



**FY2021 – FY2025**  
**Capital Improvement Plan**



## Overview

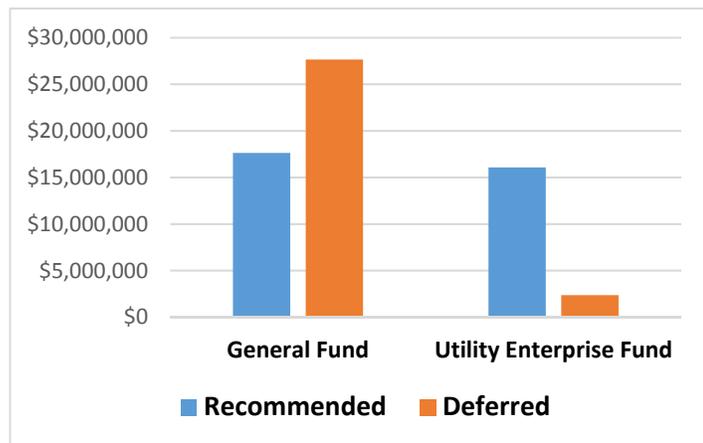
The Capital Improvement Plan is a five-year City-wide plan that invests critical resources to valuable assets including School and City buildings and structures, equipment, roads and sidewalks, water and sewer infrastructure, handicapped accessibility and includes a major push toward energy conservation, climate change preparedness as it relates to stormwater remediation and sustainability.

The Capital Improvement Plan spans five years from FY2021 to FY2025. The first year, FY21 is considered the Capital Budget. The City Council and City Council Finance Subcommittee will review this proposal, hold a public hearing, make recommendations, and vote on the capital budget in conjunction with the FY21 Operating Budget. This vote will likely be the beginning to the middle of June 2020. The City's charter requires the submission of the Capital Improvement Plan (CIP) on November 1.

The City's departments prepare their CIP over the summer and submit their requests for funding in late September. The Chief Financial Officer's (CFO) office reviews the FY21 requests and the longer-term plan relative to financing capacity, alternative resources to borrowing, use of cash, and impact of project costs on long-term finances. The CFO's Office makes recommendations to the Mayor, who makes the final determination whether each request is included in the FY21 Capital Budget or deferred until a subsequent year.

The larger City departments have longer range CIPs for the capital assets in their custody. These plans are based on industry standards for replacement of equipment, the useful life of building mechanicals and athletic field and courts, replacement schedules for water and sewer pipes and pump stations, and the capital maintenance needs for City buildings and Schools. These plans are included in the Capital Improvement database. City Councilors will have direct access to that database as they did last for last year's CIP.

As you will see from the narrative below and in the data in the CIP, we should be making more capital investment than we can afford on an annual basis. In the General Fund for FY21, the capital requests total \$45.3 million. We recommended authorizing \$17.6 million, funding \$1.8 million with Free Cash. Which means we are deferring the authorization of 66% of the requests.



We are not unique in this situation. Capital investment is a significant challenge across the country. Almost all cities/urban centers that have aging infrastructure; some are more committed to maintaining it than others, but, frankly, every community is falling behind. The City is also

falling behind. Framingham has historically kicked the can down the road by not doing the routine maintenance when facilities and infrastructure are new (police and fire stations, for example), nor replacing equipment and infrastructure after it has reached the end of its useful life.

This was the case with the water and sewer systems when in 2006, the state assessed an administrative consent order to require the Town to perform a minimum number of sewer repair projects and require ongoing operations standards within the Sewer Department. The City has let buildings such as the Memorial Building and the old Danforth School on Union Ave. decay. The Memorial Building is shedding concrete from its exterior, and the Danforth has been closed because it is a hazard to occupants. Yet some have said publicly that we have done enough, and others have said we have done more than enough. Except for the fact that even with almost \$200 million invested in water and sewer infrastructure in the last eight years we have repaired/replaced /redesigned only ten percent (10%) of that system.

The Roadway Master Plan in 2006 stated that we should be spending \$5,000,000 per year to keep roads to good repair. That year we did nothing. We have worked incrementally to get to about \$3 - \$3.2 million per year. But this still creates a backlog – the Master Plan now says we should be investing \$8.5 million per year. Some of that increase is due to the growing costs of paving, however, the majority is to make up for what we have deferred.

A recent article in [The Atlantic](#) introduced the concept of “toxic debt” or “technical debt” that is embedded in the national infrastructure that was constructed during the 20<sup>th</sup> century. This is due to the lack of maintenance and upgrades to roads, dams, bridges, electrical grids, and distribution systems that allow them to be used/operate in both good and disastrous conditions.

