



VILLAGE OF RIVER FOREST SPECIAL COMMITTEE OF THE WHOLE MEETING

Monday, February 13, 2023 – 6:00 PM
Village Hall – Community Room, 400 Park Ave., River Forest, IL

AGENDA

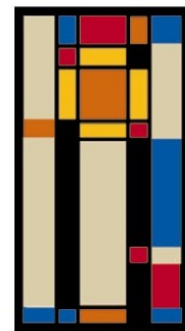
Public comments sent in advance of the meeting will be shared with the Village President and Board of Trustees. You may submit your written public comments via email in advance of the meeting to: vbot@vrf.us. You may listen to the meeting by participating in a Zoom conference call as follows: dial-in number: 312-626-6799 with meeting ID: 858 7554 5159 or by clicking here <https://us02web.zoom.us/j/82063676956>. If you would like to speak during public comment, please email imasella@vrf.us by 4:00 PM on Monday February 13, 2023. If you would like to watch the livestream, please go to the Village website: <https://www.vrf.us/events/event/2575>

1. Call to Order/Roll Call
2. Public Comment
3. Discussion: FY 2024 – 2028 Five Year Capital Improvement Program
4. Adjournment

CAPITAL IMPROVEMENT PLAN



FY 2024 - 2028



INCORPORATED 1880

**RIVER
FOREST**

Proud Heritage

Bright Future

INTRODUCTION AND SUMMARY



Village of River Forest

Five Year Capital Improvement Program

All Village programs and services are provided with three guiding principles in mind: providing a safe community, protecting property values in River Forest, and working to stabilize property taxes. The Village's annual budget is prepared by Village Staff and approved by the Village Board in service of those guiding principles and understanding that sound management of its finances, resources, and infrastructure is key to ensuring the long-term health of the organization and community.

The Five Year Capital Improvement Plan is prepared by Staff and reviewed by the Village Board as the initial step toward preparing the annual budget. The Plan is generally amended during the budget process as determinations are made for items to be moved forward or deferred based on current information. The Five Year Capital Improvement Program (CIP) is a planning tool for the Village that seeks to identify major capital projects and a corresponding funding source for projects that are \$10,000 or more.

The CIP is divided into the following sections:

Buildings and Improvements

Number of Existing Facilities: 3

Village facilities include Village Hall, which houses Administration, Finance, Building, Police, and Fire operations, the Public Works Garage, and the Water Pumping Station, which are located in separate facilities.

Vehicles

Number of Vehicles in Fleet: 48

The Vehicles section includes all Village vehicles subdivided into building, police, fire, and public works vehicles. The detail page for each vehicle to be replaced within this five-year Capital Improvement Plan provides a photo of the vehicle, historical cost, repair information, a description of how the vehicle is used, and its life expectancy.

Equipment

The Equipment section lists the capital equipment items that need to be repaired, replaced, or acquired over the next five years. This section includes equipment for the Police, Fire, and Public Works operations.

Information Technology

System Equipment: Approximately 100 computers/tablets, one physical server and several virtual servers

The Information Technology (IT) section includes hardware, software, equipment, licenses, and consulting costs for supporting the robust computer network that supports the Village's day-to-day operations.

Streets, Sidewalks, Alleys

Miles of Streets/Sidewalks/Alleys: 31.6 miles

The Streets program includes annual street resurfacing, alley maintenance, sidewalk, curb maintenance, and general street patching and maintenance. The annual Street Improvement Program is funded through Motor Fuel Tax (MFT) revenues. The CIP also includes the final phase of implementing the Bicycle Plan recommendations, which was adopted during FY 2020.

Water and Sewer Improvements

Miles of Water/Sewer Mains: 76.5 miles

The Village annually budgets for the maintenance and repair of the sewer system, including sewer lining, rehab, and main repairs. The Village's water system serves a population of more than 11,000. Maintenance of the pumping station and distribution system is essential to the water utility's operation. Annual funding is recommended for water main replacement and rehabilitation. Water main replacement is recommended when a history of line failure or inadequate fire flow exists. Fire flow is the quantity of water available for fire suppression purposes over that which is required for other purposes. When possible, water main replacement is scheduled to coincide with street improvements to limit the impact of construction activity on a particular area. Equipment improvements at the Water Pumping Station can be found in this section.

Village of River Forest

Financing the Five Year Capital Improvement Program

The Five Year Capital Improvement Program (CIP) is financed through the following Village funds or particular revenue sources. The individual project sheet will indicate when the project is funded from a specific revenue source, such as a grant, within the fund. The proposed FY 2024 funding levels for each fund or source can be found below.

General Fund **\$ 460,000**

The General Fund is the primary operating fund in the Village's budget and provides for all activities not accounted for in other funds.

Motor Fuel Tax (MFT) **\$ 1,226,279**

The State of Illinois has imposed a gas tax on the privilege of operating motor vehicles on public highways in Illinois. MFT dollars are collected by the State of Illinois and remitted to the municipality on a per capita basis.

Water & Sewer Fund **\$ 914,000**

The Water and Sewer Fund includes the following revenue sources which assist in funding capital improvements: water and sewer charges, interest income, and bond proceeds.

Capital Equipment Replacement Fund (CERF) **\$ 808,702**

The Capital Equipment Replacement Fund (CERF) is a capital projects fund where Administration, Police, Fire, and Public Works Departments set aside funds each year to eventually replace existing equipment and vehicles and avoid significant fluctuations in the operating budget from one year to the next. Revenues are provided by transfers from the General and Water and Sewer Funds.

Water & Sewer - CERF Fund **\$ 240,000**

The Water & Sewer - CERF Fund is part of the above-mentioned CERF; however, only this portion is funded from Water & Sewer revenues and provides for the eventual replacement of Public Works vehicles utilized for sewer and water functions.

Capital Improvements Fund **\$ 1,073,375**

The Capital Improvements Fund is used to account for improvements to buildings, parking lots, municipal lighting systems, alleys, streets, and information technology. Revenue sources include red light camera revenue, parking lot fees, grants, and transfers from other funds.

Infrastructure Improvement Bond Fund **\$ 250,000**

The Infrastructure Improvement Bond Fund is a new fund that utilizes the proceeds from the 2022 General Obligation Bond issued using the Village's available debt service extension base. These funds may be used to finance the Street Improvement Project.

Madison Street Tax Increment Financing (TIF) District Fund **\$ -**

The Madison Street TIF is a fund that utilizes the Madison Street TIF District proceeds to pay for TIF-eligible projects.

North Avenue Tax Increment Financing (TIF) District Fund **\$ 75,072**

The North Avenue TIF is a fund that utilizes the North Avenue TIF District proceeds to pay for TIF-eligible projects.

**Village of River Forest, Illinois
Five Year Capital Improvement Program
Fiscal Year 2024 Budget**

CATEGORY	Fiscal Year					Five Year Total
	2024	2025	2026	2027	2028	
Buildings and Improvements	397,200	367,000	-	49,001	250,000	1,063,201
Vehicles	836,370	1,173,269	1,236,498	144,478	533,076	3,923,691
Equipment	559,579	629,872	293,355	355,241	156,842	1,994,889
Information Technology	298,000	115,000	115,000	53,000	40,000	621,000
Streets, Sidewalks & Alleys	2,112,279	1,040,000	1,005,000	975,000	975,000	6,107,279
Water and Sewer Improvements	844,000	1,060,000	1,147,000	1,032,000	1,062,000	5,145,000
Total	5,047,428	4,385,141	3,796,853	2,608,720	3,016,918	18,855,060

PROPOSED FUNDING SOURCE	Fiscal Year					Five Year Total
	2024	2025	2026	2027	2028	
General Fund (GF)	460,000	105,000	105,000	105,000	105,000	880,000
Motor Fuel Tax Fund (MFT)	1,226,279	490,000	490,000	490,000	490,000	3,186,279
Water and Sewer Fund (WS)	914,000	1,130,000	1,217,000	1,102,000	1,352,000	5,715,000
Capital Equipment Replacement Fund (CERF)	808,702	1,738,355	1,312,513	498,720	639,918	4,998,208
CERF/WS	240,000	237,000	118,540	-	-	595,540
Capital Improvements Fund (CIF)	1,073,375	434,786	249,400	163,000	180,000	2,100,561
Capital Improvements Fund/Parking Reserve (CIF/PR)	-	-	30,000	-	-	30,000
Infrastructure Improvements Bond Fund (IIBF)	250,000	250,000	250,000	250,000	250,000	1,250,000
Madison Street TIF District (M-TIF)	-	-	-	-	-	-
North Avenue TIF District (N-TIF)	75,072	-	24,400	-	-	99,472
Totals	5,047,428	4,385,141	3,796,853	2,608,720	3,016,918	18,855,060

BUILDINGS AND IMPROVEMENTS



Buildings and Improvements – Five Year Capital Improvement Program

The Buildings and Improvements section of the Capital Improvement Program (CIP) identifies proposed improvements to the Village Hall, including the Police and Fire Department areas and the Public Works Garage and Water Pumping Station. Proposed improvements may include repair, replacement, or the rehabilitation of Village buildings.

As with other sections of the CIP, these improvements are targeted for specific years and financed through various methods such as the General Fund, Water and Sewer Fund, Capital Equipment Replacement Fund, and the Capital Improvement Fund (CIF).

Improvements planned for FY 2024 include:

Improvement	Cost of Improvement	Funding Source	Nature of Project
Village Hall Improvements	\$ 227,200	CIF	Recommended
Village Hall Second Floor Improvements	\$ 100,000	CIF	Recommended
Garage Improvements	\$ 70,000	CIF	Contingent
Total	\$ 397,200		

Each project in the CIP is categorized by the requesting department as follows:

Critical- The project must be completed in the year recommended due to safety or operational needs or as mandated by law.

Critical projects are highlighted in yellow.

Recommended- The project will significantly improve operations or safety. The project is strongly recommended for funding in the year recommended or the year after.

Contingent on Funding- The project would benefit the Village and improve service levels but is only recommended if funds are available.

**Village of River Forest, Illinois
Five Year Capital Improvement Program
Buildings and Improvements
Fiscal Year 2024 Budget**

This Project is:	Fiscal Year					Five Year Total	Funding Source	
	2024	2025	2026	2027	2028			
Police								
Firing Range Rehab	Recommended	-	-	-	49,001	-	49,001	CERF
Village Hall								
Village Hall Improvements	Recommended	227,200	367,000	-	-	-	594,200	CIF/CERF
Second Floor Improvements	Recommended	100,000	-	-	-	-	100,000	CIF
Public Works								
Garage Improvements	Contingent	70,000	-	-	-	30,000	100,000	CIF
Pumping Station Improvements	Critical	-	-	-	-	220,000	220,000	WS
Total		397,200	367,000	-	49,001	250,000	1,063,201	

Proposed Funding Source	Fiscal Year					Five Year Total
	2024	2025	2026	2027	2028	
Water and Sewer Fund (WS)	-	-	-	-	220,000	220,000
General Fund	-	-	-	-	-	-
Capital Equipment Replacement Fund (CERF)	-	317,000	-	49,001	-	366,001
Capital Improvement Fund (CIF)	397,200	50,000	-	-	30,000	477,200
Totals	397,200	367,000	-	49,001	250,000	1,063,201

Building and Improvements - Police

Firing Range Rehab	FY 2027	\$49,001	CERF
	FY 2032	\$65,036	CERF
	FY 2037	\$45,055	CERF

Critical
 Recommended
 Contingent on Funding



Original Purchase	FY 1998	
Funding History	FY 2016	\$19,851
	FY 2017	\$68,129
	FY 2018	\$0
	FY 2023	\$33,477

Project Description & Justification

The Firing Range located in the basement of Village Hall was installed in 1998 as part of the Village Hall construction project. In FY 2016 and 2017, the Firing Range was updated. Additional necessary updates were completed in FY 2023. The range is used over 200 times per year for handgun, shotgun, rifle, and less lethal training. The Village’s range requires upgrades in the bullet trap system, ventilation, and the target rail systems. With local, regional, and national focus on police officers' use of firearms, this project will help ensure that the Village maintains professional standards and safeguards the public’s trust. Use of force, judgment, de-escalation, and scenario-based training are part of a defensible firearms training program.

The main components of the range are the following:

- Bullet Trap/Ballistic/Protective Wall System
- Ballistic Ceiling Baffle System
- Shooting Stalls/Target Turning Systems - stalls, rails, target retrievers, and master control system
- Range Ventilation System

Repair/Improvement	Estimated Cost	Fiscal Year
Ventilation Direct Digital Control System	\$ 17,892	FY 2027
Ventilation VFD for Make-Up Air Unit	\$ 2,980	FY 2027
Ventilation Start Up and Commissioning	\$ 1,407	FY 2027
Ventilation Custom Radial Diffusers	\$ 2,035	FY 2027
Ventilation Control Piping and Wiring	\$ 2,625	FY 2027
Air Filtration Unit	\$ 22,062	FY 2027
Bullet Trap Conversion	\$ 30,535	FY 2032
Combat/Protective Wall System	\$ 17,218	FY 2032
Ballistic Ceiling Baffles	\$ 17,283	FY 2032
Range Master Control System	\$ 6,887	FY 2037
Network Interface	\$ 1,867	FY 2037
Rail and Target Encasements	\$ 4,017	FY 2037
Lateral Target with base	\$ 10,402	FY 2037
Target Turners	\$ 3,731	FY 2037
Electronic Enclosures	\$ 4,807	FY 2037
Shooting Stalls	\$ 13,344	FY 2037
FY 2027 Sub-total	\$ 49,001	
FY 2032 Sub-total	\$ 65,036	
FY 2037 Sub-total	\$ 45,055	
Total Project Cost	\$ 159,092	

The approximate life expectancy of the equipment, with recommended maintenance, is an additional 10 to 20 years.

Additional Justifications

FY 2027 - Improvements will address most ventilation system upgrades needed to ensure compliance with the most recent OSHA air quality standards for firing ranges.

FY 2032 - Improvements will address the safety and integrity of the bullet trap system and industry-standard ballistic walls for approximately 1/3 of the range to protect against ricochet and shrapnel displacement. Items include upgraded ceiling baffles to protect plumbing, ductwork, and other structural components. Further improvements will address mechanical and technology upgrades required concerning target rail and master control systems.

FY 2037 - Equipment was replaced in FY 2023. Master control system and target turning systems are anticipated to need replacement in FY 2037.

Project Alternative


The alternative to replacing the range equipment is to continue to repair the current system, which is less desirable and less feasible as the range age increases. Key components and mechanical parts are not available in new condition or on the secondary rebuilt market. The proposed improvement costs are based on estimates from current contracted vendors. The utilization of alternate vendors would require the complete stripping out of all or most current equipment, increasing costs by approximately 40% to 50%. A second alternative would be to lease time at an offsite firing range; however, concerns regarding this alternative are discussed below.

Project Impact

The State of Illinois requires annual firearms certification plus additional training in other weapons tactics. The use of a firearm is one of the highest liabilities a police department can face. The Department currently requires quarterly firearms training. Without a usable firing range, Village Staff must seek an alternate location to train, which would increase training, overtime, transportation, facility rental premiums, and ammunition costs. A safety/operational concern would be officers' inability to test-fire duty weapons after general maintenance or armorer repairs. The Department continues to look for other like-sized departments to potentially lease time for use. Ongoing project support will improve department range operations' overall efficiency and effectiveness.

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$4,000	Minimal-Ongoing Cleaning and Maintenance

Buildings and Improvements

Village Hall Improvements 		CIF	CERF
	FY 2024	\$227,200	\$0
	FY 2025	\$50,000	\$317,000
	FY 2026	\$0	\$0
	FY 2027	\$0	\$0
	FY 2028	\$0	\$0

Critical
 Recommended
 Contingent on Funding

Spending History

FY 2023	\$43,000 Projected (Replace front door and controls and RTU)
FY 2022	\$44,272 (Dispatch roof replacement)
FY 2021	\$18,428 (HVAC compressor replacements and repairs)
FY 2020	\$5,806 (LED lighting upgrades)
FY 2019	\$5,170 (Repaired gutters and downspouts and WSCDC HVAC repairs)

Project Description & Justification

The Village Hall, located at 400 Park Avenue, was constructed in 1999. It houses the Village’s administrative Staff, the Police and Fire Departments, and the West Suburban Consolidated Dispatch Center (WSCDC). The majority of janitorial and maintenance tasks and operations are performed and coordinated by the Village’s Custodian. Tasks and functions that cannot be performed by in-house Staff are outsourced.

