

Middletown 2021-2026 Capital Improvements Plan



Approved and Adopted on: 5-11-2020

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Introduction

Section §15.2-2239 of the Code of Virginia assigns the responsibility for preparation of plans for capital outlays to the local Planning Commissions. The Capital Improvements Plan (CIP) consists of a schedule for major capital expenditures for the Town for the ensuing five years.

The CIP is to be updated annually. Projects are removed from the plans as they are completed or as priorities change. The plan is intended to assist the Town Council in preparation of the Town budget. In addition to determining priorities for capital expenditures, the Town must also ensure that projects contained within the CIP conform to the Comprehensive Plan. Specifically, the projects are reviewed with considerations regarding health, safety, and the general welfare of the public, the stated goals and objectives, and the policies of the Comprehensive Plan. Once the CIP is adopted, it becomes a component of the Comprehensive Plan and provides a link between the documents and potential proffered contributions made with future rezoning projects.

A project's existence in the CIP is not a commitment that Middletown will be undertaking that project or that any funding has been budgeted. The CIP is strictly advisory; it is intended for use as a supplementary and support document for budget management. Once adopted, project priorities may change throughout the year based on changing circumstances. It is also possible that particular projects may not be funded during the year that is indicated in the CIP.

Projects Overview

Public Works:

Public Works highest priorities are upgrading the Wastewater Treatment Plant (WWTP) and rehabilitation to the existing sewer lines. Many of the Town's sewer lines are in extensive need of repairs and have undergone significant stress due to increased demand, generated by recent developments in Town. Over the next five years, extensive enhancements are expected to take place to ensure that Middletown's sewer lines are modernized. Other improvement projects include vehicle and machinery replacements, upgrades to pumping stations, and digester upgrades.

Planning & Zoning:

Planning and Zoning's main project is the upcoming Stormwater Management Plan for the Town. In order for it to be created, an analysis of the existing stormwater conditions in Middletown need to be evaluated by a contractor, so that planning staff have the necessary information to develop an accurate and effective plan.

Volunteer Fire & Rescue:

The Middletown Volunteer Fire & Rescue Department's primary project is an expansion on the existing facilities at the Fire Station, to allow for better vehicle access and to accommodate staff growth. A secondary project is an ambulance replacement to upgrade the VFRD's fleet.

Parks and Recreation:

The Parks of Middletown will be facing needed expansion of the parking to meet the increase demand, created by the larger population. This demand is also intensified by the recent ball field that has been installed. The incoming parking spaces should be focused at that field. Another project is the increasing the screening of the WWTP. Due to the expansion to the plant, additional trees will need to be added to the existing screen, which provides cover of the WWTP from the park.

Town Office:

The largest needed improvement for the Town Office is the necessary equipment to facilitate a part time clerk. This requires an expansion on existing resources, including but not limited to extended phone line, desk, computer, and other equipment. This will allow the Town to retain an additional staff member upon their hiring.

Police Department:

The Police Department's main project for improvements are the acquisition of multi-band radios that will allow them to communicate with other departments, and brings them in conformance with a Federal mandate to do so. Other projects include an emergency generator, upgrades to the Police Station parking lot, and vehicle replacements for the their existing fleet.

Transportation:

The primary transportation project is an expansion to the sidewalk system within Middletown. This includes additional sidewalk to be placed, and the existing sidewalk to be modified.

Project Funding

The projects listed in table 1 have a total projected cost of \$12,178,426. A number of the project costs have alternative means of funding than the allocation of funds in the budget.

- The Police Department can use 599 funds, though projects that use these funds cannot be allocated funding in the Town Budget. This is due to the regulation that 599 funds for Police Departments cannot be used on budgeted items.
- A number of projects for Public Works are eligible for the Water and Waste Disposal Loan and Grant Program, administered by the Federal Department of Agriculture.