We defer this investment but never record the debt or liability, that is, the “undone” work on the asset that continues to decay. The example noted in the article was that the electric lines that PG&E in California had not maintained. PG&E’s unmaintained electric lines were cited as the “cause” of the Camp Fire last year in California, which was the deadliest and most destructive [wildfire](#) in the state’s history. According to the Associated Press, the fire caused at least 85 civilian deaths, with one person still missing, and injured 12 civilians, two prison inmate firefighters, and three other firefighters. It covered an area of 153,336 acres (almost 240 sq. miles) and destroyed 18,804 structures. The *Los Angeles Times* reported that by January 2019, the total damage was estimated at \$16.5 billion; one-quarter of the damage, \$4 billion, was not insured (disproportionately represented by exceptionally low-cost uninsured residences versus high cost insured commercial structures).

Current reports also now suggest PG&E’s unmaintained electric lines may have started the Kincade Fire as well. The grid has now been shut down to prevent additional fires. (Madrigal, 2019)

Most states and municipalities have recognized the long-term debt as it relates to pension and health insurance benefits for employees, and it is in the billions per state. Debt compounds, so unless we do something, the problem will only get significantly worse. Federal funding for water

infrastructure has declined since the 1970s, leaving cities and towns to fund improvements. But municipalities are not financially or functionally prepared to take on the job. So, nationally, water systems have built up \$1 trillion in “technical debt” (Madrigal, 2019).

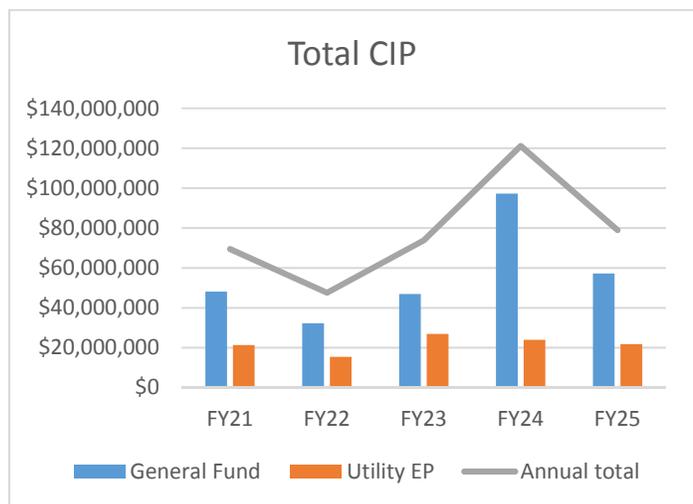
The federal requirements for addressing stormwater infiltration and mitigation place cities and towns in a similar situation. The requirements are expensive, and extensive, especially for municipalities with rivers and large bodies of water like Framingham. And the federal requirements make the local governments responsible for the overall stormwater plan and implementation for both public and private properties. The requirements come without funding and with significant penalties. To add further insult to injury, the declining federal funding for water infrastructure has been made available to fund stormwater implementation, further “diluting” the limited funding source.

This Capital Improvement Plan has identified the required investment. But we lack the financial resources to implement the plan unless we want to increase the policy limits we had imposed when we were a Town. We currently limit the amount of debt service, the annual amount of money to pay off the bonds that finance all the capital work to five percent (5%) of the total budget. In a recent discussion, a bond counsel firm thought that was too low.

The FY21 Capital Budget included in this Plan is funding the most critical capital needs for the upcoming fiscal year. It is a responsible investment within the parameters of what we can financially support and also manage the completion of the work. But it is compounding out “technical debt.” We don’t make headway. We invest a portion in the stormwater permit compliance, but it barely gets us compliant. The CIP separates stormwater as a separate category because, like many other communities, we intend to develop an enterprise fund and fee to fund the costs of the stormwater permit outside of the tax levy. Like water and sewer costs, several properties that do not pay taxes are subject to this permit and would be charged a fee if the proposal is adopted by the City Council and implemented.

### The Capital Improvement Plan (CIP) by the Numbers

The CIP for FY21 to FY25 totals \$391 million. It ranges in cost annually from the lowest in FY22 of \$47.5 million to the highest at \$121 million (the School Department has a major school building renovation). The General Fund trend is what pushes the total peaks and valleys pattern, as the Utility Enterprise Fund, in orange, is fairly steady through the years.



