS: New Project

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Municipal Building Roofs**
 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

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 determined. One area that needs attention are the roofs located at the municipal complex. Recent inspections have determined it to be the proper time to plan on replacement of these roofs. Facilities will continue to monitor conditions and recommend any adjustments to the schedule. The roofs will be prepped for potential solar panels in the future. This would also increase the insulation level to today's standards for better efficiency.

FY23 Keene Police Station located at 400 Marlboro St.-roof was replaced 1998; FY24 DPW garage roof-last replaced 1995; FY25 City Hall 4th floor roof-estimated installation date was 1988. Other roofs that will need attention in the coming years that are at the end of their life cycle are: airport terminal (installed 1993, est. cost, \$95,688) current condition-fair; library (installed 1990 est cost \$118,000) current condition-fair; and recreation center (varying ages from 1990-1994 est cost \$117,000) current condition-fair.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation					450,475	91,620	86,945	629,040
Property/Equip. Acquisition								0
TOTAL					\$450,475	\$91,620	\$86,945	\$629,040
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded					450,475	91,620	86,945	629,040
Federal or State Grants								0
Other Sources								0
TOTAL					\$450,475	\$91,620	\$86,945	\$629,040

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Ongoing

PROJECT STATUS:

New Project

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **City Hall Rear Wall**
 Department: **Facilities**
 Physical Location: **3 Washington Street**
 Federal Mandate: **Some**
 State Regulation or Law: **Some**
 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: **Provide safe and accessible public facilities**



PROJECT DESCRIPTION/JUSTIFICATION

When the parking garage behind City Hall was constructed, a small crack on the rear of the building was identified. Again in 2012 with the EMG report, consideration to move the project forward has been reviewed and planned for repair. However, the one concern that has not been resolved is the old town brook that runs beneath City Hall. This abandoned channel is the root cause of the cracking on the back of the building. Facilities and engineering have hired structural engineers to review the cause and recommendations for future repairs, however these solutions may or may not be the right option without knowing the resolution to the Old Town Brook issue.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design		25,000						25,000
Construction/Implementation		150,000						150,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$175,000	\$0	\$0	\$0	\$0	\$0	\$175,000
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded		175,000						175,000
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$175,000	\$0	\$0	\$0	\$0	\$0	\$175,000

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

PROJECT STATUS: New Project

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Revaluation**
 Department: **Assessing**
 Physical Location: **N/A**
 Federal Mandate: **N/A**
 State Regulation or Law: **RSA 75:8-a**
 Master Plan (CMP) Focus Area: **Vibrant Economy**
 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

A revaluation of all property in the City is required by state law at least once every five years. The City was last revalued in 2016 which means that it will be required again in 2021. The project will begin in 2020 and will be completed by the fall of 2021. The new assessments will be used to determine the final 2021 tax bills.

A revaluation involves a number of steps and processes in order to develop valuation models and assessed values. These include, but are not limited to: extensive market research; reviewing and analyzing property transactions; reviewing building construction costs; and reviewing all property data on file. Additionally, for income producing properties, research and analysis is done on rental income, typical expenses, and investment rates. Upon completion many valuation variables will be developed, calibrated, and applied to all properties before finalizing the valuation process. The new assessed values will be statistically tested for accuracy and equity.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Revaluation			75,000	75,000				150,000
Construction/Implementation								0
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$75,000	\$75,000	\$0	\$0	\$0	\$150,000
FUNDING								
Current Revenue			75,000	75,000				150,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$75,000	\$75,000	\$0	\$0	\$0	\$150,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

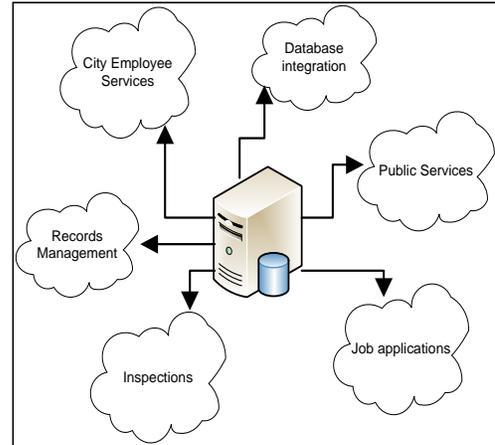
Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020- 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Database Software**
 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: **Required to maintain database integration, integrity, and availability in accordance with department mission**



PROJECT DESCRIPTION/JUSTIFICATION

This project provides funding to upgrade and migrate database platforms as necessary to meet minimum licensing requirements and/or adopt new platforms to sustainably accommodate operational and financial requirements into the long term. In particular, the database platform(s) supporting financial, property assessment, and work order management information systems that drive functions such as tax billing, fund accounting, payroll, infrastructure management, etc. require consistent upgrades over time to avoid costly obsolescence. These systems also provide foundational property information to other City systems and broad reporting and business intelligence information necessary to drive management decisions.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation					5,000			5,000
Property/Equip. Acquisition					75,000			75,000
TOTAL	\$0	\$0	\$0	\$0	\$80,000	\$0	\$0	\$80,000
FUNDING								
Current Revenue					80,000			80,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$80,000	\$0	\$0	\$80,000

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

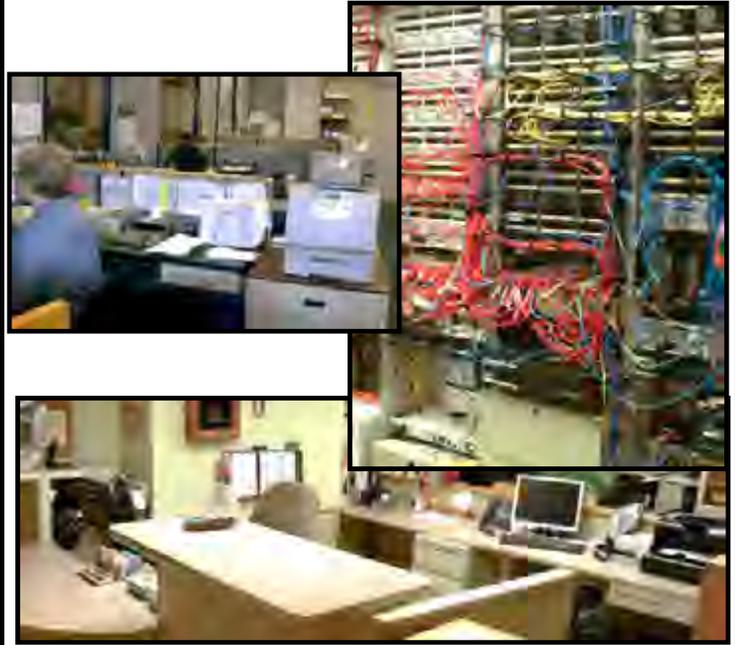
PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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 security and accessibility and minimize maintenance efforts. This involves wireless access points, cabling, and switches within each building, core equipment in the IT datacenters, and firewalls that secure 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 security. This plan calls for the replacement of the network equipment in the year the manufacturer will no longer provide maintenance and support services 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 including our phone system, 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	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		6,000	31,000	6,500	25,000	0	0	68,500
TOTAL	\$0	\$6,000	\$31,000	\$6,500	\$25,000	\$0	\$0	\$68,500
FUNDING								
Current Revenue			31,000	6,500	25,000	0	0	62,500
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		6,000						6,000
TOTAL	\$0	\$6,000	\$31,000	\$6,500	\$25,000	\$0	\$0	\$68,500

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

PROJECT STATUS: Ongoing CIP

Schedule of Network Equipment Replacement

Building	Type	End of life(sale)	End of Maintenance	End of Support	Replacement Cost	FY Subtotal	
Fire Central Station	24 port switch	Oct-13	Oct-15	Oct-19	\$2,500	FY20	
Keene Public Library	48 port switch	Oct-13	Oct-15	Oct-19	\$3,500	\$6,000	
Fleet	24 port switch	Nov-14	Nov-16	Nov-20	\$2,500	FY21	
Recycling Ctr (Public Works)	24 port switch	Nov-14	Nov-16	Nov-20	\$2,500		
Fire Station 2	24 port switch	Nov-14	Nov-16	Nov-20	\$2,500		
Waste Water	24 port switch	Nov-14	Nov-16	Nov-20	\$2,500		
350 Marlboro (Public Works)	48 port switch	Nov-14	Nov-16	Nov-20	\$3,500		
350 Marlboro (Public Works)	48 port switch	Nov-14	Nov-16	Nov-20	\$3,500		
Parks and Rec	48 port switch	Nov-14	Nov-16	Nov-20	\$3,500		
Keene Public Library	48 port switch	Nov-14	Nov-16	Nov-20	\$3,500		
Keene Public Library	48 port switch	Nov-14	Nov-16	Nov-20	\$3,500		
Airport	48 port switch	Nov-14	Nov-16	Nov-20	\$3,500		\$31,000
Waste Water	48 port switch	Oct-15	Oct-17	Oct-21	\$6,500		FY22
						\$6,500	
Fire Station 2	Router	Apr-16	Oct-17	Oct-21	\$2,500	FY23	
Waste Water	Router	Apr-16	Oct-17	Oct-21	\$2,500		
Parks and Rec	Router	Apr-16	Oct-17	Oct-21	\$2,500		
Water Treatment	Router	Apr-16	Oct-17	Oct-21	\$2,500		
Recycling Ctr (Public Works)	Router	Apr-16	Oct-17	Oct-21	\$2,500		
Keene Public Library	Router	Apr-16	Oct-17	Oct-21	\$2,500		
Fire Central Station	Router	Apr-16	Oct-17	Oct-21	\$2,500		
Airport	Router	Apr-16	Oct-17	Oct-21	\$2,500		
City Hall	Router	Apr-16	Oct-17	Oct-21	\$2,500		
400 Marlboro (Police)	Router	Apr-16	Oct-17	Oct-21	\$2,500	\$25,000	
						FY24	
						TBD	
						FY25	
						TBD	

\$68,500

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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 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 to five years, an upgrade to the Microsoft Exchange Server platform, server operating system upgrades, and required Client Access License (CAL) upgrades. 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	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		27,000	14,000	9,000	9,000	55,000		114,000
TOTAL	\$0	\$27,000	\$14,000	\$9,000	\$9,000	\$55,000	\$0	\$114,000
FUNDING								
Current Revenue			14,000	9,000	9,000	55,000	0	87,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		27,000						27,000
TOTAL	\$0	\$27,000	\$14,000	\$9,000	\$9,000	\$55,000	\$0	\$114,000