- The Rescue Squad Assistance grant is available for some of the Volunteer Fire and Rescue Department's projects. This grant covers half of the expense, with the locality to match the other half.
- Community Development Block Grants (CDBG) from the state could potentially be used for the transportation project. While the grant would likely not be able to be applied to the entire project, but could be for certain areas, depending on the objectives of the grant program.

2021-2026 Capital Improvement Projects Table

		<u>2021-2026 Middletown Capital Improvement Plan Requests</u>							
Department/Area:	CIP#	Projects:	2021-22	22-23	23-24	24-25	25-26	2026+	Estimated Total:
Public Works	1-01	Water Treatment Plant Upgrade	\$ 2,500,000	\$ 2,400,000					\$ 4,900,000
	1-02	Cameraing and Cleaning	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000			\$ 120,000
	1-03	Lining of Sewer Lines	\$ 65,000	\$ 65,000	\$ 65,000	\$ 65,000			\$ 260,000
	1-04	Water Line Replacement	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 300,000
	1-05	Manhole Rehabilitation	\$ 30,000	\$ 30,000	\$ 60,000				\$ 160,000
	1-06	Pump Station Rehabilitation	\$ 15,000	\$ 20,000	\$ 30,000	\$ 15,000			\$ 80,000
	1-07	Digester Renovation			\$ 20,000	\$ 20,000	\$ 10,000		\$ 50,000
	1-08	Sludge Building Extension		\$ 25,000					\$ 25,000
	1-09	Vehicle Replacements	\$ 50,000	\$ 40,000	\$ 50,000	\$ 50,000			\$ 190,000
	1-10	Equipment Replacements	\$ 60,000		\$ 60,000		\$ 60,000	\$ 110,000	\$ 300,000
Planning and Zoning	2-01	Drainage Study	\$55,000						\$ 55,000
Volunteer Fire & Rescue	3-01	Fire Station Addition		\$ 2,500,000	\$ 2,500,000				\$ 5,000,000
	3-02	Ambulance Replacement	\$292,426						\$ 292,426
Parks and Rec	4-01	Parking Lot and Handicap Walkway							\$ 30,000
	4-02	Tree screening							\$ 24,000
Town Office	5-01	Office Equipment	\$4,000						\$ 4,000
Police Department	6-01	Multi-Band Radios	\$ 15,000	\$ 20,000	\$ 15,000				\$ 50,000
	6-02	Building Generator	\$ 50,000						\$ 50,000
	6-03	Paving of Police Station Parking Lot		\$ 25,000					\$ 25,000

Table 1. Capital Improvement Plan Projects

2021-2026 Middletown Capital Improvement Plan Requests, Cont.									
Department/Area:	CIP#	Projects:	2021-22	22-23	23-24	24-25	25-26	2026+	Estimated Total:
Police Department	6-04	New Vehicle						\$ 55,000	\$ 55,000
Transportation	7-01	Sidewalk Improvement							\$ 404,000
Estimated Total			\$ 3,201,426	\$ 5,315,000	\$ 2,890,000	\$ 240,000	\$ 130,000	\$ 225,000	\$ 12,178,426

Table 2. Capital Improvement Plan Projects, Cont.

Project Descriptions

Public Works:

CIP 1-01 Upgrade to the Waster Water Treatment Plant

Priority: Highest

Description: Upgrading the existing Waste Water Treatment Plant will significantly increase the utilities services in the Town. The new SBR system will greatly improve the capacity and effectiveness of the current plant.

Estimated Cost: \$4.9 million

Justification: Upgrading the plant will significantly increase the Town's capacity to accommodate the recent growth, and directly follows strategy B of the Water Independence Goal of the Comprehensive Plan---"Include upgrades to the water treatment facilities in the CIP in order to meet the growing needs of the town population."

Proposed Schedule: 2021-2023

CIP 1-02 Camering and Cleaning of Water Lines

Priority: High

Description: An inspection of Sewer Lines is need to identify cracks, blockages and break inside the pipe lines. The Town does not have the capacity to perform this comprehensive inspection that requires special camera equipment, and so must contract a company to do so. Once they camera the lines, the findings should be acted on with cleaning and repairs. The last time the lines were inspected by camera was 20 years ago, however, no action was taken afterwards, so the findings from that inspection were not resolved.