The total value of the Capital Improvement Plan

Fund	FY21	FY22	FY23	FY24	FY25	Total
General Fund	\$48,110,367	\$32,209,816	\$46,928,380	\$97,204,797	\$57,221,667	\$281,675,027
Utility EP	\$21,327,157	\$15,364,760	\$26,920,009	\$23,926,858	\$21,774,948	\$109,313,732
Annual total	\$69,437,524	\$47,574,576	\$73,848,389	\$121,131,655	\$78,996,615	\$390,988,759

The chart shows the CIP through FY25, but the DPW has a CIP through 2041. Park and Recreation’s plan is through 2030, and they have already built the newly absorbed Edgell Grove Cemetery plan through 2027. The Fire Department CIP also goes through 2030. The chart does not include the Long Range Building Plan for City Buildings, which is still under development using the incoming studies funded in the FY20 Capital Budget.

FY21 Capital Budget Summary

<b>Funding Source</b>	<b>2021</b>	<b>2021D</b>	<b>Grand Total</b>
General	\$14,539,273	\$27,617,244	\$42,156,517
General - Free Cash	\$1,865,366		\$1,865,366
Sewer	\$8,380,751	\$713,000	\$9,093,751
Stormwater	\$1,217,000	\$30,000	\$1,247,000
Water	\$7,693,406	\$1,640,000	\$9,333,406
<b>Grand Total</b>	<b>\$33,695,796</b>	<b>\$30,000,244</b>	<b>\$63,696,040</b>

Note: D after the fiscal year means deferred

The recommended FY21 Capital Budget totals \$33.7 million for both funds. \$17.6 million in the General Fund and \$16 million in the Utility Enterprise Fund. The chart above itemizes the FY21 Capital Budget by Funding Source. Stormwater is identified separately (as mentioned in the previous section), but for the purposes of counting debt service, it is included in the General Fund.

Free cash is funding four budget items, the largest of which is the city-wide energy conservation/sustainability project. Led by the City’s Sustainability Coordinator, this project was developed with the utility companies, School Building and Grounds staff, Parks staff and Facilities Management staff. A separate, color-coded sheet is included that highlights the project groupings and describes each project in the group.

This project is funded via free cash because a number of the projects will be eligible for rebates. Depending on how the rebates are awarded, they are considered a local receipt and will close out to free cash at the end of the fiscal year. So it will be replenishing the free cash that is recommended here. If the rebate is credited to the vendor, the cash will not be spent by the project, and when complete, we will close out the project and return the balance to free cash.

The remaining projects funded by free cash include the technology upgrade for the City's Libraries and the storage and network/server upgrade for the City's technology infrastructure. Finally the Traffic Calming project is funded from free cash. Some of the traffic calming solutions could include signage and crossing systems that are not considered capital. In the past, the project has been used to fund traffic tables and permanent light structures, which can be bonded, but this funding structure would allow the Traffic Commission access to funding for smaller initiatives.

Several notable projects recommended for FY21 include the replacement of Engine 7 in the Nobscot Fire Station. This was deferred from the FY20 Capital Budget, although with considerable discussion. The fire truck is at the end of useful life in an area that has seen and will see additional development, likely increasing demand. This budget also recommends addressing the exterior envelope of School and City buildings as presented in the public discussion regarding Building Infrastructure. The School project is requested and recommended for \$2 million and \$1.8 million for the Memorial Building, as well as \$631, 312 for the Pearl Street Garage.

The request for the Annual Roadway Improvements has grown to \$8.5 million. This year, there are a number of competing roadway projects that are timed with state funding that need to be approved in this capital budget cycle to be ready for the state Transportation Improvement Plan (TIP). The Annual Roadway amount is \$3.1 million because of the TIP projects. The two projects tied to the TIP are Union Ave and the Edgell Rd/Central Street intersection. We have received a significant amount of resident feedback in the Arlington street area, so we are recommending the Arlington St Drains and Roads Design project to move improvements in that area forward. Also in response to resident input, the Unaccepted Streets project, which includes funding for the repair of Harmony Lane and Bonvini Drive once they are accepted.

The largest water and sewer projects are a combined project for the westbound side of Route 9 (Worcester Rd) from Concord St. to the Natick line. The eastbound side is under construction now with an estimated end time of next fall. The replacement of the water line on Flagg Drive is also recommended which is paired timely with the Fuller School project.

In addition to School building exterior envelope repairs the School ADA improvement project, phased across a number of CIP years, is recommended in FY21. The Annual Roadway improvement program includes the installation of ADA compliant sidewalks and crosswalks for roads that do not currently meet that code.

Each City Department has an extensive request. Some of the smaller departments have only one request each year. If it is a top priority, for both the Department and the City, then we recommend funding it this fiscal year. Most departments have multiple requests. Although department priority is a strong criteria, legal compliance, imminent hazard and neighborhood need are critical decision making criteria. The table below provides the detail on requested amounts by Departments for the FY21-25 term of the CIP.