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

PROJECT STATUS: Ongoing CIP

Server Replacement Costs

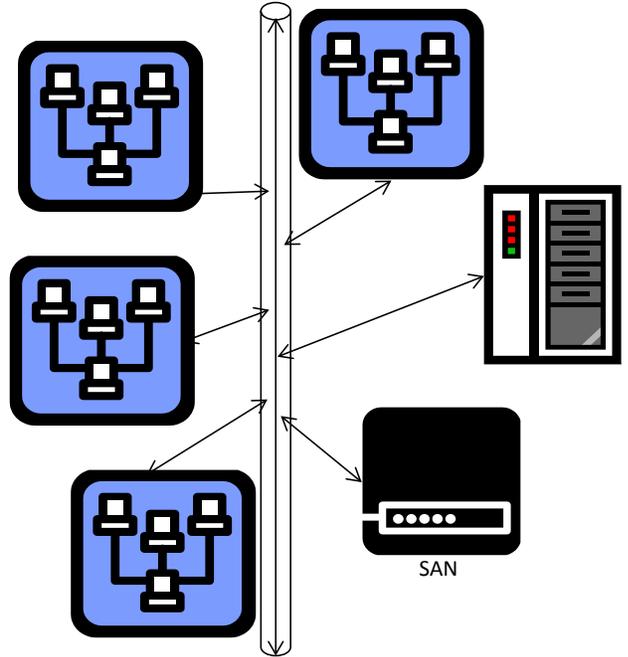
Server Function	1st Replacement Date	Fiscal Year	Replacement Cost
Virtual Server - Host	7/1/2019	FY20	\$9,000
Virtual Server - Host	7/1/2019	FY20	\$9,000
Virtual Server - Host	7/1/2019	FY20	\$9,000
APC Unit	7/1/2020	FY21	\$14,000
Virtual Server - Host - Finance	7/1/2021	FY22	\$9,000
Virtual Server - Host	7/1/2022	FY23	\$9,000
Server OS & Client Licensing	7/1/2023	FY24	\$55,000
			\$114,000

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 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. They are integral to our virtual environment and provide high availability and disaster recovery for all production servers we currently run. The typical life of a storage area network solution is about five years.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation						5,000		5,000
Property/Equip. Acquisition						100,000		100,000
TOTAL	\$0	\$0	\$0	\$0	\$0	\$105,000	\$0	\$105,000
FUNDING								
Current Revenue						105,000		105,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$105,000	\$0	\$105,000

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Phone System Replacement**
 Department: **IT**
 Physical Location: **Organization Wide**
 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 telecommunications services for all City departments**



PROJECT DESCRIPTION/JUSTIFICATION

Phones and the systems that run them, provide the backbone to City communications. There are 300 phones in regular use at the City of Keene and 5 separate paging systems. The importance of which cannot be understated as there is a phone on almost every City desk as well as in police dispatch and booking areas, Emergency Operations Center, laboratories, out-buildings, lobbies, and elevators. The servers and central phone system software that run all phone operations as well as building paging functions at multiple facilities including emergency services, are on a five-year replacement cycle. The phones themselves also have a finite useful life and are scheduled for replacement every seven to ten years depending on vendor life span predictions and compatibility with the system software. This replacement schedule ensures that our phone system is up and running 24X7 and does not jeopardize emergency services nor the day-to-day communications essential to City operations. Our current system is also tied into our networking devices of the same brand which greatly simplifies maintenance, upgrades and configurations, and helps minimize upgrade costs. Moving to another platform could require new, redundant network devices which would drive up the cost.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation					30,000			30,000
Property/Equip. Acquisition					173,000			173,000
TOTAL	\$0	\$0	\$0	\$0	\$203,000	\$0	\$0	\$203,000
FUNDING								
Current Revenue					203,000			203,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$203,000	\$0	\$0	\$203,000

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Financial Software Replacement**
 Department: **Finance**
 Physical Location: **City Hall**
 Federal Mandate: **N/A**

State Regulation or Law:

Master Plan (CMP) Focus Area: **Strong Citizenship and Proactive Leadership**
 CMP Vision/Strategy: **Municipal Governance & Financial Stability**

Council Initiative: **N/A**
 V.O.I.C.E.: **N/A**

Departmental Objective: **Maintain, update or replace financial management technology to current standards**



PROJECT DESCRIPTION/JUSTIFICATION

The financial accounting and reporting package used by the City was implemented in FY 1998-1999. The package covers many basic municipal financial functions, including general ledger accounting, payroll, accounts payable, accounts receivable, purchasing, project accounting, utility (water and sewer) billing, property tax billing, cash receipting, personnel budgeting, and budget preparation. In FY 2015, funds (\$190,000) were budgeted for a new property tax billing module and finance system upgrade which was completed in FY 2017.

The current financial software was purchased in 1997-98 and has served the City well for nearly 20 years. While the package has been upgraded over time to add new functionality, a review of City business practices and needs, as well as a review of financial software to meet those needs should be scheduled. Funding is requested in FY 2024 for an organization-wide financial system needs analysis, with software selection, acquisition, and implementation scheduled for FY 2026, should replacement be the chosen course of action. A preliminary cost estimate of \$615,000 has been developed for planning purposes. The estimate is based upon various informal quotes received by the City Finance Department during a review of options to replace or upgrade the current financial software conducted before the 2017 upgrade, inflated at 2% per year.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Software review						30,000		30,000
Acquisition/ Impementation								0
								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$30,000	\$0	\$30,000
FUNDING								
Current Revenue						30,000		30,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$30,000	\$0	\$30,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Voting Booths**
 Department: **City Clerk**
 Physical Location: **Wards 2, 3, 4 & 5**
 Federal Mandate: **N/A**
 State Regulation or Law: **RSA 658:9 (V)(a)(2)**
 Master Plan (CMP) Focus Area: **N/A**
 CMP Vision/Strategy: **N/A**
 Council Initiative: **N/A**
 V.O.I.C.E.: **N/A**
 Departmental Objective: **To be in compliance with the State RSA 658:9 (V)(a)(2), which identifies the number of voting booths required for local, state and national elections**



PROJECT DESCRIPTION/JUSTIFICATION

Recent voter statistics indicate that voter participation in New Hampshire and nationally is increasing. Keene has seen current voter registration rising. The current voting booths used by the City are over 50 years old, made of metal parts that require many labor hours of maintenance or repair, and are cumbersome to transport, set up, take down, and store. Recently the state approved a new style booth that is made of lighter materials, has a compact design making transportation to and from polling places more efficient, allows for quick set up and take down, and uses less storage space. The purchase of these new booths will save labor hours, give Keene voters an up-to-date polling location at which to vote and be in compliance with state recommendations.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Revaluation								0
Construction/Implementation								0
Property/Equip. Acquisition		32,088						32,088
TOTAL	\$0	\$32,088	\$0	\$0	\$0	\$0	\$0	\$32,088
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		32,088						32,088
TOTAL	\$0	\$32,088	\$0	\$0	\$0	\$0	\$0	\$32,088

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Moderate \$25,001 to \$50,000 One time **PROJECT STATUS:** Ongoing CIP

Fleet Services

The rolling stock supplied and serviced by the Fleet Division is a fundamental component of the necessary infrastructure in the provision of government services. Without the basic ability to transport people and access to equipment there would be no ambulance service, police response, streets plowed, water and sewer services, and most every other city service. Because the City has a Fleet Services Division, City personnel are able to respond to the variety of needs of the citizens in an efficient and effective manner with appropriate vehicles and equipment.

The Fleet Services Division, located at 330 Marlboro Street, maintains all City vehicles and equipment including Police, Fire and Rescue, Public Works, Parks and Recreation, Cemetery as well as the City of Keene Airport. There are 157 vehicles in the City's replacement program serviced by the Fleet Division along with an additional 99 vehicles/equipment serviced by the Fleet Division, which are not part of the capital replacement program. The Fleet Services team includes an Operations Manager, Administrative Coordinator, and four Mechanics.

When vehicles or equipment are scheduled to be replaced every purchase is evaluated by the Fleet Services Division in consultation with the receiving Department. The goal of the equipment replacement program is to provide City personnel with the most efficient and functional vehicle or equipment at the lowest cost. Some of the City's recent equipment purchases will allow City personnel to do more work without additional human resources. Several years ago the City instituted a "new/used" vehicle and equipment purchasing policy that allows consideration of demo equipment or used equipment for certain applications. Recent purchases of used equipment such as a grader and a brush chipper supply the Public Works Department with the critical tools necessary for efficient drainage maintenance and forestry management. In 2018 the Fleet Division worked with the Parks & Recreation Department to better serve their customer's transportation needs. Two non-handicap accessible vans were replaced by a handicap accessible bus which will provide comfortable, safe seating for 12 plus 2 wheelchairs.

In addition, the Fleet Services Division maintains a diesel fuel station at 330 Marlboro Street which had a technological update in 2018. In light of recently constructed private sector vehicle wash options, and the need for a longer service bay for the City's fire apparatus, the Fleet Services vehicle wash bay can be converted to a service bay using operating budget funds. Fleet Services fully subscribes to vehicle cleaning as a foundation to help preserve the life of vehicles and equipment by reducing the corrosive effects of salt, and there are better, more cost effective solutions than a City operated wash bay available to Fleet Services and its customers.

CITY OF KEENE, NEW HAMPSHIRE

2020- 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Equipment Replacement**
 Department: **Public Works - Equipment Fund**
 Physical Location: **330 Marlboro St.**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Strong Citizenship and Proactive Leadership**
 CMP Vision/Strategy: **Infrastructure**
 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 157 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 division in consultation with the receiving department before any piece of equipment is replaced. Vehicles are not replaced just because they are on the schedule.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		717,743	812,356	627,576	607,746	579,787	899,767	4,244,975
TOTAL	\$0	\$717,743	\$812,356	\$627,576	\$607,746	\$579,787	\$899,767	\$4,244,975
FUNDING								
Current Revenue								0
Capital Reserve		717,743	812,356	627,576	607,746	579,787	899,767	4,244,975
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$717,743	\$812,356	\$627,576	\$607,746	\$579,787	\$899,767	\$4,244,975

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

PROJECT STATUS: Ongoing CIP

CITY OF KEENE, NEW HAMPSHIRE

2020 - 2025 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Fleet Services Roof Replacement**
 Department: **Public Works - Equipment Fund**
 Physical Location: **330 Marlboro St.**
 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: **Invest resources to maintain City fleet operations**



PROJECT DESCRIPTION/JUSTIFICATION

One of the pressing long term capital needs is a replacement of the roof on the fleet services facility building. Small leaks are beginning to appear in the roof and are patched as necessary. The overall integrity of the roof of the 20-year-old facility is starting to become compromised. The roof will be evaluated every year to determine if the project needs to be accelerated or can be deferred. The original estimated replacement cost of \$90,230 done in 2016, has been inflated by 3% per year to reflect the expected cost at the time of replacement.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation					109,178			109,178
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$109,178	\$0	\$0	\$109,178
FUNDING								
Current Revenue					109,178			109,178
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$109,178	\$0	\$0	\$109,178