Camera inspection of a Town Sewer line, performed twenty years ago.

Estimated Cost: \$120,000

Justification: To improve the infrastructure of the Town by identifying areas for improvement, and advances strategy B of the Water Independence Goal of the Comprehensive Plan---“Include upgrades to the water treatment facilities in the CIP in order to meet the growing needs of the town population.”

Proposed Schedule: 2020-2023

CIP 1-03 Lining of Sewer Lines

Priority: High

Description: The integrity and longevity of the sewer lines is vital in preventing maintenance cost and ensuring secure utilities throughout the town. Based on the camering of the sewer lines, lines that have compromised integrity would be identified, and then lined to prevent leaks and breakdown.

Estimated Cost: \$260,000 per 4000 ft.

2021-\$65,000

2022-\$65,000

2023-\$65,000

2024-\$65,000

Justification: Improving the town infrastructure by strengthening the integrity of sewer lines. This will significantly reduce cost of repairs and prevent water loss, and advances strategy B of the Water Independence Goal of the Comprehensive Plan---“Include upgrades to the water treatment facilities in the CIP in order to meet the growing needs of the town population.”

Proposed Schedule: 2021-2024

Notes: This project would be undertaken after the camering and cleaning of the sewer lines

CIP 1-04 Upgrade of Manholes

Priority: High

Description: Manholes throughout town are in need of rehabilitation for the town's infrastructure. the majority of the town's manholes have not been improved in over 20 years, and have experienced considerable decay. The manholes need to go undergo extensive rehabilitation.



A manhole on Main Street. Note the rebar sticking out along the sides. When first constructed this rebar was placed in the middle of 4 inches of concrete, now heavily eroded.



A manhole after being rehabilitated and sealed.

Estimated Cost: Total cost: \$160,000

2020-\$70,000

2021-\$30,000

2022-\$30,000

2023-\$30,000

Justification: The improval of the Town's sewer system is necessary for Middletown's aging infrastructure, and advances Public Works mission.

Proposed Schedule: 2020-2023

Notes: This would be done after the lining of the sewer lines

CIP 1-05 Upgrade of Pump Stations

Priority: Medium

Description: The pump stations located at Lost Pond and Greenbriar need modifications and replacements so that they can meet current standards. Specific needs are transfer switches for a portable generator and alarm call-out.

Estimated Cost: \$80,000 total

- \$15,000---alarm call-outs
- \$30,000---- Greenbriar pump rehab
- \$20,000---- Lost Pond pump rehab

- \$15,000--- transfer switches

Justification: The aging equipment and out-of-date controls for the sites mean that replacement parts are becoming harder to acquire when maintenance is needed. Eventually, replacements will not be able to found. Additionally, none of the pump stations currently have alarm call-outs, which is a safety hazard. This project also advances strategy B of the Water Independence Goal of the Comprehensive Plan---“Include upgrades to the water treatment facilities in the CIP in order to meet the growing needs of the town population.”

Proposed Schedule: 2020-2024

CIP 1-06 Replacement of Water Lines

Priority: Medium

Description: A number of water lines in Middletown are quite aged and have surpassed their lifetime. Those that are will need to be replaced, and possibly enlarged to meet new demand from the growth of the Town.

Estimated Cost: \$300,000 Total

2021- \$60,000

2022-\$60,000

2023-\$60,000

2024-\$60,000

2025-\$60,000

2026-\$60,000

Justification: Replacing sections of the Town’s water is a necessary step to improve the Town’s infrastructure and to better allow the Town to meet the utility demand that has come from the recent growth, advancing strategy B of the Water Independence Goal of the Comprehensive Plan---“Include upgrades to the water treatment facilities in the CIP in order to meet the growing needs of the town population.”