ComEd evaluated the energy efficiency of the building in FY 2019 to identify improvements to electrical systems/fixtures that would increase efficiency and be eligible for their incentive program. LED lighting upgrades were completed based on the analysis of the exterior lighting of the building and in the community room. The working condition of all Village Hall HVAC units is also monitored, and the HVAC contractors assist in determining if replacement is needed in the next five years. The replacement of fluorescent lighting on the 2nd floor, stairways, and 1st-floor common areas of Village Hall with energy-efficient LED lighting is planned for FY 2024. This is based on the recommendations of the ComEd facility assessment, and using their energy efficiency incentives saves approximately 30% off the purchase price of lighting fixtures. The front doors need replacement due to their current operating condition. This replacement will require compliance with ADA egress requirements and updated controls for opening and closing. Several interior doors are also planned for improvements to improve ADA egress.

A building envelope and roofing assessment were conducted in 2016 by the Garland company to provide thermal scans of the roof’s condition. This report recommended roof replacement for this facility in FY 2017. Since then, all sections of the roofing system have been replaced with the exception of the apparatus bay roof. An additional assessment of the apparatus bay roof was performed in FY 2023, which recommends roofing system replacement similar to the work performed on the rest of the building.

The following facility improvements are recommended within the next five years with higher priority items listed first:

Repair/Improvement	Estimated Cost	Year
Apparatus Bay Roof Improvements	\$200,000	FY 2024
Energy efficient lighting improvements (interior)	\$9,200	FY 2024
Interior door ADA access improvements	\$18,000	FY 2024
Building Envelope Improvements	\$50,000	FY 2025
Replace Emergency Generator	\$317,000	FY 2025
Total	\$594,200	

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Buildings and Improvements

Village Hall Second Floor Improvements

FY 2024

\$100,000

CIF

Critical

Recommended

Contingent on Funding

Project Description & Justification

The Village Hall second floor was reconfigured and remodeled in FY 2018. The improvements included modifications to the interior work spaces, rearrangement of the reception area, and the replacement of outdated furniture with new file cabinets, shelving, chairs and height-adjustable desks. At the time the project was planned, the eight perimeter offices were not included in the renovation, but were instead considered as a second phase. In considering the improvements that were made in FY 2018 and the positive manner in which they have been received, it has been determined that there is a need to upgrade the remainder of the furniture in the eight perimeter offices to provide a consistent aesthetic throughout the office and to allow for the installation of height-adjustable desks for all second floor staff members.

The health and wellness of Village employees is extremely important. Any initiatives that can be taken to improve the well-being of employees and allow them to perform their jobs to the best of their abilities is strongly encouraged. The interior improvements and height-adjustable desks that were installed in FY 2018 have been well received over the subsequent years. Given their frequent use and proven health-benefits, it is recommended that similar improvements be made to the eight perimeter offices in FY 2024.

Project Alternative

Project alternatives include the deferral of this work indefinitely, to a date certain beyond the recommended time period, or to refine or redefine the scope of work requested.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Buildings and Improvements - Public Works

Public Works Garage Improvements



FY 2024	\$70,000	CIF
FY 2025	\$0	CIF
FY 2026	\$0	CIF
FY 2027	\$0	CIF
FY 2028	\$30,000	CIF

- Critical
 Recommended
 Contingent on Funding

Spending History

FY 2023	\$0 (Deferred salt storage shed rebuild to FY 2024)
FY 2022	\$0
FY 2021	\$1,167 (Overhead Garage Door Repair, Lighting Replacements)
FY 2020	\$3,183 (Overhead Garage Door Repair, PW Garage Security Camera Upgrades)
FY 2019	\$111,529 (West Wall Repair and Replacement of Windows and Front Door)

Project Description & Justification

The Public Works Garage, located at 45 Forest Avenue, is the facility that houses all vehicles, equipment, fuel (unleaded and diesel), road salt, other materials (stone, asphalt, topsoil, etc.), and supplies necessary for Public Works Operations and Water/Sewer Divisions. Most janitorial and minor maintenance tasks and operations are performed and coordinated by Public Works personnel. Tasks and functions that cannot be performed in-house are outsourced. The rebuild of the salt storage shed was deferred from FY 2023 and is planned for FY 2024. The replacement of one overhead garage door and the front entry keypad are scheduled for FY 2024. Remodeling of the bathroom is scheduled for FY 2028.

Based on current conditions and a facility site assessment, the following facility improvements are recommended within the next five years with higher priority items listed first:

Repair/Improvement	Estimated Cost	Year
Rebuild salt storage shed	\$ 50,000	FY 2024
Replace overhead garage door and front entry key pad	\$ 20,000	FY 2024
Bathroom remodel	\$ 30,000	FY 2028
Total	\$ 100,000	

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Buildings and Improvements - Public Works

Pumping Station Improvements

Water & Sewer



FY 2024	\$0	WS
FY 2025	\$0	WS
FY 2026	\$0	WS
FY 2027	\$0	WS
FY 2028	\$220,000	WS

Critical

Recommended

Contingent on Funding

Spending History

FY 2023	\$0
FY 2022	\$20,000 (Stucco coating system application)
FY 2021	\$3,700 (Repairs to backup generator)
FY 2020	\$54,289 (Relocation of ComEd transformers to outside of building)
FY 2019	\$2,640 (Replacement of windows)

Project Description & Justification

The Pumping Station, located at 7525 Berkshire Street, is the facility that houses all pumps, piping, valves, and auxiliary equipment (including the SCADA controls) that are all central and critical to the operation of the Village's water distribution system. The majority of janitorial and minor maintenance tasks and operations are performed and coordinated by Water Division personnel. Tasks and operations that cannot be performed in-house are outsourced.

An evaluation of the energy efficiency of the building was performed by ComEd in FY 2019 to assess if there are any improvements to electrical systems/fixtures that would increase efficiency and be eligible for their incentive program. LED lighting upgrades were performed as a result of this analysis on the interior lighting of the building. A Facility Condition Assessment of the Pumping Station was performed to evaluate the overall condition of the buildings and sites, and provide information regarding the condition and life expectancy of the major components. The report summarizes the recommended projects involving improvements and maintenance to this facility. A Caterpillar 3400 500KW Diesel Emergency Generator and Switch Panel were purchased in FY 1988 and are on year 35 of their 40 year useful life. Replacement of the generator and switch panel are anticipated for FY 2028 and are estimated to cost approximately \$220,000.

Repair/Improvement	Estimated Cost	Year
Emergency Generator and Switch Panel	\$220,000	FY 2028
Total	\$220,000	

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

VEHICLES

Vehicles – Five Year Capital Improvement Program

The Village of River Forest recognizes the importance of maintaining, replacing, and purchasing new vehicles to guarantee public safety and the efficient delivery of services. The following is a breakdown of current vehicular levels for all vehicles owned by the Village and the replacement schedule for FY 2024:

Department	Number of Vehicles to be Replaced in FY 2024	Cost of Vehicles to be Replaced in FY 2024	Total Number of Vehicles in Fleet
Building	-	\$ -	1
Police	3	\$ 206,370	17
Fire	-	\$ -	9
Public Works	4	\$ 630,000	21
Total	8	\$ 836,370	48

Financing

Projects in this section are financed through the Capital Equipment Replacement Fund (CERF).

Each project in the CIP is categorized by the requesting department as follows:

Critical- The project must be completed in the year recommended due to safety or operational needs or as mandated by law.

These projects are highlighted in yellow.

Recommended- The project will significantly improve operations or safety. The project is strongly recommended for funding in the year recommended or the year after.

Contingent on Funding- The project would benefit the Village and improve service levels but is only recommended if funds are available.

**Village of River Forest, Illinois
 Five Year Capital Improvement Program
 Vehicles
 Fiscal Year 2024 Budget**

Vehicles	Fiscal Year					Five Year	Funding Source
	2024	2025	2026	2027	2028	Total	
Building	-	29,500	-	-	-	29,500	CERF
Police	206,370	189,748	208,958	144,478	75,076	824,630	CERF
Fire	-	354,021	1,000,000	-	-	1,354,021	CERF
Public Works	630,000	600,000	27,540	-	458,000	1,715,540	CERF & CERF/WS
Total	836,370	1,173,269	1,236,498	144,478	533,076	3,923,691	

Proposed Funding Source	Fiscal Year					Five Year
	2024	2025	2026	2027	2028	Total
Capital Equipment Replacement Fund (CERF)	596,370	958,269	1,208,958	144,478	533,076	3,441,151
CERF- Water and Sewer (CERF/WS)	240,000	215,000	27,540	-	-	482,540
Water and Sewer Fund (WS)	-	-	-	-	-	-
Totals	836,370	1,173,269	1,236,498	144,478	533,076	3,923,691

Village of River Forest, Illinois
Five Year Capital Improvement Program
Vehicles-Building
Fiscal Year 2024 Budget

Building Department	Year	Vehicle #	This Project is:	Fiscal Year					Five Year Total	Funding Source
				2024	2025	2026	2027	2028		
Ford Focus	2014	1	Recommended	-	29,500	-	-	-	29,500	CERF
Total				-	29,500	-	-	-	29,500	

Proposed Funding Source	Fiscal Year					Five Year Total
	2024	2025	2026	2027	2028	
Capital Equipment Replacement Fund (CERF)	-	29,500	-	-	-	29,500
Totals	-	29,500	-	-	-	29,500

Vehicles - Building

Administrative Vehicle

FY 2025

\$29,500

CERF

Critical

Recommended

Contingent on Funding

Make Ford
 Model Focus
 Year 2014
 Cost \$14,483
 Useful Life 10 years
 Current Life 8 years



Vehicle Description

This vehicle is utilized by the Building Official and Code Enforcement Officer for travel to/from various properties, primarily for inspections.

Total Vehicle Miles	8546 as of 12/2/22
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Maintenance Costs	Cost
Axle Replacment, Oil Change, and Tire Rotation - 9/16/21	\$456.09
Total	\$456.09

Project Alternative

- Sell this vehicle or move it to the Village's fleet of pool cars and replace it with an electric vehicle alternative, consistent with Village's sustainability goals.
- Utilize a car that is being taken out of the police, fire or public works fleet (if available) as a pool car instead of purchasing a new vehicle.
- Examine possible leasing strategies in lieu of purchasing a new vehicle.
- Defer vehicle replacement given its low mileage and low maintenance costs.

Operational Impact

This unit is the primary vehicle for the Building Department. Historically the Department has relied on fully depreciated vehicles as "pool cars" shared with other Departments and will continue to do so. The Ford Focus has had minimal maintenance and no performance issues, and replacement can be deferred.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$100	Oil changes as needed plus cost of fuel.

Carryover History

This vehicle was scheduled for replacement in FY 2020; however, due to its low mileage, condition, and low maintenance costs, the replacement has been deferred to FY 2025.

**Village of River Forest, Illinois
Five Year Capital Improvement Program
Vehicles-Police
Fiscal Year 2024 Budget**

Police Department	Year	Vehicle #	This Project is:	Fiscal Year					Five Year Total	Funding Source
				2024	2025	2026	2027	2028		
Marked Squad Car	2018	1	Recommended	-	-	69,939	-	-	69,939	CERF
Marked Squad Car	2019	2	Recommended	68,790	-	-	-	75,076	143,866	CERF
Marked Squad Car	2020	3	Recommended	68,790	-	-	72,239	-	141,029	CERF
Marked Squad Car	2019	4	Recommended	-	-	69,080	-	-	69,080	CERF
Marked Squad Car	2020	5	Recommended	68,790	-	-	72,239	-	141,029	CERF
Marked Squad Car	2017	6	Recommended	-	-	69,939	-	-	69,939	CERF
Unmarked Traffic/Patrol	2020	8	Recommended	-	74,497	-	-	-	74,497	CERF
Detectives Vehicle	2017	12	Recommended	-	52,420	-	-	-	52,420	CERF
Unmarked Tactical	2018	13	Recommended	-	62,831	-	-	-	62,831	CERF
Marked Patrol	2009	7	N/A	These vehicles are replaced with used police vehicles.					-	
Crime Prevention- Charger	2016	9	N/A						-	
Deputy Chief's Vehicle- Explorer	2013	11	N/A						-	
Admin Pool Vehicle	2016	14	N/A						-	
Covert Detective Ford Fusion	2015	15	N/A						-	
Patrol Commander-Charger	2015	16	N/A						-	
Total									206,370	189,748

Proposed Funding Source	Fiscal Year					Five Year Total
	2024	2025	2026	2027	2028	
Capital Equipment Replacement Fund (CERF)	206,370	189,748	208,958	144,478	75,076	824,630
Totals	206,370	189,748	208,958	144,478	75,076	824,630

Vehicles - Police

Marked Squad Car	FY 2026	\$69,939	CERF
Squad 1	FY 2029	\$73,980	CERF
<input type="radio"/> Critical	<input checked="" type="radio"/> Recommended	<input type="radio"/> Contingent on Funding	
Make	Dodge		
Model	Durango		
Year	2023		
Cost	\$60,826		
Useful Life	3 years		
Current Life	0 years		

Project Description & Justification

The vehicle's estimated cost incorporates \$18,480 for equipment and installation, including exterior police markings, a light-emitting diode (LED) light bar, and miscellaneous items needed to facilitate the installation of major components. The vehicle was ordered in November 2021 and was reordered in October 2022 with a tentative delivery of Spring 2023. The mileage is 0 as of 12/1/22. The average monthly miles driven is 1,000. Estimated mileage at the time of replacement: 60,000.

Vehicle Description

This vehicle is a marked squad car used for daily patrol activities. The unit is equipped with laptop computers, moving radar units, and forward-facing video cameras. As the vehicles are rotated out of the fleet, the laptops, radars, and video equipment will be removed and reinstalled in the new cars. This vehicle also houses mission-critical equipment for response to active shooter and other life-threatening events.

Maintenance Costs	Average Cost per Repair	
Routine Maintenance since May 2022	\$0.00	0
Cost of Repairs While Under Warranty (3-yr/36,000)	\$0.00	
Total Spent on Maintenance and Repairs	\$0.00	

Project Alternative

Due to the nature of the use, deferral beyond three years is not recommended for patrol vehicles. The reliability decreases as age increases, and maintenance and repair costs often increase. Major vehicle manufacturers continue the development of Hybrid and/or All-Electric Vehicles for law enforcement patrol use. As their availability expands, the availability of the equipment needed to outfit the vehicles for patrol use will also need to expand. The price of these vehicles is high compared to traditional vehicles, but the price may reduce when the supply increases. The FY 2029 cost assumes the funding requirement anticipated for purchasing an All-Electric Vehicle. The Village will also pursue grant funding for the electrification of its fleet.

Operational Impact

These cars are used extensively for daily patrol activities, so breakdowns directly impact the department's ability to respond to requests from residents, provide traffic control, respond to complaints of criminal activity, and perform routine investigations.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
Approximately \$3,735	Routine maintenance and periodic repairs

Carryover History

This vehicle was deferred from FY 2022 to FY 2023. Delivery is expected in late FY 2023.

Vehicles - Police

Marked Squad Car		FY 2024	\$68,790	CERF
Squad 2		FY 2028	\$75,076	CERF
	<input type="radio"/> Critical	<input checked="" type="radio"/> Recommended	<input type="radio"/> Contingent on Funding	
Make	Chevy			
Model	Tahoe PPV			
Year	2019			
Cost	\$44,073			
Useful Life	4 years			
Current Life	3.5 years			

Project Description & Justification

The vehicle's estimated cost incorporates \$18,480 for equipment and installation, including exterior police markings, a light-emitting diode (LED) light bar, and miscellaneous items needed to facilitate the installation of major components. The in-service date was March 20, 2019. The mileage is 56,000 as of 12/1/2022. The average monthly miles driven is 1,700. Estimated mileage at the time of replacement: 80,000.