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 2019/2020	FY 2020/2021	FY 2021/2022	FY 2022/2023	FY 2023/2024	FY 2024/2025
STAFF CARS											
			REPLACE AT								
			7 Yrs./60,000								
0901	2009	\$23,080	Honda Civic Hybrid	P3	Pool car	\$28,765					
0903	2009	\$23,080	Honda Civic Hybrid	P1	Pool Car	\$28,765					
1702	2017	\$22,995	Ford Fusion	P2	Pool car						
2100	2012	\$16,585	Ford Focus	110	Assesing	\$21,560					
3118	2014	\$18,559	Ford Fusion	118	Health/Code	\$24,126					
09C1	2009	\$29,879	Ford Explorer	1	PW	\$38,842					
7114	2017	\$22,995	Ford Fusion	114	Code						
19C2	2009	\$37,336	Suburban	19C2	Fire					\$48,339	
19C1	2009	\$21,927	Explorer	19C1	Fire						
0606	2006	\$35,132	Suburban	19C3	Fire		\$51,304				
19U3	2012	\$34,970	Ford Interceptor		Fire	\$45,461					
0973	2009	\$29,879	Ford Escape	57	Engineering	\$38,842				\$2,612	
1001	2009	\$29,879	Ford Escape	112	Health/Code						
1144	2011	\$18,989	Ford Transit connect	21	Wastewater						\$27,534
1243	2012	\$22,374	Ford Transit Connect	1143	PD Parking						
0037	2000	\$2,900	Lexus 300 ES	0037	Fleet						
VANS											
			REPLACE AT								
			10 YEARS/70,000								
			(8 YEARS/70,000 old)								
1370	2013	\$16,353	Ford E150	70	Water Meter			\$22,610	\$23,596		
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						
1545	2015	\$16,807	GMC Savannah	1145	PD Parking						
0908	2009	\$22,232	Ford E-250	102	Parks & Rec						
1259	2012	\$16,491	Ford E-150	59	WWTP		\$29,000				
0313	2003	\$14,250	Ford E-250	125	Records				\$32,227		
AMBULANCE											
			(Funding by separate Fire Department Capital Reserve Program)								
1601	2016		Ford	19A1	Fire						
19A2	2013		International	19A2	Fire						
19A3	2009		C4500 Chevy	19A3	Fire						
MARKED POLICE											
			REPLACE AT								
			60,000/3YEARS								
1736	2017	\$37,500	Ford Interceptor	1136	Cruiser	\$77,392	\$79,714	\$122,850	\$84,358	\$86,888	\$132,000
1837	2018	\$37,500	Ford Interceptor	1137	Cruiser						
1633	2016	\$37,500	Ford Interceptor	1133	Cruiser						
1734	2017	\$37,500	Ford Interceptor	1134	Cruiser						
1835	2018	\$37,500	Ford Interceptor	1135	Cruiser						
1640	2016	\$37,500	Ford Interceptor	1140	Cruiser						
1630	2016	\$37,500	Ford Interceptor	1130	Cruiser						
1538	2015	\$37,500	Ford Interceptor	1138	Cruiser						
1739	2017	\$37,500	Ford Interceptor	1139	Cruiser						

VEHICLE AND EQUIPMENT 6 YEAR REPLACEMENT SCHEDULE

VEHICLE NUMBER	MODEL YEAR	Purchase Price	DESCRIPTION	VEHICLE DEPT. NO	USING DEPT/DIV	FY 2019/2020	FY 2020/2021	FY 2021/2022	FY 2022/2023	FY 2023/2024	FY 2024/2025
PD UNMARKED/ STAFF CARS											
4121	2014	\$20,595	REPLACE AT 80,000/ 6 YEARS Ford Fusion	1121	Unmarked				\$26,773		
1829	2018	\$27,570	Ford Interceptor Util.	1129	Unmarked				\$36,750		
1711	2017	\$41,000	Tahoe	1111	Shift Commander						\$43,410
0637	2006	\$2,900	Lexus 300 ES	1120	PD Staff						\$31,324
1110	2012	\$26,423	Ford Taurus	1110	PD Staff						
0923	2009	\$17,859	VW Jetta	1123	PD Staff						
1222	2012	\$20,528	Dodge Caravan	1122	PD Staff			\$24,018			
0924	2009	\$20,910	Dodge Caravan	1124	PD Staff						
DUMP TRUCKS 35/48/50 GVW											
0202	2002	\$112,143	REPLACE AT 17 YEARS Freightliner	6	Highway	\$192,857					
0526	2005	\$133,600	Ford Dump (lg)	26	Highway					\$216,876	
0527	2005	\$133,600	Freightliner	27	Water				\$210,560		
0965	2009	\$151,000	Freightliner	65	Highway						
1803	2018	\$157,000	Inter. Dump	3	Highway						
1405	2014	\$80,463	Inter. Dump	5	Highway						
9508	1995	\$80,463	Inter. Dump	AP5	Airport						
1412	2014	\$80,463	Inter. Dump	12	Highway						
1607	2016	\$142,000	Inter. Dump	7	Highway						
0312	2003	\$120,000	Freightliner	2	Highway		\$198,642				
1704	2017	\$156,000	Inter. Dump	4	Highway						
9906	1999	\$88,000	Inter. Dump	10	Highway						
0201	2002	\$112,143	Freightliner	22	Highway	\$192,857					
09AP8	2009	Grant	Freightliner	AP8	Airport						
0001	2001	\$76,644	Sterling	72	Highway						
1 TON TRUCKS 10,000 GVW											
0874	2008	\$44,888	REPLACE AT 60,000/10 YEARS Ford Dump (sml)	11	Highway						
1724	2017	\$60,000	Ford F450	24	Highway						
1113	2011	\$23,967	Ford F350 Dump	13	Water					\$54,147	
1774	2017	\$60,000	Ford F450	74	Highway						
0823	2008	\$29,956	Ford F350	23	WWTP						
4134	2014	\$33,562	GMC K3500	134	Cemetery			\$43,631			
0105	2001	\$25,000	Ford E350	54	Water						
1445	2013	\$37,806	Dodge 3500	45	Highway				\$49,148		
1275	2012	\$49,681	Ford F450	75	Highway	\$64,584					
4107	2014	\$26,411	Ford F350	107	Parks & Rec						\$52,800
1214	2012	\$31,623	Ford F350	14	Water				\$41,110		
1815	2018	\$55,000	Ford F350	15	Water						
9820	1998	\$52,000	Ford F350	20	Fleet			\$67,600			
06AP3	2006	\$22,500	Ford F350	73	Recycle						
1119	2011	\$27,659	Ford F 350	19	Fleet			\$31,200			
3/4 TON TRUCKS											
6130	2016	\$30,000	REPLACE AT 80,000/10 YEARS Ford F250	130	Parks						
8131	2018	\$34,000	Ford F250	131	Parks						
1301	2013	\$22,232	GMC 2500	AP1	Airport						\$28,902

VEHICLE AND EQUIPMENT 6 YEAR REPLACEMENT SCHEDULE

VEHICLE NUMBER	MODEL YEAR	Purchase Price	DESCRIPTION	VEHICLE DEPT. NO	USING DEPT/DIV	FY 2019/2020	FY 2020/2021	FY 2021/2022	FY 2022/2023	FY 2023/2024	FY 2024/2025
18AP3	2018	\$22,232	Ford F250	AP3	Airport						
0904	2009	\$22,232	Ford F250	104	Parks			\$33,902			
1116	2011	\$20,483	Ford F250	16	Water					\$28,600	
1/2 TON TRUCKS											
REPLACE AT 70,000/10 YEARS											
4103	2014	\$31,348	GMC 1500 Crew	103	Parks						\$37,700
1832	2018	\$24,000	Ford F150	32	Parks						
0929	2009	\$36,000	Chevy Tahoe	18	Highway						
1425	2014	\$19,828	GMC 1500	25	Highway						\$37,700
1/4 TON TRUCKS											
REPLACE AT 70,000/10 YEARS											
0314	2003	\$15,496	Ford Ranger	112	Code						
0502	2005	\$14,707	Ford Ranger	120	Inspections					\$19,481	
SIDE WALK PLOWS											
REPLACE AT 10 YEARS											
1350	2013	\$54,000	Wacker WL 30	50	Highway						
1551	2015	\$63,159	Boat Toolcat	51	Highway						
0653	1999	\$52,000	Trackless (sidewalk plow)	53	Highway						
0752	2007	\$82,357	Trackless (sidewalk plow)	52	Highway						
0649	2006	\$110,000	Trackless (sidewalk plow)	49	Highway						
BACKHOE											
REPLACE AT 12 YEARS											
1541	2015	\$76,000	John Deere 310SK	41	Highway						
1639	2014	\$116,000	Hitachi Excavator	39	Water						
PAYLOADERS											
REPLACE AT 15 YEARS											
0115	2001	\$148,964	John Deere Payloader	17	Transfer Station		\$140,000				
0634	2006	\$126,667	Komatsu	34	Highway		\$150,000				
1431	2014	\$142,000	SDLG Payloader	33	Highway						
0306	2003	\$161,802	Case Payloader	AP5	Airport						
0607	2006	\$61,595	409 Loader	JCB	Recycle	\$60,000					
TRACTORS											
REPLACE AT 10 YEARS											
0407	2004	\$106,472	Ford Versatile Tractor	40	Highway						
066AP	2006	\$106,472	Ford Versatile Tractor	60	Airport		\$135,000				
0905	2009	\$31,000	New Holland Tractor	105	Parks & Rec						
0932	2009	\$20,125	Cub Cadet	132	Cemetery	\$33,963					
1429	2014	\$61,000	Kubota Tractor	29	WWTP						
1410	2014	\$23,400	Toyota Forklift		Recycle						\$34,200
0513	2005	\$6,190	John Deere 1300	113	Parks & Rec						
0909	2009	\$8,000	John Deere X700	109	Parks & Rec						
1117	2011	\$32,250	Volvo MC115C	skidsteer	Highway					\$41,925	
1455	2014	\$45,000	Volvo MC115C	skidsteer	Solid Waste						
0706	2007	\$70,588	Toro Mower	Mower	Cemetery		\$80,000				
6135	2016	\$10,600	Kubota Tractor	135	Cemetery						

VEHICLE AND EQUIPMENT 6 YEAR REPLACEMENT SCHEDULE

VEHICLE NUMBER	MODEL YEAR	Purchase Price	DESCRIPTION	VEHICLE DEPT. NO	USING DEPT/DIV	FY 2019/2020	FY 2020/2021	FY 2021/2022	FY 2022/2023	FY 2023/2024	FY 2024/2025
0709	2007	\$22,000	Kubota Tractor	AP7	Airport	\$34,660					
SPECIALTY EQUIPMENT			REPLACE AT 10 YEARS								
1528	2015	\$307,000	Freightliner VacCon	28	Water/Sewer						
0317	2003	\$204,638	Sterling VacCon	36	Highway						\$425,000
9408	1994		Oshkosh Snow Blower	AP4	Airport						
AIR COMPRESSORS			REPLACE AT 10 YEARS								
9503	1990	\$10,000	Ingersoll Compressor	133	Cemetery						\$29,760
9714	1997	\$10,000	Lindsay Compressor	88	Highway						
1586	2015	\$13,730	Atlas Compressor	86	Water						
0589	2000	\$10,000	Air Compressor	89	Highway						
CONSTRUCTION EQUIPMENT			REPLACE AT 10 YEARS								
0704	2007	\$4,499	Graco Painter	80	Highway						
9012	1990	\$6,000	Snow Blower attach.	80	Highway						
9823	1998	\$10,000	Chipper		Highway						
0912	2009	\$1,788	Woods Brush Hog		Highway						
9912	2000	\$7,155	Rosco Roller		Highway						
9410	1994	\$18,700	Forklift		Fleet Services					\$24,310	
9818	1998	\$3,000	Trailer for Cemetery		Cemetery	\$3,900					
9924	1999	\$8,200	Hydro Tek Steamer		Highway						
0113	2001	\$21,208	Asphalt Reclaimer		Highway			\$53,530			
9301	1993	\$21,208	Asphalt Reclaimer		Highway			\$53,530			
8210	1982	\$20,000	Trailer		Highway				\$25,960		
0010	2000	\$5,800	Miller Curber		Highway						
0022	2000	\$33,000	Cimline Crack Sealer		Highway						
0520	2005	\$9,260	Welder/Generator on Trailer		Fleet Services			\$25,960			
0408	2004	\$38,000	USA Mower Attach		Highway						
0011	2000	\$5,225	Stowe Roller		Parks & Rec						
9014	1990	\$20,000	Snogo Blower		Highway					\$25,960	
0663AP	2006		Salasco/Chipper		Airport						
0409	2004		Pronovost Snowblower		Highway						
0036	2000	\$9,995	Vibromax Roller		Highway					\$25,960	
			Total		Total	\$717,743	\$812,356	\$627,576	\$607,746	\$579,787	\$899,767

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APPENDIX A

This appendix includes General Fund projects that are NOT included in the proposed FY 2020-2025 CIP but may appear in future CIP documents. These projects have not been included in the CIP for a variety of reasons, including limited resources and the need for additional project analysis and development.