Proposed Schedule: 2021-2026

CIP 1-07 Extension of Sludge Bay

Priority: Medium

Description: An extension to the existing sludge building at the Plant, in order to allow the garage to close during sludge pressing. Currently, when the sludge truck does not fit inside, so the door must be left open. This allows considerable amounts of heat to escape, and the temperature must be maintained high enough to preserve a number of the chemical components that are stored in the garage. An expansion on the garage would allow the Sludge truck to move into the garage, with the door being able to close. It also directly follows strategy B of the Water Independence Goal of the Comprehensive Plan---

“Include upgrades to the water treatment facilities in the CIP in order to meet the growing needs of the town population.”

Estimated Cost: \$25,000

Justification: The expansion would reduce energy costs, allowing the Plant to operate more efficiently,

Proposed Schedule: 2022-2023

Notes: This would be done after the plant upgrade.

CIP 1-08 Replacement of Vehicles

Priority: Medium

Description: Replacing a number of the aged vehicles within the public works department: the vehicles to be replaced are: 2001 Chevy Malibu, 2009 Ford 350, 2011 Ford f350, 2013 Ford 550, and a 2017 GMC 3500. These vehicles will modernize the current fleet of maintenance vehicles, reducing cost of repairs and maintenance.

Estimated Cost: \$190,000

Replacing 2001 Chevy Malibu--\$10,000.

Replacing 2009 Ford 350 -- \$40,000

Replacing 2011 Ford F350 ---\$40,000

Replacing 2013 Ford 550 ---\$50,000

Replacing 2017 GMC 3500-- \$50,000

Justification: Advances public works ability to perform their mission with reduced costs.

Proposed Schedule: 2021- 2001 Chevy Malibu, 2009 Ford 350

2022- 2011 Ford F350

2024- 2013 Ford 550

2026- 2017 GMC 3500

CIP 1-09 Replacement of Machinery and Equipment

Priority: Low

Description: Replacement of machinery is a necessary process to update and improve the town's ability to service utilities. The machines that will need to be replaced are: John Deere Tractor 2520, John Deere Zero Turn, John Deere Skid Loader, John Deere 60G Excavator, 1994 Ford Bucket Truck, 1980 Service Truck excavator.

Estimated Cost: Total: \$300,000

2021- \$60,000

2023-\$60,000

2025- \$60,000

2026- \$110,000

Justification: Improvement of machinery will advance Public Works ability to perform their mission and service the Town's infrastructure.

Proposed Schedule: Six years, replacing as needed

CIP 1-10 Renovation of Digester

Priority: Low

Description: Currently, one of the three digesters is being remodeled to use an air system, the other 2 continue to use the older jet vacuum system. Public Works would like to renovate these digesters to use the same system as the new digester.

Estimated Cost: \$50,000

Justification: After completion of the new digester, the existing systems do not operate the same. By replacing the jet vacuum system with an air system, the digesters will be more effective and operate on the same systems, reducing maintenance cost and effort to maintain different systems. It also directly follows strategy B of the Water Independence Goal of the Comprehensive Plan---"Include upgrades to the water treatment facilities in the CIP in order to meet the growing needs of the town population."

Proposed Schedule: 2023-2025, post plant upgrade

Planning and Zoning:

CIP 2-01 Stormwater Drainage Study

Priority: Medium

Description: In order to develop a stormwater management plan as called for in the Comprehensive Plan, a stormwater drainage study is necessary. As the Town does not have the ability to perform this itself, a private consultant will have to be contracted through an RFP to perform the study. Using the information from the study, a stormwater management plan may be developed.

Estimated Cost: \$55,000

Justification: Provides the relevant data to develop a stormwater management plan, to fulfill strategies E and A of the Comprehensive Plan Stormwater Management Goal, and directly fulfills strategy D of the same goal—" Incorporate a storm water management map and priority list into the Capital Improvement Plan and relevant ordinances."