Vehicle Description

This vehicle is a marked squad car used for daily patrol activities. The unit is equipped with laptop computers, moving radar units, and forward-facing video cameras. The vehicle carries several entry tools and protective equipment ready for immediate deployment by officers. As the vehicles are rotated out of the fleet, the laptops, radars, and video equipment will be removed and reinstalled in the new cars.

Maintenance Costs		Average Cost per Repair
Routine Maintenance since March 2019	\$14,059.00	48 @ \$293.00
Cost of Repairs While Under Warranty	\$0.00	
Total Spent on Maintenance and Repairs	\$14,059.00	

Project Alternative

Due to the nature of the use, deferral beyond three to four years is not recommended for patrol vehicles. The reliability decreases as age increases, and maintenance and repair costs often increase. Major vehicle manufacturers continue the development of Hybrid and/or All-Electric Vehicles for law enforcement patrol use. As their availability expands, the availability of the equipment needed to outfit the vehicles for patrol use will also need to expand. The price of these vehicles is high compared to traditional vehicles, but the price may reduce when the supply increases. The FY 2028 cost assumes the funding requirement anticipated for purchasing an All-Electric Vehicle. The Village will also pursue grant funding for the electrification of its fleet.

Operational Impact

These cars are used extensively for daily patrol activities, so breakdowns directly impact the department's ability to respond to requests from residents, provide traffic control, respond to complaints of criminal activity, and perform routine investigations.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
Approximately \$3,735	Routine maintenance and periodic repairs

Carryover History

None

Vehicles - Police

Marked Squad Car	FY 2024	\$68,790	CERF
Squad 3	FY 2027	\$72,239	CERF
<input type="radio"/> Critical	<input checked="" type="radio"/> Recommended	<input type="radio"/> Contingent on Funding	
Make	Ford		
Model	Explorer PUV		
Year	2020		
Cost	\$45,490		
Useful Life	3 years		
Current Life	2 years		

Project Description & Justification

The vehicle's estimated cost incorporates \$18,480 for equipment and installation, including exterior police markings, a light-emitting diode (LED) light bar, and miscellaneous items needed to facilitate the installation of major components. The vehicle was put into service in July of 2020. The mileage is 43,500 as of 12/1/2022. The average monthly miles driven is expected to be approximately 1,800. Estimated mileage at the time of replacement: 80,000.

Vehicle Description

This vehicle is a marked squad car used for daily patrol activities. The unit is equipped with laptop computers, moving radar units, and forward-facing video cameras. As the vehicles are rotated out of the fleet, the laptops, radars, and video equipment will be removed and reinstalled in the new cars.

Maintenance Costs	Average Cost per Repair	
Routine Maintenance since July 2020	\$4,898.00	15 @ \$326
Cost of Repairs While Under Warranty	\$0.00	
Total Spent on Maintenance and Repairs	\$4,898.00	

Project Alternative

Due to the nature of the use, deferral beyond three years is not recommended for patrol vehicles. The reliability decreases as age increases, and maintenance and repair costs often increase. Major vehicle manufacturers continue the development of Hybrid and/or All-Electric Vehicles for law enforcement patrol use. As their availability expands, the availability of the equipment needed to outfit the vehicles for patrol use will also need to expand. The price of these vehicles is high compared to traditional vehicles, but the price may reduce when the supply increases. The FY 2027 cost assumes the funding requirement anticipated for purchasing an All-Electric Vehicle. The Village will also pursue grant funding for the electrification of its fleet.

Operational Impact

These cars are used extensively for patrol activities, so breakdowns have a direct impact on the department's ability to respond to requests from residents, provide traffic control, respond to complaints of criminal activity, and perform routine investigations.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
Approximately \$3,735	Routine maintenance and periodic repairs

Carryover History

None

Vehicles - Police

Marked Squad Car		FY 2026	\$69,080	CERF
Squad 4		FY 2029	\$70,461	CERF
	<input type="radio"/> Critical	<input checked="" type="radio"/> Recommended	<input type="radio"/> Contingent on Funding	
Make	Dodge			
Model	Charger			
Year	2023			
Cost	\$54,465			
Useful Life	3 years			
Current Life	0 years			

Project Description & Justification

The vehicle's estimated cost incorporates \$18,480 for equipment and installation, which includes exterior Police markings, a light-emitting diode (LED) light bar, and miscellaneous items needed to facilitate the installation of major components. The vehicle was ordered in October 2022 with a tentative delivery date of Spring 2023. The mileage as of 12/1/2022 is 0. Estimated mileage at the time of replacement: 80,000. Once it has reached its useful life, the car will replace an older model in the fleet, be offered to another internal Village department, or be disposed of at auction.

Vehicle Description

This vehicle is a marked squad car used for daily patrol activities. The unit is equipped with laptop computers, moving radar units, and forward-facing video cameras. As the vehicles are rotated out of the fleet, the laptops, radars, and video equipment will be removed and reinstalled in the new cars.

Maintenance Costs FY	Average Cost per Repair	
Routine Maintenance since October 2022	\$0.00	0
Cost of Repairs While Under Warranty	\$0.00	
Total Spent on Maintenance and Repairs	\$0.00	

Project Alternative

Due to the nature of the use, deferral beyond three years is not recommended for patrol vehicles. The reliability decreases as age increases, and maintenance and repair costs often increase. Major vehicle manufacturers continue the development of Hybrid and/or All-Electric Vehicles for law enforcement patrol use. As their availability expands, the availability of the equipment needed to outfit the vehicles for patrol use will also need to expand. The price of these vehicles is high compared to traditional vehicles, but the price may reduce when the supply increases. The FY 2026 cost assumes the funding requirement anticipated for purchasing an All-Electric Vehicle. The Village will also pursue grant funding for the electrification of its fleet.

Operational Impact

These cars are used extensively for patrol activities, so breakdowns directly impact the department's ability to respond to requests from residents, provide traffic control, respond to complaints of criminal activity, and perform routine investigations.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
Approximately \$3,735	Routine maintenance and periodic repairs

Carryover History

None

Vehicles - Police

Marked Squad Car		FY 2024	\$68,790	CERF
Squad 5		FY 2027	\$72,239	CERF
	<input type="radio"/> Critical	<input checked="" type="radio"/> Recommended	<input type="radio"/> Contingent on Funding	
Make	Chevrolet			
Model	Tahoe			
Year	2020			
Cost	\$40,192			
Useful Life	3 years			
Current Life	2 years			

Project Description & Justification

The vehicle's estimated cost incorporates \$18,480 for equipment and installation, which includes exterior police markings, a light-emitting diode (LED) light bar, and miscellaneous items needed to facilitate the installation of major components. The in-service date was August 15, 2020. The mileage is 39,000 as of 12/1/2022. The average monthly miles driven is 1,750. Estimated mileage at the time of replacement: 80,000. This vehicle will be kept in the fleet as a secondary line vehicle for crime prevention or backup patrol vehicle.

Vehicle Description

This vehicle is a marked squad car used for daily patrol activities. The unit is equipped with laptop computers, moving radar units, and forward-facing video cameras. As the vehicles are rotated out of the fleet, the laptops, radars, and video equipment will be removed and reinstalled in the new cars.

Maintenance Costs		Average Cost per Repair
Routine Maintenance since November 2019	\$2,771.00	14 @ \$197.00
Cost of Repairs While Under Warranty	\$0.00	
Total Spent on Maintenance and Repairs	\$2,771.00	

Project Alternative

Due to the nature of the use, deferral beyond three years is not recommended for patrol vehicles. The reliability decreases as age increases, and maintenance and repair costs often increase. Major vehicle manufacturers continue the development of Hybrid and/or All-Electric Vehicles for law enforcement patrol use. As their availability expands, the availability of the equipment needed to outfit the vehicles for patrol use will also need to expand. The price of these vehicles is high compared to traditional vehicles, but the price may reduce when the supply increases. The FY 2027 cost assumes the funding requirement anticipated for purchasing an All-Electric Vehicle. The Village will also pursue grant funding for the electrification of its fleet.

Operational Impact

These cars are used extensively for patrol activities, so breakdowns directly impact the department's ability to respond to requests from residents, provide traffic control, respond to complaints of criminal activity, and perform routine investigations.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
Approximately \$3,735	Routine maintenance and periodic repairs

Carryover History

None

Vehicles - Police

Marked Squad Car	FY 2026	\$69,939	CERF
Squad 6	FY 2029	\$73,980	CERF
<input type="radio"/> Critical	<input checked="" type="radio"/> Recommended	<input type="radio"/> Contingent on Funding	
Make	Ford		
Model	Explorer AWD		
Year	2022		
Cost	\$56,241		
Useful Life	3 years		
Current Life	0.5 years		

Project Description & Justification

The vehicle's estimated cost incorporates \$18,480 for equipment and installation, which includes exterior police markings, a light-emitting diode (LED) light bar, and miscellaneous items needed to facilitate the installation of major components. The vehicle was inservice as of October 2022. The mileage is 2500 as of 12/1/2022. The average monthly miles driven is 1,000. Estimated mileage at the time of replacement: 60,000.

Vehicle Description

The recommended replacement model is a larger vehicle, such as a SUV. This vehicle serves as a multi-purpose utility vehicle for deploying the speed trailer and rapid deployment equipment. The vehicle houses the Automatic License Plate Reader System (ALPR), used for traffic and parking operations. This vehicle will be a marked squad car used for daily patrol activities. The unit is equipped with laptop computers, moving radar units, and forward-facing video cameras. As the vehicles are rotated out of the fleet, reusable laptops, radars, and video equipment will be removed and reinstalled in the new cars.

Maintenance Costs		Average Cost per Repair
Routine Maintenance since May 2022	\$72.00	3 @\$24.00
Cost of Repairs While Under Warranty	\$0.00	
Total Spent on Maintenance and Repairs	\$72.00	

Project Alternative

Due to the nature of the use, deferral beyond three years is not recommended for patrol vehicles. The reliability decreases as age increases, and maintenance and repair costs often increase. Major vehicle manufacturers continue the development of Hybrid and/or All-Electric Vehicles for law enforcement patrol use. As their availability expands, the availability of the equipment needed to outfit the vehicles for patrol use will also need to expand. The price of these vehicles is high compared to traditional vehicles, but the price may reduce when the supply increases. The FY 2029 cost assumes the funding requirement anticipated for purchasing an All-Electric Vehicle. The Village will also pursue grant funding for the electrification of its fleet.

Operational Impact

These cars are used extensively for patrol activities, so breakdowns directly impact the department's ability to respond to requests from residents, provide traffic control, respond to complaints of criminal activity, and perform routine investigations. The ALPR equipment serves a mission-critical function for daily parking and other enforcement assignments.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
Approximately \$3,735	Routine maintenance and periodic repairs

Carryover History

None

Vehicles - Police

Marked Traffic/Patrol	FY 2025	\$74,497	CERF
Patrol 8	FY 2030	\$78,682	CERF
<input type="radio"/> Critical	<input checked="" type="radio"/> Recommended	<input type="radio"/> Contingent on Funding	
Make	Ford		
Model	F-150 Police Responder		
Year	2020		
Cost	\$48,500		
Useful Life	5 years		
Current Life	2.5 years		

Project Description & Justification

This vehicle is a marked squad car used for daily patrol activities. Car #8 is used as a Traffic Enforcement/Accident Investigation unit and serves as the Department's primary Truck Enforcement vehicle. The mileage is 26,000 as of 12/1/2022. It is estimated that the vehicle averages 900 miles per month and serves as a front-line car until other operational needs or mechanical issues dictate its rotation or replacement. Staff anticipates the possible opportunity to defer the purchase of a replacement vehicle beyond FY 2025 due to the pursuit and heavy-duty ratings of the Ford F-150.

Vehicle Description

The F-150 Police Responder is used for traffic enforcement, truck enforcement, accident investigation, radar/message board trailer deployment, police mountain bike deployment, evidence transport, and WESTAF Major Accident Team deployment. The unit has high water, severe winter conditions, and off-road capabilities to meet all mission-critical assignments. The vehicle has onboard storage for evidence technician equipment, entry tools, protective gear, and specialized hardware.

Maintenance Costs		Average Cost per Repair
Routine Maintenance since May 2020	\$1,155.00	6@\$192.00
Cost of Repairs While Under Warranty	\$0.00	
Total Spent on Maintenance and Repairs	\$1,155.00	

Project Alternative

At this time, the Traffic Enforcement car is used to meet the community's number one citizen-driven complaint: speeding and reckless drivers. In addition, the vehicle is used for multiple operational applications. The Department will evaluate this unit's effectiveness and make recommendations to determine actual or deferred replacement. The development of Hybrid and/or All-Electric Vehicles for law enforcement patrol use continues by primary vehicle manufacturers. As their availability expands, the availability of the equipment needed to outfit the vehicles for patrol use will also need to expand. The price of these vehicles is high compared to traditional vehicles, but the price may reduce when the supply increases. The FY 2030 cost assumes the funding requirement anticipated for purchasing an All-Electric Vehicle. The Village will also pursue grant funding for the electrification of its fleet.

Operational Impact

As a front-line unit, the car is used for all patrol-related activities, plus its specialized applications. This vehicle needs to be properly maintained and replaced as necessary to further the community's expectations of prompt and professional police service.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
Approximately \$3,735	Routine maintenance and periodic repairs

Carryover History

None

Vehicles - Police

Dodge Durango Primary Detectives Vehicle	FY 2025	\$52,420	CERF
Squad 12	FY 2030	\$57,586	CERF
<input type="radio"/> Critical	<input checked="" type="radio"/> Recommended	<input type="radio"/> Contingent on Funding	
Make	Dodge		
Model	Durango		
Year	2017		
Cost	\$31,341		
Useful Life	5 years		
Current Life	6 years		

Project Description & Justification

The vehicle's estimated cost incorporates an all-wheel-drive SUV, \$10,000 for covert equipment and installation, including hidden light-emitting diode (LED) emergency lights, radio antennae, and miscellaneous items needed to facilitate the installation of major components. The in-service date was October 1, 2016. The mileage is 31,000 as of 12/1/2022. The average monthly miles driven is 313. Estimated mileage at the time of replacement: 58,000. Depending on the vehicle's condition at replacement time, this vehicle will be deferred or can be rotated as the secondary Detective Unit, a tactical vehicle, command vehicle, or training vehicle.

Vehicle Description

This unmarked detective unit is used daily for criminal investigations, tactical patrol, and covert surveillance. It is equipped with hidden emergency lights, a laptop computer, and car radios. The vehicle is set up to store protective gear and additional weapons systems.

Maintenance Costs		Average Cost per Repair
Routine Maintenance since October 1, 2016	\$636.75	8 @ \$79.60
Cost of Repairs While Under Warranty	\$0.00	
Total Spent on Maintenance and Repairs	\$636.75	

Project Alternative

Due to the nature of the use, deferral beyond its estimated life is not recommended for a tactical vehicle. The reliability decreases as age increases, and maintenance and repair costs often increase. In addition, tactical or detective plainclothes units are eventually identified by the local criminal element and become somewhat ineffective for investigative purposes. Major vehicle manufacturers continue the development of Hybrid and/or All-Electric Vehicles for law enforcement patrol use. As their availability expands, the availability of the equipment needed to outfit the vehicles for patrol use will also need to expand. The price of these vehicles is high compared to traditional vehicles, but the price may reduce when the supply increases. The FY 2030 cost assumes the funding requirement anticipated for purchasing an All-Electric Vehicle. The Village will also pursue grant funding for the electrification of its fleet.

Operational Impact

Breakdowns directly impact the department's ability to respond to and investigate criminal activity. In addition, the Department depends on unmarked/covert units to perform a myriad of surveillance, tactical, investigative and, and arrest functions for the community.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
Approximately \$3,735	Routine maintenance and periodic repairs

Carryover History

Deferred from FY 2022, FY 2023, FY 2024 to FY 2025.