AIRPORT (ECONOMIC DEVELOPMENT AND VITALITY)

Aviation Easements and Obstruction Removal

Avigation easement acquisition and obstruction removal have, are, and will be constant topics. The City will generally be eligible for FAA/State funding to around \$500,000 per year with a City matching amount of 5% (\$25,000). There is no immediate funding as of this date due to the use of previously appropriated funds combined with more than a dozen property owners who have voluntarily consented to obstruction removal. Going forward, our airport consultants will be asked to perform new obstruction studies to determine with exactness, where new obstructions are and new budgetary estimates will be advanced.

Dean Memorial Airport Funds

Dean Memorial Airport in N. Haverhill NH has \$300,000 of unused federal/state funds that is available for use by Keene and which we intend to acquire (with City Council approval) to continue to implement the Airport Master Plan projects. Acquiring these funds will cost an additional 5% so that the City expense to access and expend these funds is 10% or \$30,000. There may be existing capital funds to offset this cost but depending upon the timing, this request may come before City Council.

Estimated Cost = \$30,000

Green Hangar Repairs

The so-called 'Green Hangar', empty for several years, is now rented by a tenant, and the city receives approximately \$5,400 annually in rent and real estate taxes. The roof was patched within the past year, but leaks badly as it is the original roof on this structure that was built sometime in the 1950's. The metal exterior panels are also in bad shape, and at least the bottom 8 to 10 feet should be replaced. The building should be painted. This building has not had any meaningful repair in decades. We estimate the roof at \$88,000; exterior sheathing at \$24,000. There is no federal/state funding available for this project.

Estimated Cost = \$112,000

Hangar Construction

While the airport has not used tax dollars to construct new hangars, this is a possibility depending upon development trends going forward. Hangars are fundable with FAA/state money and score around 32 out of 100. By comparison, the runway reconstruction project scored 70. Hangar cost estimates are based on the size/capacity. There would be revenue generated from a city-owned hangar project.

Hex Hangar Repairs

Constructed more than 40 years ago, this hangar came to be owned by the City through a reverter contained in the long-term land lease. Now that it is owned by the City, maintenance of this building should be considered. Upon examination, it was determined that the roof leaks in many areas; the electrical wiring is not per code; many of the hangar door gaskets have deteriorated beyond use; and the building has not been painted in decades, if ever. For cost planning purposes, the roof is estimated at \$55,000; the electrical work at \$3,000; the door gaskets at \$2,000; and the exterior painting at \$3,000. There is no federal or state funding for this project.

Estimated Cost = \$63,000

Municipal Water and Sewer at Terminal Locus

The terminal building, SRE building and C&S hangar are all served by individual septic systems. The water supply comes through Edgewood but is not connected via a loop to the Swanzey Water Company lines on Rt. 32. The ultimate development interests for this part of the airport would be well-served if municipal sewer service and a continuous water line were installed. Successful development will require an appropriate infrastructure

Estimated Cost = \$700,000 - \$900,000

Obstruction Removal

The airport is mandated to comply with many regulations including those related to safety within the aerial approaches to the four runways. Obstruction clearing (trees basically) is an on-going and perpetual task. While the airport has cleared hundreds of trees over the past two years, more trees need to be trimmed or removed. The airport will continue to assess tree growth around the airport to identify safety issues due to obstructions. The airport will continue to work with property owners in an effort to secure permission to remove obstructions and will seek to purchase aviation easements where necessary. Continuing obstruction removal is eligible for federal/state funding of 95% with the final 5% the responsibility of the City. Some property owners do not want easements, but would give consent for obstruction removal without going through the federally required process of survey, appraisal, negotiation, and easement acquisition. This would not be part of federal/state funding.

Estimated Cost = \$35,000

Old Airport Fire Station Building

The former fire station at the airport continues to be used for equipment and de-icer storage, and other equipment seasonally. The building is heated minimally due to the need to keep the de-icer at minimum temperatures. The overhead doors have significant deterioration and should be replaced in order to preserve the useful life of this necessary structure. There is no federal/state funding available for this repair.

Estimated Cost = \$8,000

Real Estate Acquisition

While the land owned by the City for airport purposes is currently adequate, properties are available adjacent to the airport and consideration should be given to acquiring more property. For example, land immediately south of Airport Road is presently available and could be used to re-develop the road into the airport. The listed price for this property is \$275,000 for 1.9 acres of land. There are two other properties for sale that are wedged in-between City-owned airport land.

Utility Task Vehicle

I recommend that the City evaluate and plan for the acquisition of a UTV (Utility Task Vehicle) for use at the airport. A UTV, which costs approximately half of a new pick-up truck, would be used on many airport projects as a vehicle is necessary to cover the near 1,000 acres of property. This UTV would also be used to travel to the dozen safety beacon locations scattered in the hills surrounding the airport. In the past, we have rented an all-terrain vehicle. The correct UTV could have sufficient space capacity to carry tools and staff to airport locations vs. using a large pick-up that frequently must sit, with strobes on, while maintenance tasks are underway. A UTV is just more economical in all ways.

Estimated Cost = \$15,000 (used)

CITY MANAGER (ECONOMIC DEVELOPMENT AND VITALITY)

Broadband

A Broadband Study was completed in 2018 as called for by the City of Keene Economic Development Action Plan of 2017. The study recommended that the City add conduit/handhole allocation to the Capital Improvements Program so that such equipment could be purchased for placement when projects such as road, sidewalk and intersection improvements take place. The City Engineer has researched the costs associated with broadband conduit, handholes and installation services alongside future improvement projects and estimates that the minimum cost would be about \$57.50 per linear foot for the acquisition and installation of conduit and handholes (no fiber). In FY20, this would include 23,500 linear feet of conduit if done with proposed road rehabilitation projects for a total cost of \$1.3 million just for the conduit and handholes, and the expense would be similar in future years. Even if broadband providers take advantage of the new network option and lease space for their services at a competitive lease rate, it could take over 40 years to recoup the City's investment in the infrastructure in this one, FY20 example. Due to the expense, staff has not included broadband conduit costs in any CIP project and is recommending that attention continue to be placed on identifying opportunities for grant funding and partnerships with organizations with similar interest in conduit or right-of-way excavation projects.

New Hampshire is one of few States that does not provide financial or legislative support for broadband expansion unlike Vermont, Maine, Massachusetts and New York, to name a few. IT staff will continue to work with the legislative delegation to support broadband expansion as an economic development priority.

FIRE DEPARTMENT (PUBLIC HEALTH AND SAFETY)

Cardiac Monitors

Currently the department has 4- advanced life support defibrillator and 6 AED defibrillator monitors. The advanced life support defibrillators are used on the ambulances to monitor the patient's heart rhythm and have the ability to pace and shock the patient heart when warranted. The AED units are units that are carried on our front line response units and have the ability only to shock the patient that presents in cardiac arrest. The 4 advanced life support units were replaced starting in FY16 and completed in FY17. It is expected that between FY26-FY30 these units will require replacement. The cost to replace the units today without trade in value is \$26,000 per unit for the advanced life support unit and \$1,500 for the AED units with an overall replacement cost of \$107,000.

Replacement Life Span = 10 – 15 years

Gear Washer/Extractor and Drying System

Currently we have two gear washer/extractor systems and one drying system. The Central Station has the newest washer/extractor and a drying system that was purchased in 2012 when we moved into the new Central Station. The gear washer/extractor at Station 2 was purchased in 2002. Department regulations require all structural firefighter gear to be washed after every fire or when contaminated with bodily fluids, etc. to remove harmful containments. This not only extends the life of the gear but also is required to make sure that our employees are not absorbing harmful products into their bodies. The projected replacement for the Station 2 washer with dryer system would be in FY22 and the Central Station washer/drying system in FY26-31.

Replacement Life Span = 15-20 years

Estimated Cost = \$15,000

Hydraulic Rescue Tools

The department currently has one main brand of hydraulic rescue tools used for vehicle extrication, building collapse and machinery incidents. This equipment was purchased in 2009 when Rescue 1 was purchased. There are also two sets of older equipment carried on Ladder 1 and Ladder 2. The equipment is currently under review to determine when and what cost this equipment will need to be replaced.

Replacement Life Span = 15-20 years

Estimated Cost = \$50,000

Mobile Radios

The current mobile radios were recently replaced over three years starting in FY15 and completed in FY17. The department currently has 23 of these units that are used daily to provide communications on all response apparatus. The units have an expected 10 year life cycle. Parts for the units are also not available 2-3 years after the model has stopped production. It is expected that by FY25 we will need to start to replace these units once again over a 2-3 period before they are not operable. The current cost of the mobile units is \$4,500 per unit and a total replacement cost today that would exceed \$103,000.

Replacement Life Span = 10 years

Portable Radios

The current mobile radios are being replaced over a four year program that started in FY17 and will be complete in FY20. For the same reasons as the mobile radio replacement project listed above, the replacement of these radios is expected for FY27-FY30 if we were to purchase over a multi-year period as we are now. I caution the purchasing of equipment like this over multi years as I did with the current project as it potentially limits the life span and parts availability if the units are purchased near the end of the model years of the radios being produced. We try to make sure that the equipment purchased is "state of the art" and a new model at the time, so we are able to get the longest life span and service availability as possible; but we don't have control over that when models are discontinued. Currently we have sixty five portable radios at a cost of \$3,700.

Replacement Life Span = 10 years

Estimated Cost = \$240,500

Self-Contained Breathing Apparatus Compressor Fill Station

Currently the department has two different fill stations, one located at the Central Station and the second located at Station 2. The units are used to fill our SCBA bottles on a daily basis. The SCBA units are used to enter toxic areas and also during training required to remain proficient and competent with the equipment. The compressor/fill station and cascade system at the Central Station is used not only to fill bottles, but also to fill our mobile bottle systems on the two of our apparatus. The system located at the Central Station was purchased late 2012 through a grant when we moved into the new Central Station. The unit at Station 2 was also purchased through a grant in January of 2005. The Central Station system is valued at \$50,000 with a replacement projected for FY26-31 and the Station 2 system is valued at \$15,000 with a replacement projected in FY20-25.