Proposed Schedule: 2021

Volunteer Fire and Rescue:

CIP 3-01 *Fire Station Addition*

Priority: High

Description: The current design of the Fire Station is inadequate for modern equipment and to properly accommodate the increased demand on VFD services. In order for Middletown's VFD to increase its current staffing, space for beds, restrooms, office, training, and storage must be developed. The section of the fire station adjacent to the Wayside Theater must be redesigned to include this space and to allow for larger bay doors to accommodate the modern apparatus of the vehicles.

Estimated Cost: \$5,000,000

Justification: In order for the VFD to maintain its ability to serve its mission to provide a quality and caring service for a safe environment, and is also called for in the Middletown Volunteer Fire and Rescue Company Strategic Plan under the facilities objective.

Proposed Schedule: 2022—2023

CIP 3-02 *Ambulance Replacement*

Priority: Moderate

Description: Among the Middletown Volunteer Fire & Rescue Company's vehicles is a 2007 Navistar 4300 H Ambulance, which as of April 20th, 2020, had 125,124 miles traveled, and 748,471 engine hours. Due to the age and heavy usage of the ambulance, as well as increased costs to maintain the ambulance, the VFD is seeking to replace this ambulance with a newer model. This will allow for more effective and reliable emergency response and services, and reduce costs of maintenance.

Estimated Cost: \$292,426

Justification: In order for the VFD to maintain its ability to serve its mission to provide a quality and caring service for a safe environment.

Proposed Schedule: 2021

Notes: Through the Virginia Department of Health, a Rescue Squad Assistance grant is available which can cover 50% of the cost.

Parks and Recreation:

CIP 4-01 *Additional Parking Lot at Town Park*

Priority: Low

Description: Adding an additional parking lot closer to the basketball court will allow for better access to the park for the citizens. A handicap walkway being added to the park leading to the walkway from the parking lot also allowing handicap access to the pavilion from the parking lot should also be added

Estimated Cost: \$30,000

Justification: advances the accessibility of the park to the public, particularly those with disabilities.

Proposed Schedule: 2022

Notes: This will be more cost effective if it is done at the same time as phase 3 of the ball field parking lot.

CIP 4-02 Tree Screening

Priority: Low

Description: Adding up to ten evergreen trees to the screen along the waste water treatment plant to increase the buffer between the WWTP and the park.

Estimated Cost: \$24,000 per ten trees

Justification: better preserves the park and advances Strategy B of the Parks and Recreation Goal of the Comprehensive Plan, "Install tree screening as needed on the West side of the existing park to screen the expanded wastewater treatment plant."

Proposed Schedule: After the completion of the plant upgrade.

Town Office:

CIP 5-01 Office Equipment for New Employee

Priority: Medium

Description: As Middletown continues to grow and with 180 new residence constructed with the Villages subdivision, town services will become more stressed. To alleviate the pressure and accommodate the growth, equipment and materials will need to be procured for a deputy clerk. This includes an additional phone, desk, chair, computer, and other supplies that are necessary for the position to operate.

Estimated Cost: \$4,000

Justification: Necessary to maintain levels of service for citizen's needs, demand of which will continue to increase as more residents move into the town.

Proposed Schedule: 2021, dependent on time of hire.

Notes: (if applicable)

Police Department:

CIP 6-01 Multi-Band Radios

Priority: High

Description: The FCC mandates that for public safety law enforcement agencies should have radios that meet the P25 Narrow band standards, which will allow agencies from different localities to

communicate with each other. This need became evident during the September 11th attacks of 2001, when multiple law enforcement and emergency response agencies were mobilized, but were hindered by multiple communication systems that were not compatible with each other. The FCC calls for all law enforcement agencies to meet this mandate by 2023.

Estimated Cost: \$35,000-50,000 for portable and mobile (car).

Justification: This project will be the Middletown's Police Department in conformance with the Federal Mandate.

Proposed Schedule: All radios should be acquired by 2023

Notes: Funding may be available through 599 funds. Town Council should be advised that 599 funds cannot be used for budgeted items.