Vehicles - Police

Unmarked Tactical Squad 13		FY 2025	\$62,831	CERF
		FY 2031	\$70,395	CERF
	<input type="radio"/> Critical	<input checked="" type="radio"/> Recommended	<input type="radio"/> Contingent on Funding	
Make	Dodge			
Model	Charger			
Year	2018			
Cost	\$38,162			
Useful Life	6 years			
Current Life	5 years			

Project Description & Justification

The vehicle's estimated cost incorporates an all-wheel-drive (AWD) vehicle, \$12,480 for covert equipment and installation, including hidden light-emitting diode (LED) emergency lights, radio antenna, and miscellaneous items needed to facilitate the installation of major components. The 2018 Dodge Charger in-service date was January 1, 2018. The mileage is 32,100 as of 12/1/22. The average monthly miles driven is 565. Estimated mileage at the time of replacement: 50,000.

Vehicle Description

This is an unmarked police unit used daily for tactical patrol and covert surveillance. The unit is equipped with hidden emergency lights, a laptop computer, a printer, and car radios. The unit is set up to store additional protective gear and weapons systems.

Maintenance Costs		Average Cost per Repair
Routine Maintenance as of November, 2019	\$3,520.00	17 @ \$207.00
Cost of Repairs While Under Warranty	\$0.00	
Total Spent on Maintenance and Repairs	\$3,520.00	

Project Alternative

Due to the nature of the use, deferral beyond its estimated life is not recommended for a tactical vehicle. The reliability decreases as age increases, and maintenance and repair costs often increase. Major vehicle manufacturers continue the development of Hybrid and/or All-Electric Vehicles for law enforcement patrol use. As their availability expands, the availability of the equipment needed to outfit the vehicles for patrol use will also need to expand. The price of these vehicles is high compared to traditional vehicles, but the price may reduce when the supply increases. The FY 2031 cost assumes the funding requirement anticipated for purchasing an All-Electric Vehicle. The Village will also pursue grant funding for the electrification of its fleet.

Operational Impact

Breakdowns directly impact the department's ability to respond to and investigate criminal activity. The effectiveness of an unmarked/undercover vehicle can be diminished over time due to local criminal offenders having identified it as a police car. The car has covert out-of-state plates.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
Approximately \$3,735	Routine maintenance and periodic repairs

Carryover History

This vehicle will be deferred from FY 2024 to FY 2025.

Village of River Forest, Illinois
Five Year Capital Improvement Program
Vehicles-Fire
Fiscal Year 2024 Budget

Fire Department	Year	Vehicle #	This Project is:	Fiscal Year					Five Year Total	Funding Source
				2024	2025	2026	2027	2028		
Administrative Vehicle	2023	201	Recommended	-	-	-	-	-	-	CERF
Ambulance	2015	215	Critical	-	304,021	-	-	-	304,021	CERF
Utility Pick-up Truck	2006	218	Contingent	-	50,000	-	-	-	50,000	CERF
Pumper	2001	222	Recommended	-	-	1,000,000	-	-	1,000,000	CERF
Ambulance	2006	214	-	This vehicle is a reserve and replaced with frontline upon purchase					-	
Fire Prevention Bureau Vehicle	2009	299	Contingent	This vehicle is replaced with used police vehicles					-	
Total				0	354,021	1,000,000	-	-	1,354,021	

Proposed Funding Source	Fiscal Year					Five Year Total
	2024	2025	2026	2027	2028	
Capital Equipment Replacement Fund (CERF)	0	354,021	1,000,000	-	-	1,354,021
Totals	0	354,021	1,000,000	-	-	1,354,021

Vehicles - Fire

Ambulance - A215

Critical

Recommended

FY 2025

\$304,021

CERF

Contingent on Funding

Make Ford
 Model F-450 Wheeled Coach
 Year 2015
 Cost \$172,906
 Useful Life 8 years frontline +
 4 years shared reserve
 Current Life 8 years



Vehicle Description

A-215 is a Type III (van style front chassis) and serves as an Advanced Life Support (ALS) transport vehicle. Staffed with two firefighter/paramedics, Ambulance 215 responds to an average of 1,100 EMS calls per year. This vehicle operates to treat and transport accident victims and patients of illness to local hospitals. An innovative lifting system (Stryker Power System) is included in the cost of the new vehicle as an additional resource to minimize firefighter injuries due to bariatric (heavy) patients.

Vehicle	Year	Date	Road Mileage
A-215	2014	12/2022	55,480
A-214	2006	12/2022	58,124

Maintenance Costs for Past 2.5 Years

<i>Routine Maintenance</i>		
215		\$175 (1 item)
214 (Shared reserve unit)		\$510 (2 items)
<i>Cost of Repairs</i>		
215		\$3,315 (2 items)
214 (Shared reserve unit)		\$4,908 (4 items)
Total		
215		\$3,490
214 (Shared reserve unit)		\$5,418

Repair Description

Ambulance 215 is in its eighth year of service. Ambulance 214 (Reserve) has experienced several mechanical issues that are resolved. This vehicle had its engine replaced in FY 2016.

Project Alternative

- Eliminate the Stryker Power Lift system for a savings of \$40,000; however, this is not recommended as it could increase the risk of injury.

Operational Impact

This vehicle is in the eighth year of a planned eight-year useful life expectancy. This ambulance will be moved to the reserve position, and the existing reserve engine will be sold. The reserve ambulance is shared with the Village of Forest Park.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$13,648	Preventative maintenance and repairs

Carryover History

None

Vehicles - Fire

Administrative Vehicle – C218

Critical

Recommended

FY 2025

\$50,000

CERF

Contingent on Funding

Make Ford
 Model F-250
 Year 2006
 Cost \$35,000
 Useful Life 8 years
 Current Life 17 years



Vehicle Description

C218 is the utility vehicle assigned to Haz-Mat & Technical Rescue. This vehicle is purchased through the State of Illinois Central Management Service (CMS) program or at a local dealer that will match the cost in the State Purchasing program. This vehicle is a four-wheel drive for extreme weather conditions and is equipped with emergency lights and a siren for emergency response. It can tow safety trailers, including the Citizen Corps and MABAS trailers. Additionally, this vehicle serves as the Incident Command vehicle in disaster situations. This vehicle will be sold or become a pool car after it is replaced.

Vehicle	Year	Date	Road Mileage
C-218	2006	12/2022	16,904

Maintenance Costs for Past 2.5 Years

Routine Maintenance as of December, 2022	\$1,497	(1 item)
Cost of Repairs	\$0	(1 item)
Total	\$1,497	

Project Alternative

- Purchase an all-wheel-drive SUV to place in service for severe weather conditions, which provides better traction ability during fire response in extreme weather conditions (four-wheel vs. two-wheel drive).
- Purchase an electric or hybrid vehicle consistent with the Village's sustainability goals.
- Maintain current vehicle for another year and re-evaluate next budget.
- Continue to defer the purchase of this vehicle and when it is due for replacement, determine if there is a vehicle rotating out of the Public Works fleet that can be utilized and will meet the Fire Department's tow capacity needs instead of replacement.

Operational Impact

This vehicle was initially scheduled for an eight-year useful life. When purchased, it will replace the current vehicle used by Haz-Mat & Technical Rescue and tow MABAS-11 assets. The replaced vehicle can be utilized for school, training, travel, and an auxiliary vehicle in the Village fleet for other departments or sold at auction.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
Normal reduction in maintenance costs \$1,500 preventative maintenance	Reduce fleet maintenance by providing new, warranty driven apparatus, replacing older, costlier vehicle

Carryover History

This vehicle has been deferred since FY 2014 and is scheduled for replacement in FY 2025.

Vehicles - Fire

Pumper - E222

FY 2026

\$1,000,000 CERF

Critical

Recommended

Contingent on Funding

Make Darley
 Model Pumper
 Year 2001
 Cost \$326,000
 Useful Life 10 years front line +
 10 years reserve
 Current Life 21 years



Vehicle Description

E-222 is a 1,500-gallon per minute fire pumper with a 750-gallon water tank and a full complement of fire hose, ladders, and equipment. This vehicle meets NFPA 1901 and Insurance Services Office (ISO) criteria for a Class ‘A’ Pumper. A Class A pumper entails the following pumping requirements: 100% pump capacity at 150psi, 70% capacity at 200psi, and 50% at 250psi. Class B pumps were found on older apparatus. They developed 100% pump capacity at 120psi, 70% at 200psi, and 50% at 250 psi.

Vehicle	Year	Date	Road Mileage	Engine Hours	Actual Mileage
E-222	2001	12/2022	92,419	13,205	330,125

*Fire and EMS vehicles use a conversion of 25 miles per engine hour due to the on scene time at an emergency call.

Maintenance Costs for Past 2.5 Years

<i>Routine Maintenance</i>	
222	\$5,886 (3 items)
213	\$2,540 (4 items)
<i>Cost of Repairs</i>	
222	\$42,228 (9 items)
213	\$17,672 (18 items)
Total	
222	\$48,114
213	\$20,212

Project Alternative

- Evaluate State of Illinois loan programs and federal grants.
- Delay the purchase of this vehicle and incur increased maintenance costs and out-of-service time.
- Sell this vehicle and purchase a newer used vehicle from another community.

Operational Impact

This vehicle has been placed in reserve pumper status, with Engine 213 moved to front line status. The need to maintain a reserve pumper exists when the front line Engine is down for maintenance or repair. It gives responding off-duty firefighters the apparatus to run multiple calls when the front-line pumper is in use. It also allows for mutual aid while maintaining a response pumper to provide adequate fire suppression within the Village. With the pump being rebuilt in FY 2021, this engine should provide useful service for several more years.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$25,000 in maintenance and repairs	Reduce fleet maintenance by providing new, warranty-driven apparatus, replacing older, costlier vehicles, and placing E-213, a 20-year-old vehicle, in reserve status.

Carryover History

With the pump being rebuilt in FY 2021 and the frame being rebuilt a few years earlier, replacement is deferred from FY 2022 to FY 2026.

Vehicles - Fire

Quint Concept

Critical

Recommended

FY 2026

\$1,500,000

CERF

Contingent on Funding

Make EONE
 Model Quint
 Year 2026
 Cost \$1,500,000
 Useful Life 10 years front line +
 10 years reserve
 Current Life N/A



Vehicle Description

This Emergency One HP 75 Quint is a 2,000-gallon per minute quint (pumper/aerial ladder) with a 75 foot aerial ladder, a 500-gallon water tank and a full complement of fire hose, ground ladders, and equipment. This vehicle meets NFPA 1901 and Insurance Services Office (ISO) criteria for a Quint. A Quint entails the following NFPA 1901 requirements: a rated fire pump, and aerial ladder, a water tank, ground ladders and hose and equipment storage.

Vehicle	Year	Date	Road Mileage	Engine Hours	Actual Mileage
					0
*Fire and EMS vehicles use a conversion of 25 miles per engine hour due to the on scene time at an emergency call.					

Project Alternative

- Replace Pumper 222 with another Class A Pumper

Operational Impact

This concept is for an operational change to help us respond to emergencies in a safer more efficient manner by combining the functions of two of our current apparatus into one vehicle. This will make our operations safer, the use of our manpower more efficient and reduce vehicle maintenance costs. This concept would include the sale or trade in of Truck 219 and Reserve Engine 222. The sale/trade in of these vehicles will help offset the purchase price of the new Quint vehicle.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$2,000 Preventive Maintenance	Reduce fleet maintenance by providing new, warranty-driven apparatus, replacing older, costlier vehicles, and placing E-213, a 10-year-old vehicle, in reserve status.

Carryover History

None

Village of River Forest, Illinois
 Five Year Capital Improvement Program
 Vehicles-Public Works
 Fiscal Year Budget

Public Works Department	Description	Year	Vehicle #	This Project is:	Fiscal Year					Five Year	Funding Source
					2024	2025	2026	2027	2028	Total	
Pick-up Truck w/ Dump Body	Ford F350 Super Duty	2006	33	Critical	-	-	-	-	79,000	79,000	CERF
Street Sweeper	Elgin Pelican	2016	34	Critical	-	300,000	-	-	-	300,000	CERF/WS
Large Int'l Dump Truck	Ford F550	2016	40	Critical	-	-	-	-	110,000	110,000	CERF
Dump Truck	International 7400	2012	41	Critical	240,000	-	-	-	-	240,000	CERF/WS
Pick-Up Truck	F550 Super Duty	2011	42	Critical	75,000	-	-	-	-	75,000	CERF
Large Int'l Dump Truck	International 4000 Series	1998	44	Critical	250,000	-	-	-	-	250,000	CERF
Pay Loader #45	Front End Loader	2012	45	Critical	-	-	-	-	215,000	215,000	CERF
Aerial Truck	International 4400	2003	46	Critical	-	170,000	-	-	-	170,000	CERF
Pick-Up Truck	Ford F350 Super Duty	2012	48	Critical	65,000	-	-	-	-	65,000	CERF
Pick-Up Truck	Ford F350 Super Duty	2015	49	Critical	-	65,000	-	-	-	65,000	CERF
Skid Steer Loader w/Implements	Bobcat	2016		Recommended	-	-	-	-	54,000	54,000	CERF
Pick-Up Truck	Ford F350 Super Duty	2008	67	Critical	-	65,000	-	-	-	65,000	CERF/WS
Cargo Van	Ford Transit Connect	2015	68	Recommended	-	-	27,540	-	-	27,540	CERF/WS
Total					630,000	600,000	27,540	-	458,000	1,715,540	

Proposed Funding Source	Fiscal Year					Five Year
	2024	2025	2026	2027	2028	Total
Capital Equipment Replacement Fund (CERF)	390,000	385,000	-	-	458,000	1,233,000
CERF - Water and Sewer (CERF/WS)	240,000	215,000	27,540	-	-	482,540
Water and Sewer Fund (WS)	-	-	-	-	-	-
Totals	630,000	600,000	27,540	-	458,000	1,715,540

Vehicles - Public Works

Dump Truck #33

FY 2028

\$79,000

CERF

Critical

Recommended

Contingent on Funding

Make Ford
 Model F550 Super Duty
 Year 2020
 Purchase Cost \$66,200
 Purchased FY 2020
 Useful Life 8 years
 Current Life 3 Year



Vehicle Description

Various personnel in the Operations Division operate this truck. The vehicle is equipped with a eight-foot stainless steel dump body, 500 gallon salt brine sprayer, ten-foot power angling snowplow, emergency lighting, and two-way radio. This vehicle is used for anti-icing operations and to plow and salt main roads, alleys and parking lots throughout the Village during snow removal operations. It is also used to haul soil and debris during water and sewer repairs.

Total Vehicle Miles	6955	Date	8/18/2022
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Recent Maintenance Costs

Date	Maintenance Performed	Cost
10/27/2020	Lightbar control bracket	\$15.46
4/2/2021	light bulb	\$10.35
6/10/2021	Oil change	\$47.82
12/21/2021	Oil and filter change	\$51.96
2/18/2022	Plow pivot pins	\$32.44
8/1/2022	Safety Lane	\$40.00
8/18/2022	Diagnostics for inoperable PTO	\$700.00
Total		\$898.03

Project Alternative

The alternative is to defer the purchase to later years; or to explore the potential acquisition of alternative fuel or electric vehicles when they become available in the marketplace.

Operational Impact

This is one of ten primary snow plowing vehicles in the Village's snow and ice control fleet. It is also one of two vehicles equipped with anti-icing equipment. A breakdown reduces the Village's snow removal response by a tenth and anti-icing capabilities by half. It also extends the time needed to complete snow removal operations. This unit is used for other operations (hauling materials) which would also be impacted if it were removed from the fleet.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$450.00	Routine Annual Maintenance and periodic repairs

Carryover History

None

Vehicles - Public Works

Street Sweeper #34

FY 2025

\$150,000

CERF

Critical

Recommended

FY 2025

\$150,000

CERF/WS

Contingent on Funding

Make Elgin
 Model
 Year 2016
 Purchase Cost \$193,352
 Purchased FY 2017
 Useful Life 8 years
 Current Life 7 years



Vehicle Description

The street sweeper is the only vehicle in the Village’s fleet that sweeps Village streets and State routes. State routes are swept per the Intergovernmental Street Maintenance Agreement held between the Village and the Illinois Department of Transportation (IDOT).