Replacement Life Span = 15-20 years

Station Generator/ Emergency Power Systems

The Central Station system was new in 2012. The Station 2 system was replaced by the state between 2010 and 2012. Both systems will be projected for replacement in FY30 depending on their condition and availability of parts. Cost of the units is not known, but the Central Station system is projected over \$75,000 due to its size.

Replacement Life Span = 20-25 years

Station 2: Upgrades/Renovations

Currently the West Keene Fire Station is located at 110 Hastings Ave. It occupies a facility reacquired in early 2018 by the City of Keene from the State of NH Adjutant General's Office (NHARNG) following a determination that the facility was no longer needed to meet their mission.

The Fire Station Study project has been an anticipated capital improvement program (CIP) project for approximately 10 years. The recent transfer of ownership of the facility to the City, initiated study of the location and consideration of fire department future needs as a phased project. Goals of the first phase, in progress as part of FY19 approved CIP, focus on the 110 Hastings Ave. location to determine if this is the best location to meet the City's protection needs considering factors detailed in the paragraph below. That assessment will frame next steps, which if warranted would include a review of the existing Station 2 facility to determine building and systems needs if the fire station location was to remain there; or initiate additional investigation of other options meeting the City's service needs, if the 110 Hastings Ave. location is not recommended for long term investment.

Through the current CIP, City staff from the fire department, community development office and the City Manager started working on an internal GIS review of the current station location. This review is intended to analyze current response times, incident data, target hazards, water supplies, future growth and possible other locations for Station 2, if the current site is not found to be the best location. Once the GIS review is completed, it is intended that a feasibility study to review the needs of the current facility and or a new facility, would be conducted. Future funds would be needed to complete the full building review and we are currently working to estimate what those costs would be so a funding source can be determined.

PARKS & RECREATION AND FACILITIES (COMMUNITY DEVELOPMENT)

Community Center

In 2016, through the CIP process, a project outlining the possible future collaboration between the City of Keene and the Keene Senior Center was brought forward. The purpose of this project was to explore the possibility of bringing the seniors to the Recreation Center at 312 Washington Street. The Recreation Center was built in 1987 and has served the community well, offering a wide variety of programs and community events. Part of the 2010 Comprehensive Master Plan highlighted six focus areas; a Healthy Community looked to consider the community's individual health and well-being. This project incorporates the CMP, the Active and Passive Recreation Management Plan, the Healthy Monadnock initiative and the overall goal to be the healthiest community by the year 2028. The demographics are changing and the projection for Keene and the Monadnock region shows that by the year 2030 the senior population will be 30%.

The study has been completed with recommendations that outline a need for an updated Recreation Center, Senior Center addition, and necessary building renovations. The study included public engagement through focus groups, surveys, public discussion nights, and national industry trends. These findings, along with space utilization analyses between the Recreation Center and Senior Center, were compiled to make the recommendation to move the project forward. The study provided four options: Option 1 - Senior Center addition and Recreation Center addition and building renovations; Option 2 - Senior Center and building renovations; Option 3 - Recreation Center addition and building renovations; Option 4 - building renovations only.

The original intent of this project was to provide the Recreation Center with the necessary improvements highlighted in the EMG report. These improvements facilitated a larger discussion on the best utilization of space, and the improvements needed to the Recreation Center. Despite the feasibility cost introduction for the entire project, the original goal still needs to be brought forward as the main purpose and focus of any future improvements before expansion can be further explored.

The EMG report provided an assessment of \$1.2 million improvements needed to the building.

Dog Park

A new group of citizens have come forward to establish a dog park. This group does not have a connection to the past group and has begun creating a 501c3 non-profit status for fundraising purposes. The dog park was once listed in the Capital Improvement Program much like the skate park. Although their fundraising goal is significantly less, the impact of a new facility would require additional maintenance and upkeep.

Robin Hood Playground Building

Built in the 1960's, this is a small cement block building used for the summer playground with a seasonal restroom facility. Additionally, the building also houses an oil fueled furnace to maintain warm temperatures in the winter for ice making operations and to keep the hoses from freezing. The 8 week summer program hosts about 80 children who enjoy the many activities the department has to offer. With a new building to accommodate the program, the department could create a revenue stream similar to the Wheelock playground building.

Estimated Cost = \$200,000

Estimated Year = FY 2024

Swimming Pool

In fiscal years 2011 and 2012, both Robin Hood and Wheelock Pool were resurfaced respectively. The surface for each pool needs to be completed every 10 years in an effort to maintain a quality pool surface. Overtime, small chips and cracks occur and leaks can go undetected. Proper maintenance will keep the pools in operation for future generations to come.

Estimated Cost = \$90,000

Estimated Year = FY 2025

Transportation Heritage Trail

The Transportation Heritage Trail will be the next phase in the ongoing development for our existing Cheshire Rail Trail System. This section will begin at the terminus of the previously completed Industrial Heritage Trail (IHT). While the IHT celebrates Keene's history as an industrial and manufacturing hub, the Transportation Heritage Trail (THT) will pay homage to the evolution of transportation technology through the decades.

The central feature of this project will be the adaptive reuse of three historic bridges. To the west, the trail will reuse the Robert J. Prowse Memorial Bridge to cross NH Route 101. This bridge previously carried traffic over Interstate 93 in Londonderry, and is being made available for reuse by the NHDOT. In the center, the trail will feature the existing Stone Arch Bridge, which will be rehabilitated with historically-appropriate railings. The City anticipates reusing our own Island Street Bridge (a Baily truss bridge) to carry the trail over Swanzey Factory Road. Along the trail, the historic bridges will form the context for educational signage and static displays related to the history of transportation and how transportation systems have shaped today's built environment.

In order to maximize our opportunity to seek out funding from various grant programs and contributions from non-profit organizations, the project will be completed in several phases. In 2023, we will construct a roadside trailhead off of Swanzey Factory Road and install safety railings on the Stone Arch Bridge. Funding in 2024 will allow the rail bed from Eastern Avenue to Rt. 101 to be improved and embankment on the North side of Rt. 101 to be prepared for the Prowse Bridge. In 2025, the historic Prowse Bridge will be relocated from temporary storage in Londonderry to its new home in Keene. The schedule outlined above will be contingent upon the availability of grant funds and private donations.

This project should be phased in over a period of four years beginning with the design phase in FY22.

FY 2022 - \$26,600

FY 2023 - \$225,200

FY 2024 - \$583,200

FY 2025 - \$1,729,500

Total - \$2,564,500

Wheelock Park Lights

Working with the City Engineering Department, and reviewing the Active and Passive Recreation Management Plan, recreation lighting in Wheelock Park will need to be addressed. Current electric and pole infrastructure is failing on O'Neal and Durling fields, the horseshoe pits, tennis courts, and skating rink as they were all installed in the early to mid-1980's. The youth ball fields were installed as recently as the early 2000's. Technologies have changed with LED's. Creating a greener footprint and reducing the energy bill is a mission of the City. Working with the department, park user groups will collaborate to create a capital campaign, seek grants, utilize alternative revenue sources, such as crowdfunding, and partner with local energy providers to fund this project.

Estimated Cost = \$1,515,817

Estimated Year = FY 2025

PARKS & RECREATION AND FACILITIES (GENERAL OPERATIONS FACILITIES AND INFRASTRUCTURE)

City Hall Generator and Transfer Switch

The City Hall emergency backup generator is approximately 27 years old with a lifespan of 25 years. City Hall is home to the Emergency Operating Center and the City Data Center; both are required to have a backup power source. The EMG report identified the need and recommends replacement of the unit. Further evaluations agreed with the report findings and the overall condition of the emergency backup generator. The backup generator is at best in fair condition and should be replaced. The recommended lifespan of an emergency backup generator is 20-30 years. Given this is a critical location, facilities recommends upgrading immediately. It is also recommended to replace the automatic transfer switch at this time. The switch is also in functional condition, but is showing its age and it would be cost effective to be replaced along with the generator. Alternative funding sources to fund this project through grant opportunities are being explored. We are currently seeking a FEMA grant; if approved, the grant would cover 75% of this project. If the grant is approved, this project will move forward in FY19.

Estimated Cost = \$77,000

Estimated Year = FY 2019

Municipal Building Improvements

The current condition of the Heating, Ventilation and Air Conditioning (HVAC) units at the Marlboro Street municipal complex have been determined to be past their useful lives. As the facilities staff continues to observe system failures, the cost of maintaining and repairing the units continues to increase as the necessary parts become obsolete. Technologies have changed, resulting in higher energy efficiencies and reductions in cost and greenhouse gas emissions. We will move toward our greener footprint by replacing the existing units. Utilizing the EMG report, these units are past their useful life and should be replaced as these units are now 14-18 years old in 2018. The ASHRAE (ASHRAE is the industry origination that set standards and guidelines for HVAC equipment) life expectancy of these units is 15 years. In addition to the HVAC units, there are 4 Make up Air units located in the equipment bay of public works; they are in functional condition, but will be past useful life in the immediate future and should be replaced. They are recommended for replacement by the EMG report in FY 2019. An engineering study is recommended to determine the proper replacement needs which could potentially reduce cost through energy saving incentives. Facilities will closely monitor equipment condition and replace equipment at end of life with funds held in reserve such as:

- 2- 3 ton HVAC systems for server room KPD \$5,000 each unit total \$10,000 (redundant system)
- 2-7.5 ton HVAC units at \$11,000 each total \$22,000
- 1- 20 ton package gas heating –cooling unit \$32,750

Paving of Parking Lots

The City of Keene owns many facilities and associated parking lots used by various departments. Over the years a combination of vehicular use, cold and wet weather, and snow plows have contributed to the deterioration of the condition of the lots. The damages accelerate once moisture is able to enter the pavement base through cracks and then freeze. In order to improve the function of the lots and reduce the long-term maintenance costs for patching and crack-sealing, rehabilitation is necessary.

Rehabilitation of the lots will include milling the existing asphalt surface, performing spot repairs as needed, leveling low points, overlaying with new asphalt, and re-striping. Existing granite curbs that are damaged or out of alignment will be repaired or replaced. Existing bituminous curb will be replaced. The existing sidewalks will be evaluated and rehabilitated in kind. Rehabilitation of the Public Works, Airport and Recreation Center lots are scheduled for future years.

Recreation Center Boilers

Installed in 1987, the Recreation Center boilers have been well maintained; however, they have served their useful life and are approximately 81% efficient at best. New technologies will bring energy and fuel efficient boilers to an improved 97% rating. To better understand the efficiency rating, this would represent 2200 gallons of propane savings. Translate the current cost of propane (city contract is \$1.155 per gallon), that represents \$2,500 per year savings in energy cost, and in addition this will eliminate approximately 27,940 pounds of CO2 per year. Recent boiler replacement projects have demonstrated the City's ability to potentially reduce the purchase cost through energy saving incentives should they still be available through local energy providers.

Estimated Cost = \$100,000

Estimated Year = FY 2024

POLICE DEPARTMENT (PUBLIC HEALTH AND SAFETY)

Communication System

The department employs a communication system that is comprised of essentially two parts; the radio system itself (transmitters, receivers, comparator, repeaters, antennas, etc.) and the dispatch electronics, which serve as the command and control for the system.

The radio system portion is being replaced in FY19; however, funding for the dispatch console equipment was not included. The current dispatch console system, which we have two, is more than 12 years old and works from outdated circuit switched technology. During the review of our entire communication system by our contractor for the radio system replacement, it was suggested that our dispatch console system be changed within the next five years to bring it up to current standards of Internet Protocol (IP) technology.