CIP 6-02 *Building Generator*

Priority: Medium

Description: Currently the Town's Police Station does not have emergency back-up power in the event of an outage. It would be prudent of the Town to acquire means of back-up power in the form of a Generator. It could potentially be used as a back-up for Town Hall as well in similar circumstances.

Estimated Cost: \$50,000

Proposed Justification: This increases the emergency preparedness of Middletown, and better equips the Town to respond in the event of emergencies.

Proposed Schedule: 2021

CIP 6-03 *Paving of Police Station Parking Lot*

Priority: Medium

Description: The vehicles of the Police Department undergo significant amounts of stress, far exceeding the average for normal cars. To help reduce the stress put on those cars and to increase the ease and safety of access into the police station, the station's parking lot should be repaved, striped, and update the handicap markings.

Estimated Cost: \$25,000

Justification: This project makes it easier and safer for individuals and officers travelling in and out of the Police Department

Proposed Schedule: 2021-2022

CIP 6-04 *New Vehicle*

Priority: Low

Description: Due to the heavy usage of vehicles for the Police Department, all are subject to increased strain and maintenance. As time goes on, the cost to maintain police vehicles steadily increases. To curb maintenance costs, police vehicles should be replaced over time, through careful phasing.

Estimated Cost: \$55,000

Justification: To reduce maintenance costs and increase the Police's ability to serve their mission and the Town.

Proposed Schedule: 2026

Transportation:

CIP 7-01 Sidewalks

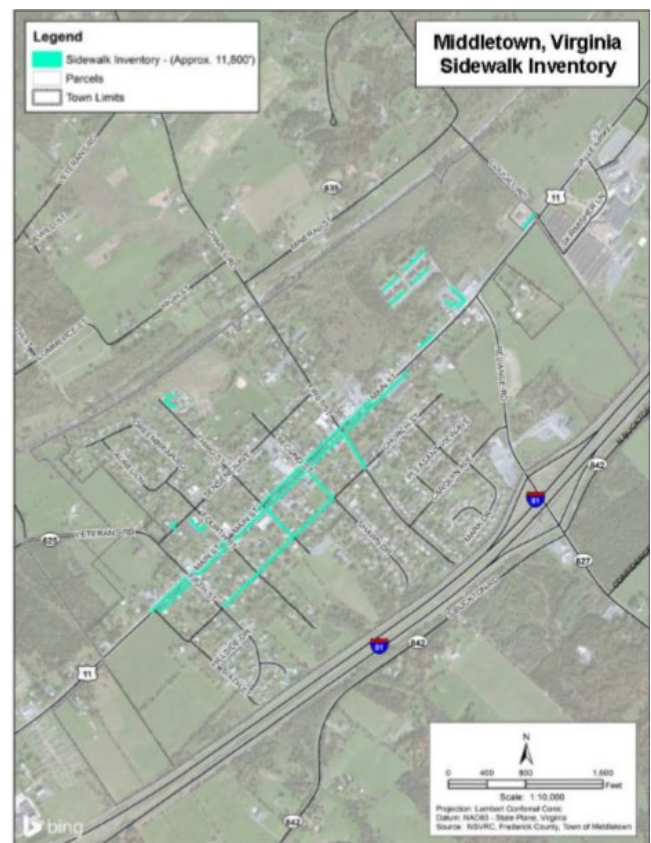
Priority: Low

Description: The upcoming Transportation plan (estimated to be completed in 2022) will include plans to develop the sidewalks of Middletown. Significant upgrades will likely be advised for the existing sidewalks, such as for disabled accessibility or stormwater designs, based on the stormwater management plan (estimated to be completed in 2021). Further, additional sidewalks will be planned to expand the pedestrian arteries throughout the town.

Estimated Cost: \$404,000

Justification: Directly called for in the Comprehensive plan, Street, Street Lighting, and Sidewalks Goal, Strategies A and D.

Proposed Schedule: TBD, Long Range Planning Objective



Sidewalk Inventory of Middletown.