The street sweeper performs a vital function as it removes debris (leaves, twigs, garbage, etc.) from Village streets and prevents such debris from entering the Village’s combined sewer system. It also improves the appearance of the Village. Removing debris from Village streets and keeping it out of the Village’s sewer system reduces blockages and prevents debris from being discharged into the Des Plaines River during combined sewer overflow events.

Total Equipment Miles	13,886	Date	10/6/2022
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Recent Maintenance Costs

Date	Maintenance Performed	Cost
12/9/2016	Windshield wiper protection bar, wiring harness for LED's	\$275.00
12/11/2017	Fuel filters changed and outside air filters	\$192.90
3/1/2018	Changed windshield wiper arm and blade; replaced fill hose	\$365.00
6/27/2018	Replaced conveyor belt drive chain and gears	\$120.00
8/2/2018	Repaired leaking left front hub, rebuilt right front caliper and change brake pads	\$2,757.76
9/3/2018	Replaced conveyor belt drive chain, gears and upper roller bearings.	\$1,170.86
10/26/2018	Replaced fuel filters due to debris in fuel tank	\$258.76
10/30/2018	Removed and clean fuel tank and replace sending unit gasket	\$1,573.00
8/13/2019	Replaced fuel sensor	\$500.00
9/11/2019	Replaced main broom	\$392.26
9/18/2020	Replaced side brooms X 6	\$806.46
12/10/2020	Replaced side brooms X 5	\$672.05
4/8/2021	Replaced side brooms X 4	\$564.52
4/15/2021	Replaced main broom & runners	\$536.67
5/4/2021	Replaced belt drive motor hydraulic hoses	\$3,580.00
6/11/2021	Replaced side brooms	\$546.52
8/18/2021	Replaced deflector parts under hopper	\$318.17
8/24/2021	Replaced side brooms X 3, 2 short runners, main belt and splice kit	\$1,715.41
10/22/2021	Replaced side brooms x 4, one main broom	\$1,074.02
1/26/2022	Oil and oil, fuel, hydraulic filters changed	\$198.00
5/22/2022	A/C recharge and pressure test	\$417.10
6/24/2022	Side brooms and runners	\$598.01
8/26/2022	Runners	\$143.70
10/6/2022	Hydraulic hose	\$156.17
10/6/2022	Side brooms x 4, one main broom	\$1,074.06
10/6/2022	Shock absorber, conveyor cover, miscellaneous nuts, bolts, clamps	\$645.96
Total		\$20,652.36

Project Alternative

The alternative is to reconsider the potential outsourcing of sweeping operations.

Operational Impact

The operational impact would be critical as the Village would lose its ability to perform in-house street sweeping on an as-needed or emergency basis.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$3,500.00	Routine Annual Maintenance and periodic repairs

Carryover History

None

Vehicles - Public Works

Dump Truck #40 **FY 2028** **\$110,000** **CERF**

Critical

Recommended

Contingent on Funding

Make Ford
 Model F-550
 Year 2016
 Purchase Cost \$83,500
 Purchased FY 2016
 Useful Life 12 years
 Current Life 6 years



Vehicle Description

Various personnel in the Operations Division operate this truck. This vehicle is equipped with a chipper body, multiple tool boxes, a heavy duty ten foot snow plow and emergency lighting.

Total Vehicle Miles	9,565	Date	8/18/2022
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Recent Maintenance Costs

Date	Maintenance Performed	Cost
1/18/2018	Replace mud flap	\$60.00
2/1/2019	Driver's side mirror housing	\$262.56
7/18/2019	Oil change	\$129.61
9/11/2019	safety lane sticker	\$29.00
3/6/2020	safety lane sticker	\$29.00
11/10/2020	Oil change	\$176.24
3/5/2021	safety lane sticker	\$40.00
8/27/2021	Turn signal assembly	\$109.21
8/12/2021	Battery	\$112.95
12/21/2021	Oil change and filter	\$154.91
2/1/2022	Air filter change	\$30.18
3/11/2022	Safety lane inspection	\$40.00
8/18/2022	Replace backup alarm	\$24.64
Total		\$1,198.30

Project Alternative

The alternative is to defer the purchase to later years; or to explore the potential acquisition of alternative fuel or electric vehicles when they become available in the marketplace.

Operational Impact

This is one of ten primary snow plowing vehicles in the Village's snow and ice control fleet. A breakdown reduces the Village's snow removal response by a tenth and extends the time needed to complete snow removal operations. This unit is the only vehicle equipped with a chipper box for hauling wood waste. Removing it from the fleet would impact the Village's forestry and snow plowing operations.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$250.00	Routine Annual Maintenance and periodic repairs

Carryover History

None

Vehicles - Public Works

Dump Truck #41 **FY 2024** **\$240,000** **CERF/WS**

Critical

Recommended

Contingent on Funding

Make International
 Model 7400 6X4
 Year 2012
 Purchase Cost \$117,237
 Purchased FY 2012
 Useful Life 12 years
 Current Life 12 years



Vehicle Description

Various personnel in the Operations Division operate this truck. The vehicle has a 13-foot dump body, stainless steel v-box salt spreader with manual controls, liquid salt pre-wetting system, 11-foot power angling snowplow, dump body tarp, emergency lighting, and two-way radio. It is one of two tandem axle dump trucks capable of hauling heavy loads.

Total Vehicle Miles	33,975	Date	11/14/2022
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Recent Maintenance Costs

Date	Maintenance Performed	Cost
12/30/2013	changed oil, air/oil filter, greased	\$98.47
12/14/2015	changed oil, air/oil filter, greased	\$87.18
12/14/2016	Oil change,air,fuel,oil filters,greased	\$88.06
5/16/2017	Repaired electrical problem	\$1,012.46
6/30/2017	Repaired fuel system	\$2,474.80
12/11/2017	changed fuel filters, air filters and greased chassis	\$116.89
1/2/2017	hose repair	\$113.45
6/21/2018	Replaced brake chamber, air dryer, fuel gauge sending unit	\$1,328.00
9/28/2018	Replaced marker light	\$3.72
11/10/2018	Replaced regen sensor	\$484.30
1/7/2019	Oil change,fuel,oil filters and greased	\$124.36
1/15/2019	safety lane sticker	\$44.00
12/13/2019	oil change, fuel filters, air filter and greased chassis	\$180.62
6/19/2020	Recharged AC, hydraulic filter and repair battery cables	\$472.98
6/18/2020	Replaced batteries	\$400.00
7/22/2020	safety lane sticker and test	\$99.50
8/12/2020	Replaced left front brake chamber	\$271.09
9/28/2020	Tarp	\$86.16
11/24/2020	Tow to shop and replace transmission module	\$1,435.00
12/1/2020	Replaced transmission	\$9,500.00
12/7/2020	Spreader light	\$34.00
12/14/2020	Greased chassis	\$0.00
12/17/2020	Oil change, oil filters and fuel filter changed	\$145.80
12/21/2020	Replaced fuel pump strainer	\$491.59
1/5/2021	safety lane sticker and test	\$59.50
1/4/2022	Oil and oil, fuel, and air filters changed	\$278.16
2/1/2022	Safety lane inspection	\$59.50
6/15/2022	Wire replaced near leaf springs. Was short circuiting truck.	\$580.60
9/22/2022	Safety lane inspection	\$59.50
9/20/2022	PTO pump replacement	\$7,091.14
10/31/2022	30 FT hose to dump body pinched/leaking/replaced	\$1,439.58
11/14/2022	Primary air tank replaced	\$1,044.80
Total		\$29,705.21

Project Alternative

The alternative is to defer the purchase to later years and explore the potential acquisition of alternative fuel or electric vehicles when they become available in the marketplace.

Operational Impact

This truck is one of ten primary snow plowing vehicles in the Village’s snow and ice control fleet. A breakdown reduces the Village’s snow removal response by a tenth and extends the time needed to complete snow removal operations. This unit is used for other operations (hauling materials), which would also be impacted if removed from the fleet.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$3,300.00	Routine Annual Maintenance and periodic repairs

Carryover History

None

Vehicles - Public Works

Pickup Truck #42

FY 2024

\$75,000

CERF

Critical

Recommended

Contingent on Funding

Make Ford
 Model F550 Super Duty
 Year 2011
 Purchase Cost \$46,692
 Purchased FY 2011
 Useful Life 12 years
 Current Life 13 years



Vehicle Description

Various personnel in the Operations Division operate this truck. The vehicle has a dump body, v-box salt spreader, 250-gallon salt brine sprayer, nine-foot power angling snowplow, emergency lighting, and two-way radio. This vehicle applies salt brine solution to roadways, plow and salt alleys, and parking lots throughout the Village during snow removal operations and hauling miscellaneous raw materials.

Total Vehicle Miles	31,244	Date	12/2/2022
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Recent Maintenance Costs

Date	Maintenance Performed	Cost
8/28/2016	Replaced battery	\$118.29
5/1/2017	Replaced front suspension parts	\$1,500.00
2/18/2018	Replaced rear rim	\$600.00
9/1/2018	Replaced plastic hydraulic tank	\$250.00
10/1/2018	Replaced rear brake pads and rotors	\$1,181.42
2/19/2020	Replaced rear strobe light	\$67.00
5/20/2020	Replaced passenger side mirror	\$700.00
1/20/2020	Replaced battery	\$120.00
3/9/2021	Replaced side mirror	\$270.00
4/7/2021	Replaced vibrator motor for salt box	\$752.92
7/16/2021	Brake light	\$22.10
12/21/2021	Oil and filter change	\$45.97
1/4/2022	Air filter changed	\$18.13
3/13/2022	Calipers and brake pads replaced (failure due to salt spray)	\$833.43
8/1/2022	Safety lane inspection	\$40.00
Total		\$6,519.26

Project Alternative

The alternative is to defer the purchase to later years and explore the potential acquisition of alternative fuel or electric vehicles when they become available in the marketplace.

Operational Impact

This truck is one of ten primary snow plowing vehicles in the Village's snow and ice control fleet and one of two vehicles equipped with anti-icing equipment. A breakdown reduces the Village's snow removal response by a tenth and anti-icing capabilities by half. It also extends the time needed to complete snow removal operations. This unit is used for other operations (hauling materials), which would also be impacted if removed from the fleet.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$1,100.00	Routine Annual Maintenance and periodic repairs

Carryover History

This vehicle was carried over from FY 2023 and is scheduled for replacement in FY 2024.

Vehicles - Public Works

Dump Truck #44 (previously #41)

FY 2024

\$250,000

CERF

Critical

Recommended

Contingent on Funding

Make International
 Model 4000 Series
 Year 1998
 Purchase Cost \$62,000
 Purchased FY 1998
 Useful Life 12 years
 Current Life 26 years



Vehicle Description

Various personnel in the Operations Division operate this truck. The vehicle has a 13-foot dump body, 11-foot power angling snowplow, dump body tarp, emergency lighting, and two-way radio.

Total Vehicle Miles	97,382	Date	12/2/2022
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Recent Maintenance Costs

Date	Maintenance Performed	Cost
3/1/2014	Replaced muffler, flexpipe, and slack adjusters	\$1,210.64
12/1/2014	Replaced turbo charger hose	\$606.78
5/1/2015	Replaced dump body lift cylinder	\$3,278.16
10/1/2015	Replaced hydraulic tank and weld crack in frame rail	\$1,877.02
12/1/2015	Changed oil and filters	\$101.26
12/14/2016	Oil change, air, fuel, oil filters, greased	\$95.57
9/27/2017	Replaced batteries	\$229.72
12/14/2017	oil change, oil filter, fuel filters, air filter, grease chassis	\$120.32
12/17/2017	Replaced steering gear box	\$2,624.85
1/1/2018	hose repair to plow	\$51.78
2/12/2018	wiper blades	\$32.04
6/18/2018	Replaced right front brake chamber	\$245.94
10/1/2018	Safety lane sticker	\$44.00
1/9/2019	oil change, oil filter, fuel filters and greased chassis	\$59.40
2/1/2019	Replaced rusted headlight bucket	\$150.00
2/20/2020	Replaced sensor and rear seal	\$790.00
3/20/2020	Repaired rusted and broken lift cylinder frame brace	\$3,000.00
4/20/2020	Replaced headlight and wheel hub oil cap	\$231.12
4/20/2020	Repaired power steering leak	\$130.95
8/20/2020	Replaced rusted and leaking air tank. Replaced one brake chamber, lube and adjusted brakes	\$1,262.29
10/20/2020	Replaced leaking fuel tank	\$1,768.75
11/23/2020	New front tires	\$600.00
12/15/2020	Replaced air valve	\$61.25
12/17/2020	Oil change and fuel/oil filter	\$83.03
1/4/2021	oil pan plug	\$71.90
2/11/2021	Replaced gas pedal	\$642.70
8/3/2021	Replaced tail gate switched	\$245.00
12/7/2021	Safety lane sticker	\$59.50
1/7/2022	4 tires (retreads)	\$1,221.50
1/4/2022	Wiper blades	\$3.48
1/4/2022	Oil and oil, fuel, and air filters changed	\$138.80
6/2/2022	Safety lane sticker	\$59.50
Total		\$21,097.25

Project Alternative

This vehicle was replaced in FY 2012 by truck #41. Instead of purchasing a new full-size six-wheel dump truck, the vehicle was kept and refurbished. The Village will continue to explore the potential acquisition of alternative fuel or electric vehicles when they become available in the marketplace.

Background

Recognizing that both of the Village’s Packer trucks (used for leaf removal) were in mechanically poor condition, staff reevaluated the Village’s leaf collection program and determined that hauling leaves utilizing the dump truck fleet is the most operationally efficient means for collecting and transporting leaves. As a result, staff recommended disposing of truck #31 and rehabilitating the larger tandem axle dump truck (old #41) based on the following reasons:

1. Although the cab and chassis in old truck #41 are in good operating condition, the dump body was rusted with significant deterioration. That was the primary reason it was replaced in FY 2012.
2. Old truck #41 is a tandem-axle truck that can transport a larger, heavier load than truck #31, a single axle dump truck.
3. The dump body on old truck #41 is approximately two feet longer and has higher sides than truck #31.
4. It was expected that truck #31 could be sold at public auction as surplus property for approximately \$10,000 to \$15,000. The vehicle actually sold for \$23,350.

Staff recommended that the cab and chassis on dump truck #41 be reconditioned/refurbished and that the dump body and some of the hydraulic controls be replaced. Costs associated with these improvements are as follows (CERF Expenditures):

- \$7,000-Cab and chassis recondition/refurbish
- \$19,153-Replace dump body and update hydraulic controls

Cost Comparison:

- Sale of truck #31: \$23,350
- Cost to recondition current truck \$26,153
- Purchase of a new dump truck: \$175,000

This alternative allowed Public Works to maintain two tandem axle dump trucks in the fleet and extended the life of the old truck #41 by approximately ten years (replacement is scheduled in FY 2023), which is approximately 80% of the life cycle of a new dump truck.

Operational Impact

This truck is one of ten primary snow plowing vehicles in the Village’s snow and ice control fleet. A breakdown reduces the Village’s snow removal response by a tenth and extends the time needed to complete snow removal operations. This unit is used for other operations (hauling materials), which would also be impacted if removed from the fleet.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$2,300.00	Routine Annual Maintenance and periodic repairs

Carryover History

This vehicle was scheduled for replacement in FY 2022; however, due to the COVID-19 pandemic, a new vehicle could not be sourced. As a result, the purchase of the new vehicle has been deferred to FY 2024.