Current proposed equipment replacement would be the Motorola MCC 7500 dispatch console, which would also enhance the capabilities of the FY19 installed radio system. Given the advanced technology and design, this may also be the time to replace and redesign the dispatch stations physical attributes. Estimated costs are based on 2018 numbers and do not include a service support/maintenance plan.

Replacement Life Span = 15 – 20 years

Estimated Cost = \$300,000 dispatch console + additional \$50,000 for furniture/physical redesign

**PUBLIC WORKS
(ECONOMIC DEVELOPMENT AND VITALITY)**

Victoria Street Extension

This project proposes to extend Victoria Street south from Water Street, to connect to Marlboro Street. Work will include property acquisition, engineering design, and construction of approximately 1,200 linear feet of roadway. The 2004 Traffic Committee reviewed various traffic improvements throughout the city. The committee identified extension of Victoria Street as a critical piece of the Marlboro Street Zoning/Redevelopment Evaluation that was completed in 2014. This extension will open up a large parcel for redevelopment. It will also improve access for truck traffic to businesses located on Victoria Street and reduce the amount of truck traffic in residential neighborhoods.

In 2008 a total of \$163,000 was allocated for preliminary design. The project was suspended after spending limited funds for a topographic survey. In 2016 council voted to reallocate \$155,755 of bond funds previously issued for this project.

The project would also provide funding to install sewer and water mains along the 1,200 feet of new road and would support the redevelopment of adjacent properties and improve the resiliency of the system overall.

Estimated Cost = \$2,003,000

Estimated Cost (Water Fund) = \$347,800

Estimated Cost (Sewer Fund) = \$224,000

**PUBLIC WORKS
(FLOOD AND STORM WATER MANAGEMENT)**

Beaver Brook Flood Mitigation

Beaver Brook has a history of overflowing its banks during severe weather events. Flooding in 2005 and 2012, and 2013 resulted in significant property damage in some of the most densely developed neighborhoods in the City. Prior CIP's have authorized funds for a detailed Hydrologic and Hydraulic analysis of Beaver Brook. The City is teaming with the United States Army Corps of Engineers US COE) to complete this analysis using both federal and local funds. This work is expected to be completed by early 2020. The City anticipates that the project will result in recommendations for projects designed to decrease the frequency and severity of flooding along Beaver Brook. Concepts under consideration include (but are not limited to) Increasing the size of the Three Mile Dam, creating storage capacity within the Woodland Cemetery wetlands complex and installing floodgates near Rt. 101. Staff anticipates that any recommendations developed by this study would be eligible for funding through the US Army Corps of Engineers "Section 205 – Small Flood Damage Reduction" program. That program provides 65% federal funding for projects up to approximately \$10 million.

Drainage Main Lining

The City currently has an inventory of approximately 20.2 miles of corrugated metal drainage mains and pipes with over 17 miles having been installed before 1980. These mains and pipes have exceeded their anticipated 30-year service life and will need to be replaced or repaired. The total cost to replace these pipes exceeds \$3.2 million. In the summer of 2017, a short section of metal drainage pipe near the Baker Street Bridge over Beaver Brook collapsed, causing the closure of the west-bound lane for several months. We can expect this type of disruptive failure to continue. Beginning in FY23 the Public Works Department proposed funding for a lining program for the corrugated metal mains and pipes which is a less disruptive construction process, and extend the life of the drainage infrastructure. At the proposed funding profile it is anticipated that it will take over 40 years to complete the lining of the existing metal drainage infrastructure.

Flood Management Projects

The City continues to invest in improvements in areas of known urban and street flooding. Typically this flooding is the result of old and undersized mains that cannot carry the run-off from the roadway and adjacent private properties. Areas that have been identified include Probate and Church Street in FY26, Edwards Street and Church Street in FY28, Colonial Drive area and Court Street in the Evergreen Avenue and Windsor Court areas in FY30.

PUBLIC WORKS (GENERAL OPERATIONS FACILITIES AND INFRASTRUCTURE)

Access Road Bridge Replacement

The City owns and maintains a number of bridges that allow access to portions of City-owned property. These include the bridge on the access road to Goose Pond Dam, the access bridge for the Three Mile Dam, a bridge over Ash Swamp Brook near the end of Bent Court, etc. Many of these are nearing the end of their useful life and will require repairs or replacement in the future. Since these are private bridges and used for City operations, they are not eligible for New Hampshire Department of Transportation funding.

PUBLIC WORKS (TRANSPORTATION)

Swanzy Factory Road Intersection Improvements

The New Hampshire Department of Transportation's adopted Ten Year Plan for FY19-28 includes approximately \$3.6 million in FY27 for the reconfiguration of the Swanzy Factory Road / Route 101 intersection. At this time it is not clear what, if any costs, may be incurred by the City as a result of this project. It is possible that costs associated with water and sewer utility relocations will be imposed.

Traffic Signal Replacement

The FY24 CIP includes a request to begin the phased replacement of the City's 13 traffic signals. Due to their age, the current signals do not meet all applicable federal guidelines. The proposal begins with replacement of signals in Central Square. The full replacement program will be phased over seven years at a total estimated project cost of \$1,095,000.

West Street Corridor Improvements

Recently completed City projects on Court, Washington and Water Streets along with planned work on Main, Winchester, Marlboro and Roxbury Streets will address the majority of the City's gateway corridors. Conspicuously absent from this list is West Street. There are no current plans for rehabilitation and upgrade of this critical corridor. However, during the development of the City's Comprehensive Master Plan in 2010, residents and business owners frequently mentioned this corridor as presenting a significant opportunity for reinvestment and economic development.

APPENDIX B

This appendix includes a discussion of the Water and Sewer Funds (PUBLIC HEALTH AND SAFETY) capital projects that are scheduled for FY 2026 and beyond. Also included is a brief discussion of water and sewer main replacement funding. Due to the nature of aging utility infrastructure, and the scope of the proposed projects, this information is provided in an effort to better inform the long term discussion regarding utility fund infrastructure.

SEWER AND WATER INFRASTRUCTURE

Sewer Main Infrastructure

In the fall of 2017, the City applied for and received funding for the development of an Asset Management Plan for our sewer collection system through the Clean Water State Revolving Fund. The plan was completed in 2018. The recently completed inflow and infiltration work in the southeastern area of the City is providing the data needed to complete a rating similar to the risk and consequence analysis performed for water mains. The FY20-25 Capital Improvement Program (CIP) funds the replacement or lining of approximately 3,430 feet of deficient sewer main per year. With more than 90 miles of sewer main serving more than 90 percent of the City's population, this rate of work sees repair or replacement of the City's entire sewer system over 138 years.

Sewer mains have an expected life of 50-100 years and the risks of operating a main past its expected life include collapse, blockage, and overflows – all of which lead to environmental contamination and unexpected disruption and sewage backups to residents and businesses. The Administrative Order and associated fine levied to the City in 2004 by the federal Environmental Protection Agency was focused on the functionality, operation, and maintenance of the sewer system. The City responded by replacing and upgrading many of the oldest mains. The City's cost for that Administrative Order including fines and project work exceeded \$7 million.

The City's next wastewater discharge permit will include specific requirements for maintenance, operation and capacity of the sewer mains. The City risks additional fines for permit violations, so an increase in funding the sewer main replacement program is prudent. All sewer projects are funded fully through User fees and Keene's 2018 sewer rates result in a cost to the City's average domestic sewer user of approximately \$707 a year. This remains below NH's 2015 statewide average domestic sewer user cost of approximately \$712 per year.

Water Main Infrastructure

A Water Mains Asset Management Plan was developed in 2016 to provide a qualitative roadmap that would assist staff in prioritizing the replacement or rehabilitation of the City's drinking water mains. Based on the probability and consequences of failure, the four highest ranking mains are scheduled for replacement over the 6 years in the FY19-24 CIP. Due to budget constraints there is no funding for water main replacement in FY20 and FY21. The City owns more than 100 miles of water mains and is scheduled to replace or line approximately 3.1 miles of water main – the equivalent of 2,737 feet per year -- over the 6 years of the current CIP. While this rate of spending maintains level funding, it does not keep pace with the recommended rehabilitation/replacement rate. At the rate of replacement reflected in the current CIP, all of the City's water mains will be replaced or lined in approximately 218 years. While many of our existing mains have been in service for more than 100 years, it is not reasonable to expect a water main to provide a 218-year service life.

The Water Mains Asset Management Plan as presented to City Council in May of 2016 recommends a long-term annual funding rate of approximately \$1.3 million (in 2016 dollars) in order to reduce the

required service life from 218 years (current spending level) to a more reasonable service life of 110 years.

All water main projects are fully funded through water user rates. At a cost to an average water customer of \$461 per year in 2018, Keene ranks below NH's 2015 average annual cost of water statewide of \$474. To keep pace with the aging of its entire water infrastructure, Keene's water rates should increase at a rate higher than the cost of inflation.

While failure to replace water mains at this rate doesn't guarantee there will be catastrophic main breaks and severe consequences, it certainly increases that risk. It is recommended the City use the pace of replacement in the Asset Management Plan as a guide for water main infrastructure improvements; while understanding the potential risks associated with underfunding as it strikes a balance between project funding, operating budgets, competing projects, reliable and predictable water service and supply, and water rates.

	Replaced Length (average feet per year)	Funding (average \$ per year)
Proposed Water Main Replacement FY20-25	840	\$383,055
Proposed Water Main Lining	1,900	\$318,200
Total CIP 20-25	16,420	\$701,255
Asset Management Plan Recommendations		\$1,300,000

Public Works recommends the rate of replacement and lining be increased to approximately \$1,300,000 per year in FY 2027 and beyond, in order to keep pace with the aging pipe network.

Wastewater Treatment Plant's Grit Removal System

This project replaces the grit removal equipment at the Wastewater Treatment Plant which came online in 1985. The grit system consists of two 40,000 gallon chambers intended to remove sand and other inorganic material as part of the treatment process. It is equipped with a clamshell style bucket, mounted to an overhead hoist in the grit chamber. This system is original to the plant and was designed to have an employee operate the crane one scoop at a time to remove the grit and inorganics that settle into the two chambers. It has a low level of functionality as the operator cannot see what is going on below the water surface and operates the clamshell blindly. The process takes a few days to clean one chamber and once the material is removed, it carries high odors and disposal costs because it contains organic material and water. The upgraded system will automatically remove the material daily and wash out the organic material, and dry it for disposal while creating little odor.

This project was originally budgeted in the FY17 CIP at an estimated cost of \$1.9 million, but was moved out because the Advanced Treatment Upgrade became priority and capital project funds were limited. A newer and more functional system for removing grit remains a valid project, but in recognition of budget limitations and competing projects, this project has been moved out approximately 13 years, when the system will be approximately 45 years old. The estimated costs are shown in the table below.