Total CIP by Department	FY21	FY22	FY23	FY24	FY25	Total/Dept
Library	\$277,000	\$150,000	\$177,000			\$604,000
Technology Services	\$151,965	\$401,965	\$451,965	\$401,965	\$401,965	\$1,809,825
Fire	\$919,689	\$800,000	\$925,000	\$1,400,000	\$1,200,000	\$5,244,689
CPFM	\$3,721,134					\$3,721,134
Cemeteries	\$73,629	\$225,000	\$445,000	\$320,000	\$250,000	\$1,313,629
Parks & Recreation	\$1,226,426	\$2,437,035	\$3,762,381	\$3,622,028	\$2,546,146	\$13,594,016
School Department	\$7,551,613	\$10,492,293	\$15,108,330	\$78,099,675	\$13,094,230	\$124,346,141
Engineering	\$17,001,600	\$7,933,404	\$15,255,003	\$3,055,004	\$29,154,402	\$72,399,413
Fleet Services		\$75,000				\$75,000
Highway	\$9,447,000	\$8,851,927	\$9,366,830	\$8,501,000	\$9,650,000	\$45,816,757
Public Works Equipment	\$1,724,000					\$1,724,000
Sanitation	\$6,016,311	\$843,192	\$1,004,023	\$1,805,125	\$924,924	\$10,593,575
Sewer Enterprise	\$11,993,751	\$10,537,594	\$15,502,507	\$13,875,006	\$9,798,693	\$61,707,551
Snow & Ice			\$432,848			\$432,848
Water Enterprise	\$9,333,406	\$4,827,166	\$11,417,502	\$10,051,852	\$11,976,255	\$47,606,181
Total CIP	\$69,437,524	\$47,574,576	\$73,848,389	\$121,131,655	\$78,996,615	\$390,988,759

In the CIP database capital requests are categorized by project type. The project type often dictates the length of term for which you can borrow. It also provides insight into how much the plan, globally, invests in buildings, equipment, roads, water and sewer pipes and other infrastructure regardless of specific department or fund.

The chart below restates the FY21 Capital Budget recommendation by project type.

Sum of Budget Recommended	Recommended <input type="text" value="2021"/>		
Project Type <input type="text" value=""/>	2021	2021D	Grand Total
Building Mechanicals	\$1,268,361	\$3,008,409	\$4,276,770
Building Structure	\$5,842,973	\$198,004	\$6,040,977
Landfill/Land Remediation	\$400,000		\$400,000
Non-rolling Equipment		\$58,484	\$58,484
Park Facilities		\$893,942	\$893,942
Public Works Non-Rolling Equipment	\$1,240,000	\$5,562,000	\$6,802,000
Public Works Rolling Equipment	\$1,141,832	\$636,479	\$1,778,311
Roadway Infrastructure	\$5,126,600	\$13,100,000	\$18,226,600
Rolling Equipment	\$987,868	\$129,926	\$1,117,794
Sewer Non-Rolling Equipment		\$530,000	\$530,000
Sewer Piping	\$5,775,000	\$183,000	\$5,958,000
Sewer Pump Station	\$2,400,000		\$2,400,000
Sewer Rolling Equipment	\$205,751		\$205,751
Stormwater Improvement	\$1,217,000	\$4,060,000	\$5,277,000
Technology Hardware	\$397,005		\$397,005
Water Piping	\$7,458,600	\$1,640,000	\$9,098,600
Water Rolling Equipment	\$159,806		\$159,806
Water Tank/Tower Structure	\$75,000		\$75,000
<b>Grand Total</b>	<b>\$33,695,796</b>	<b>\$30,000,244</b>	<b>\$63,696,040</b>

## Debt Service Impact on the Operating Budget

The debt service summary sheets include the annual cost of issued debt, estimated costs of authorized but not yet borrowed debt (Authorized but Unissued), and an estimate of the debt service associated with each year of the CIP. The charts that accompany this CIP package show the recommended FY21 budget and an estimate of likely funding levels for future years. The General Fund sheet illustrates the impact based on the 5% policy limit. The Enterprise Fund is broken out by Water and Sewer Departments since we separate the costs for rate setting purposes and have traditionally presented the costs in this fashion.

## The CIP Electronic Package (it's paperless again this year)

The electronic documents that support the project requests in the CIP are housed in the Capital Improvement Plan database in a shareable software program called Smart Sheet. This is the same software as last year. Each Councilor has access to that database. The basic sheet itself contains the fiscal year of the project, the department that manages the project, a description, and justification. Quotes and additional supporting documents and justifications are attached via a "paper clip" in the far left column of each project line. We will post the FY21-25 Capital Improvement Plan, including the FY21 Capital Budget recommendation in PDF format on the City website on our "Budget Central" page.