Vehicles - Public Works

Pay Loader #45

FY 2028

\$215,000

CERF

Critical

Recommended

Contingent on Funding

Make Case
 Model 621F
 Year 2012
 Purchase Cost \$129,662
 Purchased FY 2013
 Useful Life 15 years
 Current Life 10 years



Vehicle Description

Various personnel in the Operations Division use this front-end loader. The vehicle is equipped with a 2¼ yard combination bucket, forks, emergency lighting, and two-way radio. It is also equipped with a quick coupling device (quick-hitch) that allows the use of different attachments, (i.e. forks, snow plows, material handling arms, brooms, brush handling buckets, etc.) making the vehicle more useful over a broader range of tasks.

Total Vehicle Hours	5,543	Date	9/9/2022
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Recent Maintenance Costs

Date	Maintenance Performed	Cost
8/14/2013	Initial service	\$835.64
4/1/2015	Replace 2 hydraulic hoses	\$142.84
4/20/2017	Replace batteries	\$475.00
11/17/2017	Replaced hydraulic hose	\$115.00
4/1/2018	Radiator flush, check pressure and hoses, check cooling system	\$534.69
10/18/2018	Replace bucket cutting edge	\$800.00
1/1/2019	Replace hydraulic hose	\$85.00
2/1/2019	Replace radio antenna	\$50.00
3/20/2020	Replace tires	\$5,100.00
7/20/2020	Machine electrical malfunction	\$850.00
7/20/2020	Full service by dealer	\$3,900.00
7/16/2020	Problem with machine in limp mode	\$853.30
7/20/2020	Troubleshoot and replace DEF injection module	\$4,056.22
12/17/2020	Engine oil for loader, 1 fuel filter changed, 1 fuel filter added to sto	\$304.79
1/28/2021	Hoses	\$289.94
3/11/2021	Lightbulbs for rear flood light	\$18.94
6/13/2021	Recharge AC system	\$242.19
11/10/2021	Quick connect fitting	\$48.69
11/29/2021	Hydraulic cylinder pin	\$322.50
2/1/2022	Air filters chnaged	\$89.04
9/9/2022	Fuel filter and seperator changed	\$18.55
Total		\$19,132.33

Project Alternative

The alternative is to delay the purchase and reschedule during later years. Should the front end loader fail during a snow removal and salting operation, the Village would have no ability to load salt into salt trucks.

Operational Impact

This unit is the only front-end loader in Public Works and is the workhorse of the fleet. It is used for loading trucks with various materials (road salt, sand, stone, leaves, etc.) and is critically important to the operations involving the removal of tree debris, logs, heavy objects, debris from storms, and providing sand for flooded areas. Road salt used during winter season cannot be loaded without the front-end loader. This piece of equipment is also used to pick up and load the majority of leaves for the Village's leaf program.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$2,100.00	Routine Annual Maintenance and periodic repairs

Carryover History

None

Vehicles - Public Works

Aerial Truck #46

FY 2025

\$170,000

CERF

Critical

Recommended

Contingent on Funding

Make International
 Model 4400
 Year 2003
 Purchase Cost \$83,336
 Purchased FY 2003
 Useful Life 15 years
 Current Life 21 years



Vehicle Description

Various personnel in the Operations Division use this aerial truck. The vehicle is equipped with a 55-foot working height utility bucket, emergency lighting, and two-way radio. The vehicle is used for tree trimming, streetlight maintenance, traffic signal maintenance, and installing holiday decorations. The Operations Division has begun outsourcing tree trimming work, reducing the amount of strain on the vehicle.

	Mileage	Hours	Date
Total Vehicle Miles/Hours	19,905	13,257	10/12/2022

Recent Maintenance Costs

Date	Maintenance Performed	Cost
12/16/2011	Repaired PTO	\$485.00
6/1/2012	Annual inspection	\$900.00
7/1/2013	Replaced AC blower motor	\$128.00
6/1/2013	Replaced PTO lines	\$647.00
8/1/2013	Certification inspection	\$900.00
1/1/2014	Replaced air filter and 2 belts	\$114.75
2/1/2014	Repaired heater module	\$364.42
10/1/2015	Replaced batteries	\$207.26
10/1/2015	Certification inspection	\$1,000.00
1/12/2017	Repaired fuel system	\$1,900.00
6/6/2017	Repaired antilock brake sensor and modulating valve	\$1,822.00
8/1/2017	Certification inspection	\$1,100.00
9/12/2017	Repaired brakes and leaking axle seal	\$2,200.00
10/17/2018	Annual inspection and associated repairs; replaced bucket liner	\$3,324.07
8/1/2018	Replaced LED light bar	\$387.68
3/1/2019	Replaced electronic gas pedal	\$840.00
9/1/2019	AC ESC module replaced and programmed	\$2,720.00
3/17/2021	Replaced ABS sensor	\$339.99
4/19/2021	Replaced seat bottom	\$445.00
7/13/2021	Replaced 2 batteries	\$598.00
8/20/2021	Side strobe light	\$97.08
9/1/2021	Safety lane inspection	\$40.00
8/13/2021	DIELECTRIC testing	\$349.00
12/14/2021	Oil cooler seal replacement and Transmission line replaced	\$1,895.15
1/26/2022	Fuel filters changed, air filter changed	\$120.00
2/1/2022	Oil and filter change	\$33.28
3/11/2022	Safety lane sticker	\$40.00
4/25/2022	Rear main seal, water pump, oil pan gasket	\$4,713.52
9/8/2022	Hoses for hydraulic swivel	\$136.32
9/26/2022	Decals and bed level replaced	\$233.00
10/12/2022	Safety lane inspection	\$40.00
Total		\$28,120.52

Project Alternative

This vehicle was originally scheduled for replacement in FY 2018. This vehicle continues to be in good mechanical condition; therefore, Staff recommends deferring its replacement to FY 2025. The vehicle will then be re-evaluated for replacement, and the Village will explore the potential acquisition of alternative fuel or electric vehicles when they become available in the marketplace.

Operational Impact

This vehicle is the only aerial bucket truck in the fleet. Its primary use is tree trimming and streetlight maintenance, and its secondary uses include building maintenance and assisting the Village with holiday decorating.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$2,500.00	Routine Annual Maintenance and periodic repairs

Carryover History

This vehicle was carried over from FY 2018. Because the vehicle is still in good working condition, it is being deferred again to FY 2025.

Vehicles - Public Works

Pickup Truck #48 **FY 2024** **\$65,000** **CERF**

Critical

Recommended

Contingent on Funding

Make Ford
 Model F350 Super Duty
 Year 2012
 Purchase Cost \$31,032
 Purchased FY 2012
 Useful Life 8 years
 Current Life 11 years



Vehicle Description

Various personnel in the Operations Division use this pickup truck to perform tasks throughout the Village. This truck is equipped with emergency lighting, two-way radio, and a nine-foot angling snowplow, used for plowing alleys and parking lots during snow events. The vehicle is also one of three pickup trucks outfitted with a large broom attachment and is used during leaf season to push piles of leaves.

Total Vehicle Miles	53,907	Date	10/12/2022
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Recent Maintenance Costs

Date	Maintenance Performed	Cost
1/14/2015	Repaired rear bumper	\$365.00
12/17/2018	Replaced battery	\$200.00
11/1/2018	Replaced hydraulic pump and motor relay for plow/broom	\$1,500.00
4/1/2019	Body work and left rear backup sensor repaired	\$1,440.00
10/1/2019	Replaced rear brake pads and rotors	\$422.00
1/20/2020	Repaired auto 4X4 system	\$280.00
10/6/2020	Replaced outer tie rod end and aligned front end	\$400.00
10/8/2020	Safety lane inspection	\$40.00
12/7/2020	Air filter	\$14.09
10/18/2021	Safety lane inspection	\$40.00
12/21/2021	Oil and filter change	\$40.97
1/25/2022	Plow replaced upper arm lift assembly	\$389.60
2/1/2022	Air filter replaced	\$18.13
10/12/2022	Safety lane inspection	\$40.00
Total		\$5,189.79

Project Alternative

The alternative is to defer the purchase to later years. The Village will explore the potential acquisition of alternative fuel or electric vehicles when they become available in the marketplace.

Operational Impact

This vehicle was initially scheduled for replacement in FY 2020 and has been deferred due to the vehicle's condition. Staff is recommending again deferring this replacement to FY 2023. This truck is one of ten primary snow plowing vehicles in the Village's snow and ice control fleet. It is also one of three vehicles necessary to push piles of leaves during leaf season. These two operations are very demanding on the drivetrain and suspension systems. A breakdown reduces the Village's snow removal response and extends the time needed to complete snow and leaf removal operations. This unit is used for other tasks that would also be impacted if removed from the fleet.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$650.00	Routine Annual Maintenance and periodic repairs

Carryover History

Carried over from FY 2020 and was again schedule for replacment in FY 2023. Acquisition of a replacment vehicle is dependent upon availability and may be deferred again to FY 2024.

Vehicles - Public Works

Pickup Truck #49 **FY 2025** **\$65,000** **CERF**

Critical
 Recommended
 Contingent on Funding

Make Ford
 Model F350 Super Duty
 Year 2015
 Purchase Cost \$26,676
 Purchased FY 2016
 Useful Life 8 years
 Current Life 8 years



Vehicle Description

Various personnel in the Operations Division use this pickup truck to perform tasks throughout the Village. This truck is equipped with emergency lighting, two-way radio, and a nine-foot angling snowplow, used for plowing alleys and parking lots during snow events. The vehicle is also one of three pickup trucks outfitted with a large broom attachment and is used during leaf season to push piles of leaves.

Total Vehicle Miles	31,344	Date	10/12/2022
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Recent Maintenance Costs

Date	Maintenance Performed	Cost
10/29/2015	Replaced plow hydraulic manifold	\$410.00
1/1/2019	Replaced front wiring harness on plow	\$230.00
6/20/2020	Changed oil and replaced front brakes	\$1,088.89
7/20/2020	Replaced catalytic converters	\$1,702.26
10/1/2020	Safety lane sticker	\$40.00
12/7/2020	Air filter	\$14.09
10/29/2021	Safety lane sticker	\$40.00
12/21/2021	Oil and filter change	\$45.97
1/4/2022	Air filter changed	\$18.13
10/12/2022	Safety lane inspection	\$40.00
Total		\$3,629.34

Project Alternative

The alternative is to defer the purchase to later years or explore the potential acquisition of alternative fuel or electric vehicles when they become available in the marketplace.

Operational Impact

This truck is one of ten primary snow plowing vehicles in the Village's snow and ice control fleet. It is also one of three vehicles necessary to push piles of leaves during leaf season. These two operations are very demanding on the drivetrain and suspension systems. A breakdown reduces the Village's snow removal response and extends the time needed to complete snow and leaf removal operations. This unit is used for other tasks that would also be impacted if removed from the fleet.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$500.00	Routine Annual Maintenance and periodic repairs

Carryover History

This vehicle was scheduled for replacement in FY 2024 and is being deferred to FY 2025 due to the vehicle's current condition.

Vehicles - Public Works

Skid Steer Loader **FY 2028** **\$54,000** **CERF**

Critical

Recommended

Contingent on Funding

Make Bobcat
 Model S590
 Year 2015
 Purchase Cost \$39,087
 Purchased FY 2016
 Useful Life 12 years
 Current Life 7 years



Vehicle Description

The Village's skid-steer loader is a versatile unit that allows Public Works personnel to load and relocate various materials, plow sidewalks during snow removal and break through pavement for water and sewer repairs. The Village owns the following attachments for this unit: bucket (loading various materials such as sand, stone, and topsoil), broom (sweeping), forks (loading pallets and other large items/water and sewer main repairs), v-plow (plowing snow on sidewalks) and a concrete breaker (water and sewer repairs). The Village also owns a flat-bed trailer that is used to transport the skid-steer loader when it is used on projects that are located a significant distance from the Public Works Garage.

Total Vehicle Hours	710	Date	12/2/2022
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Recent Maintenance Costs

Date	Maintenance Performed	Cost
10/7/2015	Replace hydraulic coupler	\$125.00
10/7/2015	Replace hydraulic hoses	\$130.00
9/11/2017	Replace hydraulic coupler	\$116.00
9/12/2017	Replace hydraulic hoses	\$60.00
12/22/2017	Replaced 5 air filters	\$215.00
12/28/2018	Replaced battery	\$260.00
7/1/2019	Replaced tires	\$800.00
9/25/2019	Replaced front window and gasket	\$280.00
3/3/2020	Repalce hydraulic hose	\$104.03
3/20/2020	window latch/knob	\$42.15
12/17/2020	Fuel filter and Hydraulic filters changed	\$145.87
2/3/2021	Quick connect for sweeper attachment	\$68.37
1/26/2022	Engine air filter	\$91.74
1/31/2022	Oil and filter change	\$34.02
Total		\$2,472.18

Project Alternative

Keep the current unit until it fails or rent a skid steer from a local equipment supplier as needed.

Operational Impact

Not having the Skid Steer fully operational greatly reduces the Village's ability to load/move materials, repair water and sewer mains, and plow some of the Village's public sidewalks.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$350.00	Routine Annual Maintenance and periodic repairs

Carryover History

None

Vehicles - Public Works

Pickup Truck #67 **FY 2025** **\$65,000** **CERF/WS**

Critical

Recommended

Contingent on Funding

Make Ford
 Model F350 Super Duty
 Year 2015
 Purchase Cost \$30,814
 Purchased FY 2015
 Useful Life 8 years
 Current Life 9 years



Vehicle Description

Various personnel in the Water Division use this pickup truck to respond to water service calls, JULIE locates, and water system emergencies. This truck is equipped with emergency lighting, two-way radio, and a nine-foot angling snowplow, used for plowing alleys and parking lots during snow events. The vehicle is also one of three pickup trucks outfitted with a large broom attachment and is used during leaf season to push piles of leaves.

Total Vehicle Miles	33,257	Date	9/9/2022
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Recent Maintenance Costs

Date	Maintenance Performed	Cost
Various dates	Three oil changes	\$125.00
12/21/2017	Replaced battery	\$161.00
12/1/2018	Replaced tires	\$800.00
1/1/2019	Replaced plow wiring harness	\$230.00
6/20/2020	Replaced catalytic converters	\$1,658.48
9/23/2020	Safety lane sticker	\$40.00
9/24/2020	oil change	\$53.22
12/7/2020	Air filter	\$14.09
6/24/2021	oil change	\$55.22
9/1/2021	Safety lane inspection	\$40.00
12/21/2021	Oil and filter change	\$45.97
1/4/2022	Air filter changed	\$18.13
9/9/2022	Safety lane inspection	\$40.00
Total		\$3,281.11

Project Alternative

The alternative is to defer the purchase to later years. The Village will explore the potential acquisition of alternative fuel or electric vehicles when they become available in the marketplace.

Operational Impact

This truck is one of ten primary snow plowing vehicles in the Village's snow and ice control fleet. It is also one of three vehicles necessary to push piles of leaves during leaf season. These two operations are very demanding on the drivetrain and suspension systems. A breakdown reduces the Village's snow removal response and extends the time needed to complete snow and leaf removal operations. This unit is used for other tasks, which would also be impacted if removed from the fleet.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$650.00	Routine Annual Maintenance and periodic repairs

Carryover History

This vehicle was scheduled for replacement in FY 2023, was deferred to FY 2024 due to the vehicle's current condition. It is being deferred again to FY 2025.

Vehicles - Public Works

Transit Connect Van #68 (Engineering) FY 2026 \$27,540 CERF/WS

Critical

Recommended

Contingent on Funding

Make Ford
 Model Transit Connect Van
 Year 2015
 Purchase Cost \$19,076
 Purchased FY 2016
 Useful Life 8 years
 Current Life 7 years



Vehicle Description

Personnel in the Engineering Division use this vehicle. This vehicle was purchased as a replacement for Truck #62. The Village Engineer uses it to inspect Village infrastructure and monitor capital projects throughout the Village.

Total Vehicle Miles	7,449	Date	12/5/2021
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Recent Maintenance Costs

Date	Maintenance Performed	Cost
6/1/2018	Oil change	\$75.00
2/24/2022	Tire repair and right mirror replacement	\$437.08
Total		\$512.08

Project Alternative

The alternative is to defer the purchase to later years or explore the potential acquisition of an alternative fuel or electric vehicle.