Evaluation	Design	Construction
Estimated Cost = \$25,000 in FY2026	Estimated Cost = \$190,016 in FY2028	Estimated Cost = \$2,423,931 in FY2030

Wastewater Treatment Plant's Service Water System

This project replaces the original 1985 non-potable service water system at the Wastewater Treatment Plant. Non-potable service water is wastewater that has received complete treatment and can be 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. Originally scheduled for replacement in FY17, budgetary restrictions have required the work and schedule to be changed. The controls, motors, and filters will be refurbished in FY19 to extend their use and to defer total replacement by at least 8 years. The eventual replacement should be considered for FY 2026 when the system is 41 years old, or when the replacement parts are no longer available. Technology for replacement equipment includes: energy efficient, vertical multi-stage pumps with variable frequency drives; and a filter backwash system for removing fine particles; resulting in lower electric use and a cleaner product.

Estimated Cost = \$159,884 in FY 2026

Wastewater Treatment Plant's Sludge Pump Replacement

In 1985, the WWTP's original equipment included five piston and bucket pumps for pumping the sludge that settles out of the primary clarifiers, scum wells and RV pump station. These systems were designed to run on a timer or by mechanical/human interface. Based on age and technology, these pumps were scheduled for replacement in FY18, but due to budgetary restrictions they were refurbished with new parts in FY17 to extend their operational abilities to FY 2026. The pumps should be replaced by 2026 when they are 41 years old. The new system will be enclosed; will not create a corrosive atmosphere; and will be fully automated into the plant SCADA system.

Estimated Cost = \$772,426 in FY 2026

Water Treatment Facility Blowers and Backwash Pump Replacement

The Water Treatment Facility (WTF) became operational in 1993 and most of the process equipment is original to the plant. The November 2013 "Water Facilities Evaluation" performed by Tighe and Bond describes the average lifespan for this type of equipment being approximately 20 to 30 years.

The existing blowers that provide air for filter cleanings are original equipment and were re-built in 2003. The backwash pumps provide water for the filter cleanings and are also original equipment. The equipment is in good condition and has been properly maintained, however based on the age of the equipment, Tighe and Bond recommends they be replaced within 12 to 16 years of their evaluation, or when they are about 32 years old. Newer equipment will be more energy efficient and designed to minimize impact on water quality.

Estimated Cost = \$407,594 in FY 2026

Water Treatment Facility Generator and Switchgear Replacement

The Water Treatment facility's 250 KW generator was installed in 1997 to provide backup power to the plant's critical equipment, so that treatment is able to continue when line power is interrupted. A facilities evaluation done in 2013 by Tighe and Bond Engineers recommended replacing the generator in FY 2024 when it will be 27 years old. Originally scheduled for replacement in FY24, this project is now scheduled in FY26 based on the condition and operating history of the generator. The transfer switch was replaced in FY18 because it failed. Due to its age, reliability may be compromised as replacement parts for the generator and switch gear become harder to procure. If the generator does not operate correctly when

the plant loses line power, the plant's ability to provide clean, safe drinking water and fire protection for the City would be impacted.

Estimated Cost = \$327,900 in FY 2026

Water Treatment Facility Liquid Propane Tank Replacement

The Water Treatment Facility (WTF) went on line in 1993, and its present two 1000 gallon liquid propane tanks that provide fuel for heating, are buried underground on site. A facilities evaluation performed in 2013 by Tighe and Bond Engineers, recommends replacement of the tanks in FY 2024 when they will be 31 years old. Over time and normal aging, corrosion creates pits or holes in the tank and lines. Leaking propane increases the potential for fires or explosions resulting in personal injuries and property damage. Originally scheduled for FY24, the replacement of this tank is now scheduled in FY26 based on its condition and maintenance history.

Estimated Cost = \$85,476 in FY 2026

APPENDIX C

This appendix is a grouping of FY 2020 – 2025 CIP projects by geographical distribution within the City. Projects identified are related to Parks, Recreations, & Cemetery, Parking, and Public Works.

EAST

FY20

- 1.5 MG Water Storage Tank Repair – Design
- Babbidge Reservoir Dam Repair – Construction
- Chapman Road Tank Repairs – Design
- City Hall Parking Structure Maintenance
- Patricia T. Russell Park Improvements
- Road Rehabilitation - Adams Street, Adams Court, Avalon Place, Elliot Street, Gates Street, Moore Farm Road, No Name Road, Main Street (Rte. 101 to Marlboro Street, Proctor Court, Roxbury Street, South Street, Sullivan Road (Rte. 9 to town line)
- Water Booster Station Repair – Fox Circle
- Water Treatment Facility Media and Filter Replacement
- Woodward Dam Repair - Construction

FY21

- Bridge Repair and Replacement Program – George Street (Design)
- Flood Management Project – Roxbury Street
- Road Rehabilitation - Chapman Road, Roxbury Street, Concord Road, Martin Street, Main Street (101 to Silent Way)
- Water Main Cleaning and Lining – Roxbury Street (Reservoir Street – Oak Street)

FY22

- 1.5 MG Water Storage Tank Repairs - Construction
- Bridge Replacement/Rehabilitation – George Street
- Chapman Road Tank Repairs
- Flood Management Project – Central Square, Main Street
- Patricia T. Russell Park Improvements
- Surface Parking Lot Maintenance
- Water Distribution Improvements – Main Street (Central Square to Church Street)
- Water Main Cleaning and Lining – Main Street (Eagle to Winter)
- Water Treatment Facility Media and Filter Replacement
- Wells Street Parking Structure Maintenance

FY23

- 3 MG Storage Tank Repairs - Construction
- Road Rehabilitation - Washington Street, Main Street (Silent Way to City Limits), North Lincoln Street
- Sewer Manhole Lining
- Water Treatment Facility Pavement Repair
- Wells Street Parking Structure Maintenance

FY24

- Beaver Brook Flood Mitigation Project
- City Hall Parking Structure Maintenance
- Flood Management Project – Church, Carpenter, Charles Street, and Key Road
- Sewer Manhole Lining
- Emergency Generator Installation – Chapman Road Pump/Tank

FY25

- Beaver Brook Flood Mitigation Project
- Road Rehabilitation – Marlboro Street (Eastern Avenue to dead end)
- Sewer Improvements – George Street and Sullivan Street
- Sewer Manhole Lining
- Surface Parking Lot Maintenance – Surface and crack sealing in Gilbo West and Commercial Street

CENTRAL

FY20

- Downtown Revitalization Improvements – Design
- Road Rehabilitation – River Street
- Skate Park
- Welcome Center Facilities
- Water Booster Stations Repairs – Glen Road
- Water Main Lining – Elm Street

FY21

- Downtown Revitalization Improvements – Design
- Road Rehabilitation – Washington Street, Lamson Street
- Sewer Improvements – Colony Court
- Water Main Lining – Main Street (Eagle Court to Winter)

FY22

- Downtown Revitalization Improvements
- Flood Management Project – Central Square and Main Street
- Road Rehabilitation - Meetinghouse Road, and Timberlane Drive
- Sewer Improvements – Conjunction with Downtown Revitalization work
- Water Distribution Improvements – Main Street
- Water Main Lining – Main Street (Eagle Court to Winter)

FY23

- Drainage Lining – Emerald Street
- Downtown Revitalization Improvements
- Sewer Improvements – force Main inspection
- Road Rehabilitation – Court Street (Westview Street to Maple Avenue)
- Water Distribution Improvements – Court Street (East Surry Road to Maple Avenue)
- Well Field Upgrades – Court Street or West

FY24

- Downtown Revitalization Improvements
- Drainage Main Lining – Emerald Street
- Parking Meter Upgrades
- Road Rehabilitation – Airport Road, Elm Street (Mechanic to Cross Street)
- Sewer Improvements – force Main rehabilitation
- Traffic Signal Replacement Program – Central Square

FY25

- Downtown Revitalization Improvements
- Traffic Signal Replacement Program – Central Square
- Well Fields Upgrades – Court Street or West

WEST

FY20

- Black Brook Tank Repairs
- Bridge Replacement/Rehabilitation – Island Street
- Sewer Improvements – Blossom Street
- Winchester Street Reconstruction PH II (NH Rt 101 to Island Street/Pearl Street)
- Well Field Upgrades – Preliminary Design

FY21

- Road Rehabilitation - Cady Street, Cobb Street, Hooper Street, Salisbury Road, School Street (West to Emerald), Speaker Street, St. James Street

FY22

- Black Brook Tank Repairs
- Road Rehabilitation – Dickinson Road, Maple Avenue, Pearl Street, West Street (West of Park Avenue)
- Winchester Street Reconstruction PH II (NH Rte. 101 to Swanzey Town Line) - Engineering

FY23

- Road Rehabilitation – Summit Road (Hastings to Park Avenue)
- Water Main Cleaning and Lining – Meadow Road (Symonds to Bradford Place)
- Well Field Upgrades – Design (Court Street or West)

FY24

- Emergency Generator Installation – Water Wells 2,3, and 4
- Road Rehabilitation – West Street (School to Park)
- Water Distribution Improvements – Island Street – Design
- Water Main Lining – West Street (Symonds to Bradford Place)
- Winchester Street Reconstruction PH II (NH Rte. 101 to Swanzey Town Line) - ROW

FY25

- Ashuelot River Dam Repair/Replacement
- Bridge Replacement/Rehabilitation – Winchester Street / Rt. 10
- Drain Main Lining – Maple Avenue
- Road Rehabilitation – Island Street
- Water Distribution Improvements – Island Street - Construction
- Water Main Lining – West Street (Symonds to Bradford Place)
- Well Field Upgrades – Construction (Court Street or West)
- Winchester Street Reconstruction PH II (NH Rte. 101 to Swanzey Town Line) - Construction

FY 2020-2025 CIP - Proposed New Debt Service

Assumed Interest Rate 4.25% / 4.75%

FY 2019-2020

Consolidated Infrastructure	Amount 2020	Term (Years)		Fund General	Assumed Interest Rate							Total	
		2021	2022		2023	2024	2025	2026	2027	2028	2029		2030
Principal	1,256,581	125,658	125,658	125,658	125,658	125,658	125,658	125,658	125,658	125,658	125,658	125,658	1,256,581
Interest	26,702	50,734	45,394	40,054	34,713	29,373	24,032	18,692	13,351	8,011	2,670		293,726
Total	26,702	176,393	171,052	165,712	160,371	155,031	149,690	144,350	139,009	133,669	128,328		1,550,307

Flood Management	Amount 2020	Term (Years)		Fund General	Assumed Interest Rate							Total	
		2021	2022		2023	2024	2025	2026	2027	2028	2029		2030
Principal	502,608	33,507	33,507	33,507	33,507	33,507	33,507	33,507	33,507	33,507	33,507	33,507	502,608
Interest	10,680	20,649	19,225	17,801	16,377	14,953	13,529	12,104	10,680	9,256	7,832	17,801	170,887
Total	10,680	54,156	52,732	51,308	49,884	48,460	47,036	45,612	44,188	42,764	41,340	185,337	673,495

State By-Pass Project	Amount 2020	Term (Years)		Fund General	Assumed Interest Rate							Total	
		2021	2022		2023	2024	2025	2026	2027	2028	2029		2030
Principal	854,004	56,934	56,934	56,934	56,934	56,934	56,934	56,934	56,934	56,934	56,934	56,934	854,004
Interest	18,148	35,085	32,666	30,246	27,826	25,407	22,987	20,567	18,148	15,728	13,308	30,246	290,361
Total	18,148	92,019	89,599	87,180	84,760	82,340	79,921	77,501	75,081	72,662	70,242	314,914	1,144,365