Operational Impact

This unit is the primary vehicle for the Engineering Division within the Public Works Department. It is used to monitor the maintenance and inspection of projects as they occur within the Village.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$125.00	Routine Annual Maintenance and periodic repairs

Carryover History

This vehicle is scheduled for replacement in FY 2025 and is being deferred to FY 2026 due to the vehicle's current condition.

EQUIPMENT



Equipment – Five Year Capital Improvement Program

The Equipment section of the Capital Improvement Program (CIP) identifies which capital equipment items need to be repaired, replaced, or acquired new over the next five years. This section of the CIP identifies all equipment other than vehicles.

As with other sections of the CIP, these improvements are targeted for specific years and are usually financed through the Capital Equipment Replacement Fund (CERF). The following improvements are proposed for FY 2024:

Equipment	Cost of Equipment	Funding Source	This Project is:
Automatic License Plate Reader (PD)	\$ 57,544	CERF	Critical
Police Radios-Handheld and In-Car (PD)	\$ 42,868	CERF	Critical
Digital In-Car Cameras (PD)	\$ 85,920	CERF	Critical
Street Camera System Optimization (PD)	\$ 107,247	CIF	Critical
Body Worn Camera System (PD)	\$ 190,000	GF	Critical
SCBA (FD)	\$ 26,000	CERF	Recommended
EV Station Planning	\$ 50,000	CIF	Contingent
Total	559,579		

Each project in the CIP is categorized by the requesting department as follows:

Critical- The project must be completed in the year recommended due to safety or operational needs or as mandated by law.

These projects are highlighted in yellow.

Recommended- The project will significantly improve operations or safety. The project is strongly recommended for funding in the year recommended or the year after.

Contingent on Funding- The project would benefit the Village and improve service levels but is only recommended if funds are available.

Village of River Forest, Illinois
Five Year Capital Improvement Program
Equipment
Fiscal Year 2024 Budget

	This Project is:	Fiscal Year					Five Year	Funding Source
		2024	2025	2026	2027	2028	Total	
Police Department								
Automatic License Plate Reader	Critical	57,544	-	-	-	-	57,544	CERF
Live Scan System	Recommended	-	26,530	-	-	-	26,530	CERF
Overweight Truck Scales	Recommended	-	19,305	-	-	-	19,305	CERF
Pole Mounted Radar	Recommended	-	26,884	27,422	-	-	54,306	CERF
Police Radios	Critical	42,868	43,725	46,365	47,292	-	180,250	CERF
Radar	Recommended	-	39,902	-	-	-	39,902	CERF
Speed Monitor Trailer	Recommended	-	-	-	19,553	-	19,553	CERF
Village Hall Camera System	Recommended	-	-	-	-	72,760	72,760	CERF
Digital In-Car Cameras	Critical	85,920	-	-	-	-	85,920	CERF
Street Camera System	Recommended	-	-	-	206,544	-	206,544	CERF
Street Camera System Plan Implementation	Critical	107,247	45,986	-	-	-	153,233	CIF/N-TIF
Taser-Less Lethal Equipment	Recommended	-	34,920	-	-	-	34,920	CERF
Body Worn Camera System	Critical	190,000	-	-	-	-	190,000	GF
Automatic License Plate Reader Systems	Recommended	-	48,800	48,800	-	-	97,600	CIF/N-TIF
Fire Department								
Hydraulic Extrication Equipment	Contingent	-	65,000	-	-	-	65,000	CERF
Self-Contained Breathing Apparatus	Recommended	26,000	27,820	29,768	31,852	34,082	149,522	CERF
Public Works								
Stump Grinder	Recommended	-	75,000	-	-	-	75,000	CERF
Stainless Steel V-Box Salt Spreader (Large)	Critical	-	23,000	-	-	-	23,000	CERF
Stainless Steel V-Box Salt Spreader (Small #1)	Critical	-	20,000	-	-	-	20,000	CERF
Sewer Televising System	Critical	-	-	91,000	-	-	91,000	CERF/WS
Asphalt Kettle	Recommended	-	35,000	-	-	-	35,000	CERF
Salt Brine Equipment	Recommended	-	26,000	-	-	-	26,000	CERF
6" Trash Pump #1	Critical	-	22,000	-	-	-	22,000	CERF/WS
EV Station Planning	Contingent	50,000	50,000	50,000	50,000	50,000	250,000	CIF
Total		559,579	629,872	293,355	355,241	156,842	1,994,889	

Proposed Funding Source	Fiscal Year					Five Year
	2024	2025	2026	2027	2028	Total
Capital Equipment Replacement Fund (CERF)	212,332	463,086	103,555	305,241	106,842	1,191,056
Capital Improvement Fund (CIF)	82,175	144,786	74,400	50,000	50,000	401,361
Capital Improvement Fund / Grant (CIF/Grant)	-	-	-	-	-	-
General Fund (GF)	190,000	-	-	-	-	190,000
Water/Sewer (WS)	-	-	-	-	-	-
CERF - Water and Sewer (CERF/WS)	-	22,000	91,000	-	-	113,000
Madison Street TIF Fund (M-TIF)	-	-	-	-	-	-
North Avenue TIF Fund (N-TIF)	75,072	-	24,400	-	-	99,472
Totals	559,579	629,872	293,355	355,241	156,842	1,994,889

Equipment - Police

Automatic License Plate Reader Systems	FY 2024	\$57,544	CERF
	FY 2029	\$63,591	CERF

- Critical
- Recommended
- Contingent on Funding

Original Purchase Date	FY 2017-19
Cost	\$39,195
Funding History	N/A



Project Description & Justification

The Automated License Plate Readers (ALPR) are a third-generation plate reader currently installed in squad cars #6, #10, and three fixed camera locations at Lake/Thatcher, Lake/Harlem, and North/Harlem. The vehicle ALPRs consist of two cameras mounted on top of the car roof, identifying license plates through recognition software. The license plate is compared to a database of wanted vehicles (Hit List) and alerts the user that a particular car is wanted for the commission of a crime. All license plate data is stored on a server and can be plotted on a map and retrieved later as part of an investigation. In addition, investigators and officers can enter plates to identify cars currently on the Boot List or that are wanted locally for investigative purposes. Since FY 2020, the ALPRs are used as part of the Village's automated PassPort Parking Program, which notes vehicles in timed zones and determines Village parking permits in Village-owned lots/zones.

The ALPRs were purchased in FY 2017 and FY 2019. The ALPRs have read 6,975,589 license plates in calendar year 2022 as of November 30, 2022. The ALPRs have recorded 80,979 "hits", or alerts, during the same time period. The hits alert personnel that something is wrong with a particular vehicle (stolen, wanted, suspended, registered sex offenders, etc.). Staff also manually enter cars eligible for the Denver Boot. The ALPR identified two (2) vehicles eligible for the boot in 2022, with over \$2,400 collected in fines/fees. Also, eleven (11) Administrative Holds were identified using the ALPR, which led to \$5,500 in Administrative Fees to be collected. In addition, traffic stops initiated from an ALPR "hit" resulted in, two (2) criminal arrests, two (2) warrant arrests, eighteen (18) traffic arrests, forty-six (46) citations, and were used to identify and locate two (2) vehicles used in crimes that occurred in a neighboring town.

Staff continues to monitor the performance of this technology to determine if it should be expanded for use on additional squad cars or to fixed-location ALPR cameras in the business, medical, school districts, and/or TIF districts. This technology has been successful with the Village's permit parking and parking enforcement program (PassPort). In addition, the ALPR Systems complement evidence located on the Village's Street Camera System.

Fixed ALPR	Equipment	Installation	Licensing	Total
3 Units	\$1,700.00	\$2,500.00	\$500.00	\$4,700.00
Vehicle ALPR				
2 Units	\$18,727.00	\$2,500.00	\$500.00	\$21,727.00
			Total	\$57,554.00

Project Alternative

The ALPR is a beneficial tool and has yielded results. With previous models, the useful life of this equipment is approximately five years.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None with extended warranty	\$2,500/year annual maintenance/licensing

Carryover History

This project was deferred from FY 2023 to FY 2024. 58

Equipment - Police

Live Scan System **FY 2025** **\$26,530** **CERF**

Critical

Recommended

Contingent on Funding

Original Purchase Date FY 2018
Cost \$0
Funding History N/A



Project Description & Justification

The Live Scan System is an automated fingerprint system that creates digital images of an arrestee’s fingerprints. Once digitized, the prints are sent to several entities, including the Illinois Bureau of Identification, Chicago Police Department, and FBI, and are stored in their databases. This system is currently in use by, and connected to, all of the Cook County municipalities and streamlines the identification process. The life expectancy of the current system is six to eight years. The Village did not incur any costs for the initial system supplied by Cook County and the State of Illinois in 2004 or for the new system installed in November 2017.

Project Alternative

Although the cost of replacement has been funded by Cook County and the State of Illinois in the past, there is no available information providing municipalities with future funding for this mission-critical automated fingerprint system. The Village should continue to fund this equipment in case the financial responsibility of the next system is passed on to the municipality. The Live Scan Equipment is considered mission-critical to daily police operations.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	Repairs covered by Cook County

Carryover History

This item continues to be carried over for future fiscal years. Replacement is dependent on Cook County decisions, protocols for upgrading to a new system, and funding options.

Equipment - Police

Overweight Truck Scales

FY 2025

\$19,305

CERF

Critical

Recommended

Contingent on Funding

Original Purchase Date FY 2006
Cost \$16,600
Funding History N/A



Project Description & Justification

The Police Department currently owns four truck scales. These scales are placed under each of the tires of a suspected overweight vehicle. If determined to be overweight, the fine could be substantial depending on the violation. The Police Department conducts annual overweight truck enforcement missions, and the dayshift patrol has a trained enforcement officer who does periodic enforcement, separate from the planned missions. Overweight trucks are a detriment to Village streets because they decrease the life of the pavement through excessive wear. The scales are certified by the Illinois State Police annually. The useful life expectancy of the scales is ten years.

Project Alternative

The enforcement officers will have to seek alternate weigh scales without the portable truck scales. This would require the truck enforcement officer to follow the truck to an alternate location outside the Village’s jurisdiction, increasing the amount of time on the traffic stop and decreasing officers’ availability. The purchase of this equipment may be deferred depending on the condition of the scales at the time of budget planning.



Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$1,000/year	Annual Re-certification of Equipment

Carryover History

Although the scales have reached their useful life expectancy, replacement of these scales has been carried over from FY 2019. They are currently in full working order. Each year the scales are re-certified by the State of Illinois. They will require replacement only if found deficient by the State or if a newer, more efficient technology becomes available. The equipment will be carried over from FY 2024 to FY 2025.

Equipment - Police

Pole Mounted Radar Speed Display Signs	FY 2025	\$26,884	CERF
	FY 2026	\$27,422	CERF
<input type="radio"/> Critical	<input checked="" type="radio"/> Recommended	<input type="radio"/> Contingent on Funding	
Original Purchase Date	FY 2020		
Cost	\$26,200		
Funding History	FY 2019 - FY 2020		

Project Description & Justification

The Pole Mounted Radar Speed Display Signs are cost-effective solutions for traffic calming in residential neighborhoods, park areas, school zones, business districts, financial districts, and any location where vehicular, pedestrian, and bicyclist traffic is intermingled. These highly visible signs are strategically placed to get drivers' attention and provide an immediate reminder to slow down. These thirteen (13) signs act as a 24-hour a day force multiplier to police patrol units and can be used to address/monitor citizen-driven complaints. The signs assist in the Village's mission to provide professional public safety services and reduce accidents. The Public Works and Police Departments work together to identify locations where vehicles are known to travel at higher rates of speed and where increased risks to the general public need mitigation. The new pole mounted signs have software to conduct traffic counts and calculate average speed traveled, which benefit both the Police and Public Works Departments for engineering and enforcement analysis. In addition, the use of this type of software assists with providing accurate data for grant writing opportunities.

The Pole Mounted Speed Radar Signs come with a dual-display with speed and message display and solar-powered. As of November 30, 2022, the solar-powered versions have been operating effectively. The useful life of this equipment is five years.

Project Alternative

The alternatives to purchasing this equipment would be to increase the use of officers to monitor multiple areas for speeding violations and buy additional Speed Radar Trailers. Having speed radar equipment mounted permanently or for extended periods is a more effective and efficient use of Village resources. As the demand for pole mounted radar signs increases, a more comprehensive analysis of their strategic deployment throughout the community is in order.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$1,500	Periodic maintenance - battery replacement

Carryover History

None

Equipment - Police

Police Radios-Handheld and In-Car	FY 2024	\$42,868	CERF
	FY 2025	\$43,725	CERF
	FY 2026	\$46,365	CERF
	FY 2027	\$47,292	CERF

Critical

Recommended

Contingent on Funding

Original Purchase Date	FY 2020-FY 2023
Cost	\$34,380
Funding History	FY 2010-FY 2021



Project Description & Justification

The use of portable and in-car radios for public safety communication is imperative for rapid and effective response to any call for service. Radio communications allow the appropriate personnel and equipment to respond to an event. It enhances officer and citizen safety and provides immediate mission-critical information to be broadcast to individual officers or regional agencies monitoring the radio channel. Today's radios allow for many options such as analog/digital crossover, voice and data transmissions, Bluetooth, encryption, talk groups, priority channel scans, and GPS location tracking. Newer technology also allows for radio channel capacities that range from 32-300 channel allotment and can communicate with other local, county, state, and federal agencies. It is also possible to communicate across other discipline lines such as fire, public works, and emergency management.

The police radio program includes a mix of Village-owned single-band radios and dual-band radios owned exclusively by the Cook County Department of Homeland Security. Both types of radios are nearing or are past the end of life. In addition, Cook County can request the immediate return of their radio equipment at any time. Newer radio models and recent technology allows for tri-band radios in the handheld format and some dual-band in-car radios. The newer tri-band technology enhances interoperability over the VHF, UHF, and 800 MHz spectrums, improved voice clarity, and longer-lasting batteries. This multi-year project spans from FY 2021 - FY 2028.

Fiscal Year Projects include FY 2021 five (5) VHF-only handheld radios; FY 2022 no purchases; FY 2023 five (5) Tri-band handheld radios; FY 2024 five (5) Tri-band handheld radios; FY 2025 five (5) Tri-band handheld radios; and FY 2026 five (5) Tri-band handheld radios.

Project Alternative

If the FY 2023-2026 WSCDC budgets allow for a group purchase for all WSCDC communities, it may reduce some costs to the Village. Public safety radios are mission-critical equipment used in day-to-day normal and emergency operations. A leasing option may be available for the handheld units but may not be supported for in-car mobile radios.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$2,500	Periodic maintenance and battery replacement

Carryover History

None

Equipment - Police

Radar-Vehicle and Handheld	FY 2025	\$39,902	CERF
	FY 2031	\$44,985	CERF

- Critical
- Recommended
- Contingent on Funding

Original Purchase Date	FY 2010-2020
Cost	N/A
Funding History	FY 2020-2021



Project Description & Justification

Law enforcement vehicle-mounted and handheld radar units measure the speed of autos, trucks, and motorcycles on public roadways. This proven traffic enforcement and traffic calming technology have been an effective tool for police agencies for several decades. In River Forest, like other communities, the number one citizen-driven complaint is speeding vehicles on both the main and secondary streets within the Village. The industry standard for establishing probable cause and proving traffic violations in court has been the use of radar devices. This technology provides for the accurate measurement of speed.

The Police Department currently deploys seven in-car radar units and three handheld units. The in-car radar units are mounted in the six front-line squad cars and the dedicated traffic enforcement unit. The three handheld radar units are used by officers assigned to plainclothes units or secondary line squad cars. The addition of an eighth in-car radar unit will allow a system to be installed in the School Liaison Officer's marked squad car for use as part of his regular duties of ensuring school zones are safe for both vehicles and pedestrians. The current handheld and in-car radar units are past or near end of life. A recommended lifespan of these systems is five to seven years. The updated radar technologies draw less power which cuts down on vehicle battery and alternator maintenance. In addition, the new systems will improve the overall effectiveness and efficiency of traffic enforcement operations of the department.