City Hall Rear Wall	Amount 2020	Term (Years)		Fund General	Assumed Interest Rate							Total	
		2021	2022		2023	2024	2025	2026	2027	2028	2029		2030
Principal	175,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	175,000
Interest	3,719	6,906	5,844	4,781	3,719	2,656	1,594	531					29,750
Total	3,719	31,906	30,844	29,781	28,719	27,656	26,594	25,531					204,750

FY 2020-2025 CIP - Proposed New Debt Service

Assumed Interest Rate 4.25% / 4.75%

FY 2020-2021

Consolidated Infrastructure	Amount 2021	Term (Years) 2022	Fund General 2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
				2024	2025	2026	2027	2028	2029	2030	2031	
Principal		132,716	132,716	132,716	132,716	132,716	132,716	132,716	132,716	132,716	132,716	1,327,157
Interest	28,202	53,584	47,944	42,303	36,663	31,022	25,382	19,741	14,101	8,461	2,820	310,223
Total	28,202	186,300	180,659	175,019	169,378	163,738	158,098	152,457	146,817	141,176	135,536	1,637,380

Flood Management	Amount 2021	Term (Years) 2022	Fund General 2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
				2024	2025	2026	2027	2028	2029	2030	2031	
Principal		30,539	30,539	30,539	30,539	30,539	30,539	30,539	30,539	30,539	30,539	458,087
Interest	9,734	18,820	17,522	16,224	14,926	13,628	12,330	11,032	9,734	8,436	7,139	155,750
Total	9,734	49,359	48,061	46,763	45,465	44,167	42,869	41,571	40,273	38,976	37,678	613,837

AIP Fuel Tank Removal	Amount 2021	Term (Years) 2022	Fund General 2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
				2024	2025	2026	2027	2028	2029	2030	2031	
Principal		51,500	51,500	51,500	51,500	51,500	51,500	51,500	51,500	51,500	51,500	515,000
Interest	10,944	20,793	18,604	16,416	14,227	12,038	9,849	7,661	5,472	3,283	1,094	120,381
Total	10,944	72,293	70,104	67,916	65,727	63,538	61,349	59,161	56,972	54,783	52,594	635,381

Colony Court	Amount 2021	Term (Years) 2022	Fund Sewer 2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
				2024	2025	2026	2027	2028	2029	2030	2031	
Principal		97,034	97,034	97,034	97,034	97,034	97,034	97,034	97,034	97,034	97,034	1,455,513
Interest	34,568	66,832	62,223	57,614	53,005	48,396	43,787	39,178	34,568	29,959	25,350	553,095
Total	34,568	163,867	159,257	154,648	150,039	145,430	140,821	136,212	131,603	126,994	122,384	2,008,608

FY 2020-2025 CIP - Proposed New Debt Service

Assumed Interest Rate 4.25% / 4.75%

FY 2021-2022

Consolidated Infrastructure	Amount 2022	Term (Years) 10	Fund										Total
			General										
			2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Principal			132,415	132,415	132,415	132,415	132,415	132,415	132,415	132,415	132,415	132,415	1,324,147
Interest	28,138		53,462	47,835	42,207	36,580	30,952	25,324	19,697	14,069	8,441	2,814	309,519
Total	28,138	185,877	180,250	174,622	168,994	163,367	157,739	152,111	146,484	140,856	135,229	1,633,666	

Flood Management	Amount 2022	Term (Years) 15	Fund										Total
			General										
			2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Principal			32,714	32,714	32,714	32,714	32,714	32,714	32,714	32,714	32,714	32,714	490,705
Interest	10,427		20,160	18,769	17,379	15,989	14,598	13,208	11,818	10,427	9,037	7,647	166,840
Total	10,427	52,873	51,483	50,093	48,702	47,312	45,922	44,531	43,141	41,751	40,360	180,947	

Patricia Russell Park	Amount 2022	Term (Years) 20	Fund										Total
			General										
			2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Principal			63,750	63,750	63,750	63,750	63,750	63,750	63,750	63,750	63,750	63,750	1,275,000
Interest	27,094		52,833	50,123	47,414	44,705	41,995	39,286	36,577	33,867	31,158	28,448	568,969
Total	27,094	116,583	113,873	111,164	108,455	105,745	103,036	100,327	97,617	94,908	92,198	772,969	

FY 2020-2025 CIP - Proposed New Debt Service

Assumed Interest Rate 4.25% / 4.75%

FY 2022-2023

Consolidated Infrastructure	Amount 2023	Term (Years) 2024	Fund General	Assumed Interest Rate 4.25% / 4.75%											
				2025	2026	2027	2028	2029	2030	2031	2032	2033	Total		
Principal	1,454,872	10	General	145,487	145,487	145,487	145,487	145,487	145,487	145,487	145,487	145,487	145,487	145,487	1,454,870
Interest	30,916	58,740	52,557	40,191	34,008	27,824	21,641	15,458	9,275	3,092					340,076
Total	30,916	204,227	198,044	185,678	179,495	173,311	167,128	160,945	154,762	148,579					1,794,946

Flood Management

Flood Management	Amount 2023	Term (Years) 2024	Fund General	Assumed Interest Rate 4.25% / 4.75%											
				2025	2026	2027	2028	2029	2030	2031	2032	2033	Total		
Principal	96,285	15	General	6,419	6,419	6,419	6,419	6,419	6,419	6,419	6,419	6,419	6,419	6,419	96,285
Interest	2,046	3,956	3,683	3,410	3,137	2,864	2,592	2,319	2,046	1,773	1,500	3,410			32,737
Total	2,046	10,375	10,102	9,829	9,556	9,283	8,738	8,465	8,192	7,919					129,022

Municipal Bldg Roofs

Municipal Bldg Roofs	Amount 2023	Term (Years) 2024	Fund General	Assumed Interest Rate 4.25% / 4.75%											
				2025	2026	2027	2028	2029	2030	2031	2032	2033	Total		
Principal	450,475	15	General	30,032	30,032	30,032	30,032	30,032	30,032	30,032	30,032	30,032	30,032	30,032	450,475
Interest	9,573	18,507	17,231	15,954	14,678	13,402	12,125	10,849	9,573	8,296	7,020	15,954			153,162
Total	9,573	48,539	47,262	45,986	44,710	43,433	40,881	39,604	38,328	37,052					603,637

3MG Water Tank

3MG Water Tank	Amount 2023	Term (Years) 2024	Fund Water	Assumed Interest Rate 4.25% / 4.75%											
				2025	2026	2027	2028	2029	2030	2031	2032	2033	Total		
Principal	2,275,882	20	Water	113,794	113,794	113,794	113,794	113,794	113,794	113,794	113,794	113,794	113,794	113,794	2,275,882
Interest	54,052	105,402	99,997	94,591	89,186	83,781	78,376	72,970	67,565	62,160	56,755	270,261			1,135,096
Total	54,052	219,196	213,791	208,385	202,980	197,575	192,170	186,765	181,359	175,954	170,549	1,408,202			3,410,978

FY 2020-2025 CIP - Proposed New Debt Service

Assumed Interest Rate 4.25% / 4.75%

FY 2023-2024

Consolidated Infrastructure	Amount 2024	Term (Years) 2025	10	Fund		2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
				General	2026										
Principal	1,356,308	135,631	135,631	135,631	135,631	135,631	135,631	135,631	135,631	135,631	135,631	135,631	135,631	135,631	1,356,308
Interest	28,822	54,761	48,997	43,232	37,468	31,704	25,939	20,175	14,411	8,646	2,882				317,037
Total	28,822	190,392	184,627	178,863	173,099	167,335	161,570	155,806	150,042	144,277	138,513				1,673,345

Flood Management

Flood Management	Amount 2024	Term (Years) 2025	15	Fund		2026	2027	2028	2029	2030	2031	2032	2033	2034	Balance	Total
				General	2026											
Principal	545,615	36,374	36,374	36,374	36,374	36,374	36,374	36,374	36,374	36,374	36,374	36,374	36,374	36,374	181,872	545,615
Interest	11,594	22,416	20,870	19,324	17,778	16,232	14,686	13,140	11,594	10,048	8,503	19,324				185,509
Total	11,594	58,790	57,244	55,698	54,152	52,606	51,060	49,515	47,969	46,423	44,877	201,196				731,124

Breathing Apparatus

Breathing Apparatus	Amount 2024	Term (Years) 2025	7	Fund		2026	2027	2028	2029	2030	2031	Total
				General	2026							
Principal	847,676	121,097	121,097	121,097	121,097	121,097	121,097	121,097	121,097	121,097	121,097	847,676
Interest	18,013	33,453	28,306	23,160	18,013	12,867	7,720	2,573				144,105
Total	18,013	154,550	149,403	144,256	139,110	133,963	128,816	123,670				991,781

Beaver Brook Mitigation

Beaver Brook Mitigation	Amount 2024	Term (Years) 2025	15	Fund		2026	2027	2028	2029	2030	2031	2032	2033	2034	Balance	Total
				General	2026											
Principal	500,000	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	166,667	500,000
Interest	10,625	20,542	19,125	17,708	16,292	14,875	13,458	12,042	10,625	9,208	7,792	17,708				170,000
Total	10,625	53,875	52,458	51,042	49,625	48,208	46,792	45,375	43,958	42,542	41,125	184,375				670,000

FY 2020-2025 CIP - Proposed New Debt Service

Assumed Interest Rate 4.25% / 4.75%

FY 2024-2025

Consolidated Infrastructure	Amount 2025	Term (Years)										Fund General	Total	
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035			
Principal	1,366,204	136,620	136,620	136,620	136,620	136,620	136,620	136,620	136,620	136,620	136,620	136,620	136,620	1,366,204
Interest	29,032	55,160	49,354	43,548	37,741	31,935	26,129	20,322	14,516	8,710	2,903			319,350
Total	29,032	191,781	185,975	180,168	174,362	168,555	162,749	156,943	151,136	145,330	139,524			1,685,554

Flood Management	Amount 2025	Term (Years)										Fund General	Total	
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035			
Principal	114,075	7,605	7,605	7,605	7,605	7,605	7,605	7,605	7,605	7,605	7,605	7,605	7,605	114,075
Interest	2,424	4,687	4,363	4,040	3,717	3,394	3,071	2,747	2,424	2,101	1,778	4,040		38,786
Total	2,424	12,292	11,968	11,645	11,322	10,999	10,676	10,352	10,029	9,706	9,383	42,065		152,861

Municipal Building Roofs	Amount 2025	Term (Years)										Fund General	Total	
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035			
Principal	86,945	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	86,945
Interest	1,848	3,572	3,326	3,079	2,833	2,587	2,340	2,094	1,848	1,601	1,355	3,079		29,561
Total	1,848	9,368	9,122	8,876	8,629	8,383	8,137	7,890	7,644	7,398	7,151	32,061		116,506

Beaver Brook Mitigation	Amount 2025	Term (Years)										Fund General	Total	
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035			
Principal	500,000	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	500,000
Interest	10,625	20,542	19,125	17,708	16,292	14,875	13,458	12,042	10,625	9,208	7,792	17,708		170,000
Total	10,625	53,875	52,458	51,042	49,625	48,208	46,792	45,375	43,958	42,542	41,125	184,375		670,000