The cost of eight in-car radar systems is \$25,957 (@ \$3,245 per unit). Installation is estimated at \$500 per unit. The cost of three (3) lidar/photo handheld radar units is \$9,945.

Project Alternative

The use of radar for speed enforcement is an industry-standard. The use of pole mounted speed radar enforcement cameras as an alternative is prohibited under Illinois state law for small municipalities. Lidar, another speed enforcement technology, may be cost-prohibitive because the costs are 30% to 50% more than the standard radar systems.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
Warranty for three years; \$1,500 annual certification	Periodic Maintenance and Battery Replacement

Carryover History

This project was deferred from FY 2021, FY 2022, FY 2023, FY 2024 to FY 2025.

Equipment - Police

Speed Monitor/Message Board Trailer **FY 2027** **\$19,553** **CERF**

Critical

Recommended

Contingent on Funding

Original Purchase Date FY 2017
Cost \$13,556
Funding History N/A



Project Description & Justification

The 2 Speed Monitor/Message Trailers monitor speed and alert drivers traveling over the posted speed limit. The Public Works and Police Departments work together to identify locations where vehicles are known to travel at higher rates of speed, and the trailers are placed in those areas. The trailers are also placed in areas based on complaints/requests from residents or police officers. The new speed trailers can conduct traffic counts and calculate average speed traveled, which will benefit both the Police and Public Works Departments. The message board adds the ability to alert drivers to detours and reminds drivers to watch their speed. Some models can take photos of violators’ vehicles. The lifespan of this equipment is approximately 9 years.

Project Alternative

The alternative to purchasing this equipment would be to have an officer monitoring an area for speeding violations. Although this often happens (officers enforcing speed limits) as part of traffic enforcement missions, utilizing a speed trailer is an additional tool to control excessive speed. In addition, the purchase of stand-alone message boards without radar capability would have to be considered to provide the community with visible alerts on the street.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
Warranty for one year; \$1,000 battery replacements	Periodic maintenance - battery replacement

Carryover History

None

Equipment - Police

Village Hall Camera System

FY 2028

\$72,760

CERF

Critical

Recommended

Contingent on Funding

Original Purchase Date FY 2019
Cost \$90,500
Funding History N/A



Project Description & Justification

The Village currently has 40 fixed digital cameras located inside and around the exterior of the Village Hall. The camera system is supported by software and hardwired to the server. The cameras can be monitored by supervisors, the dispatch center, and patrol officers on their squad car laptops or desktop computers. They monitor the booking room, interview rooms, and prisoner cells along with the front doors and lobby. These cameras are fixed with the majority mounted inside the building, they have no moving parts, so they have a longer useful life. The estimated life of this equipment is approximately seven to ten years. These cameras assist with providing overall building security for employees, public officials, residents, visitors, and arrestees. The system enhances the liability protection strategies recommended by IRMA, the Village's insurer. The Village's IT consultant and camera vendor estimate that camera replacement costs are \$1,819 per camera.

Repair/Improvement	Estimated Cost	Fiscal Year
Replace internal cameras as needed (40 @ \$1,819 per unit)	\$ 72,760	FY 2028
Total Project Cost	\$ 72,760	

Project Alternative

As with any technology, the hardware and software become outdated and should be replaced with newer technology. The continuation of this program is highly recommended. These cameras assist with providing overall building security for employees, public officials, residents, and visitors.

Project Impact

There is no annual service fee for this program.

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$7,000.00	Once replaced there is no recurring annual costs for maintenance.

Carryover History

None

Equipment - Police

Digital In-Car Cameras	FY 2024	\$85,920	CERF
<input checked="" type="radio"/> Critical <input type="radio"/> Recommended <input type="radio"/> Contingent on Funding			
Original Purchase Date	FY 2017		
Cost	\$50,761		
Funding History	N/A		



Project Description & Justification

The eight front-line vehicles and the marked traffic unit currently have digital cameras mounted to the dashboard. The cameras/audio system is used during traffic stops and arrests for recording purposes. Evidence obtained during a traffic arrest is utilized during a trial. The traffic stop videos are downloaded on a server and stored for a minimum of 90 days or longer, depending on the type of incident. Any future upgrades to the in-car camera system may require upgrades to the data storage system on the Village’s computer network. The in-car cameras have an expected lifespan of seven years. Each camera system costs \$10,740 which includes installation costs per unit.

Project Alternative

Digital in-car cameras are a necessary tool that helps protect the Village and its officers from false accusations, obtain evidence to support criminal convictions, and increase police transparency for the public. Replacement is highly recommended.

Project Impact

There is no annual service fee for this program.

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$3,100	Repair/Replacement of equipment

Carryover History

None

Equipment - Police

Street Camera System (Original Project)

FY 2027

\$206,544

CERF

Critical

Recommended

Contingent on Funding

Original Purchase Date

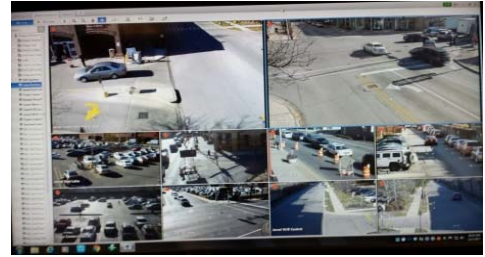
FY 2018

Cost

\$110,517

Funding History

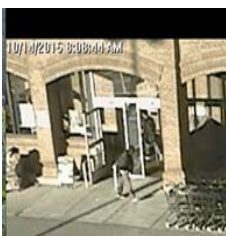
N/A



Project Description & Justification

The Village currently has 20 Pan-Tilt-Zoom (PTZ) digital cameras located along the business corridor on Lake Street and 40 fixed cameras in and around Village Hall. The camera system is supported by software, servers, and a wireless antenna system. The cameras can be monitored by supervisors, the dispatch center, and patrol officers on their squad car laptops, desktops, or video monitors. The digital images are stored for a minimum of 90 days and are used as evidence in criminal cases. The PTZ cameras have moving parts and are out in the elements; therefore, they are prone to a shorter life expectancy than fixed cameras. The estimated life of the equipment is approximately five to eight years. Future CIP processes may combine Village Hall, Street Cameras, and future camera expansion projects for planning and funding purposes. A strategic planning study by the Village's IT consultant in FY 2020 included a recommendation for future program expansion, equipment costs, infrastructure upgrades, IT costs, and maintenance costs. That information is in the Information Technology section of the CIP.

This program has been very successful as a force multiplier. Officers routinely refer to the cameras to identify suspects involved in criminal activity, and the Detectives use the footage to create still shots of suspects for bulletins. Below are some images of suspects captured on the camera system and later identified as perpetrators of a crime. It also allows for 24-hour situational awareness of weather conditions and pedestrian/traffic flow.



Retail Theft



Retail Theft



Bike Theft



Burglary



Drug Deal



Robbery



Not only are the cameras used for helping to identify criminal suspects, but the cameras have also been used for situational awareness. For example, during the blizzard of 2011, the Public Works department monitored the snow accumulation and effects on traffic along the Lake Street business corridor.

Repair/Improvement	Estimated Cost	Fiscal Year
Camera System Servers	\$68,848	FY 2027
Street Camera System	\$68,848	FY 2027
Wireless Point to Point Antenna/Backhaul	\$68,848	FY 2027
Total Project Cost	\$206,544	

Project Alternative

Due to the nature of this system, there is no salient alternative if the project is not funded in the future. The continuation of this program is highly recommended.

Project Impact

There is no annual service fee for this program.

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$7,000.00	Maintenance Contract

Carryover History


During the past three fiscal years, the Village replaced most servers, drivers, storage, software, cables, backup batteries, antennas, mounting hardware, and cameras. Some equipment may have a longer lifespan, which may reduce some estimated costs or allow for partial carryover of some equipment. At this time, the project will be carried over from FY 2024 to FY 2027. During FY 2022, the Village's vendor completed the project and presenting an updated plan for FY 2027 and FY 2028 to create two phases and provide an updated equipment and installation plan. It is believed that the overall costs will be reduced, and the project may be extended past FY 2027. The multi-year implementation of the Strategic Village Camera Expansion Plan is expected to run from FY 2022 to FY 2025. The Village's IT and camera vendor anticipate that replacement of both the Strategic Expansion Plan and the Original Camera System will be combined for future planning and funding purposes in the coming fiscal years.

Equipment - Police

Street Camera System Strategic Plan Implementation		CIF	M-TIF	N-TIF
	FY 2024	\$32,175	\$0	\$75,072
	FY 2025	\$45,986	\$0	\$0

Critical
 Recommended
 Contingent on Funding

Original Purchase Date	N/A
Cost	N/A
Funding History	New Project



Project Description & Justification

The Village has improved and expanded its street camera system over the past few years. This asset serves as a force multiplier for the Police Department and is a constant tool for day-to-day operations. Due to the expanding needs for the wireless network, equipment, and storage, paired with the desire to continue to expand the system, the Village completed a review and planning process in FY 2020 to determine best practices and needs going forward. This plan formulated recommendations for future expansion and maintenance throughout the Village. During FY 2021, the Village completed upgrades to the storage and software system that operates the street cameras and entered into an agreement with a new vendor for maintenance service and future expansion. Phase 1 of the plan included expanding the Village's camera system to the south side of the Village, primarily along Madison Street and Washington Boulevard, in FY 2022. Phase 2 of the plan included installation of additional equipment in the areas between Chicago Avenue and Augusta Boulevard in FY 2023.

Recommended for FY 2024

Phase 3 - North Expansion - \$107,247 (North - TIF - \$75,072; Thatcher - CIF - \$32,175)

Phase 3 includes expanding the Village's camera system to the central corridors of town, primarily along North Avenue and Division Street as they intersect Harlem Avenue, Lathrop Avenue, and Thatcher Avenue. In total, the expansion includes five camera sites consisting of nine cameras. The proposed cost includes all hardware, software, licensing, radio equipment, electric work, and consulting labor. Five of the seven proposed work locations are within the North Avenue TIF and are a TIF-eligible public safety enhancement. TIF funds will be used to help fund this project.

Recommended for FY 2025

Phase 4 - Optimization of Existing Infrastructure - \$45,986

Phase 4 includes the replacement and standardization of existing equipment at five locations in total. The proposed cost includes all hardware, software, licensing, radio equipment, electric work, and consulting labor.

Project Alternative

An alternative to this phasing plan would be to continue operating in a reactive manner and address issues as they arise. Additionally, the Village could elect to continue to expand on a case-by-case basis or not expand the system. These alternatives are not recommended due to difficulties created and efficiencies lost by completing the project piecemeal.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$7,000	Projected annual maintenance contract.

Carryover History

None

Equipment - Police

Taser-Less Lethal Equipment	FY 2025	\$34,920	CERF
<input type="radio"/> Critical <input checked="" type="radio"/> Recommended <input type="radio"/> Contingent on Funding			
Original Purchase Date	FY 2015-2017		
Cost	\$16,700		
Funding History	GF		

Project Description & Justification

The program was initiated in December 2014, and the Department currently has eight Tasers in service and currently deploys the Taser X26 model. The Taser is one of the several less-lethal force options that officers carry daily. Officers must attend training and complete ongoing certifications to carry this tool. The Department has several members certified as trainers. This device allows officers to maintain a safe distance when attempting to render a threat incapable of fighting back or attacking another individual. The useful life of this model is five to seven years. In October 2019, Taser introduced model 7, which has an advanced flashlight, laser, accuracy, multiple shot deployment, and electronic reporting capabilities. The Taser 7 model costs \$4,365 per unit (with extended warranty and accessories).

Project Alternative

There is no project alternative to this less-lethal conductive energy weapon (CEW) that offers options to the use of a lethal firearm or the close-quarter less-lethal OC Spray and standard baton. The Taser is recommended by IRMA, the Village's insurer, due to research data that show reductions in both offender and officer injuries and death.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$2,020	Replacement batteries and cartridges.

Carryover History

Carried over from FY 2022, FY 2023, FY 2024 to FY 2025.

Equipment - Police

Body Worn Camera System	FY 2024	\$190,000	GF
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Critical
 Recommended
 Contingent on Funding

Original Purchase Date
Cost
Funding History

N/A
 N/A
 New Project



Project Description & Justification

The Illinois SAFE-T Act was enacted in 2021. The law requires that Law Enforcement Agencies in Illinois equip and train sworn law enforcement with Body Worn Camera systems by January 1, 2025. The Department does not currently have an entire Body Worn Camera System, including equipment, hardware, software, and storage. The project would receive funding for FY 2024 and purchase the whole system in FY 2024. The software licensing agreements are valid for three years. Funding in FY 2027 will be used to renew licensing. The licensing costs include access to the video and information stored on servers. A determination will need to be made if the video and information will be stored on a cloud server, local server, or other storage options. Additionally, licensing allows the use of redaction software required for privacy and FOIA restrictions.

Project Alternative

There is no project alternative to this equipment as State Law mandates that all Law Enforcement Agencies in Illinois must have Body Worn Cameras assigned to sworn law enforcement officers by January 1, 2025. The Village will pursue all available grant funding, including through its insurance carrier, to offset the cost of this purchase.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
Under Extended Warranty for three years	Periodic Maintenance and Battery Replacement

Carryover History

None

Equipment - Police

Automatic License Plate Reader Expansion		CIF	N-TIF
	FY 2025	\$48,800	\$0
	FY 2026	\$24,400	\$24,400
<input type="radio"/> Critical <input checked="" type="radio"/> Recommended		<input type="radio"/> Contingent on Funding	
Original Purchase Date	N/A		
Cost	N/A		
Funding History	N/A		



Project Description & Justification

This project is new and is meant to augment and enhance the existing ALPR project. The ALPR system functions as the license plate is compared to a database of wanted vehicles (Hit List) and alerts the user that a particular car is wanted for the commission of a crime. All license plate data is stored on a server and can be plotted on a map and retrieved later as part of an investigation. In addition, investigators and officers can enter plates to identify cars currently on the Boot List or that are wanted locally for investigative purposes. Since FY 2017, the ALPRs are used as part of the Village's traffic calming plan.

Staff recommends that the ALPR project be expanded for use to fixed-location ALPR cameras in the business, medical, school districts, and/or TIF districts as recommended in the Street Camera System Strategic Plan from FY 2020. This newer technology has been successful in reducing citizen speeding complaints. In addition, the ALPR Systems complement evidence located on the Village's Street Camera System. Each phase of the project will cost \$48,800 for the installation of four ALPRs, with a total of eight new cameras installed.

Year	Number of Units	Equipment	Electrical	Installation	Licensing	Total
2025	4	\$1,700.00	\$7,500.00	\$2,500.00	\$500.00	\$ 48,800.00
2026	4	\$1,700.00	\$7,500.00	\$2,500.00	\$500.00	\$ 48,800.00

Project Alternative

The ALPR is a beneficial tool and has yielded results. With previous models, the useful life of this equipment is approximately five to seven years.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None with extended warranty	\$4,000/year annual

Carryover History

New Project

Equipment - Fire

Hydraulic Extrication Equipment	FY 2025	\$65,000	CERF
<input type="radio"/> Critical <input type="radio"/> Recommended <input checked="" type="radio"/> Contingent on Funding			
Original Purchase Date	FY 2013		
Cost	\$32,640		
Funding History	N/A		



Project Description & Justification

This project aims to upgrade and replace the hydraulic extrication tools on the frontline engine and Quint. Firefighting crews operate this equipment during vehicular accidents and technical rescue responses. The current tools have been in use for nine years with a planned useful life of ten years. New technology allows for lighter weight tools and more powerful lifting, spreading, and cutting pressures. New power units may be all-electric (battery-powered) in the future, taking up less space on the apparatus. The Genesis extrication equipment has state-of-the-art tools, which are lighter, faster, and easier for personnel to operate, thereby reducing the potential for back injuries and strains.

Project Alternative

Evaluate new technology as the useful life limit approaches.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$550 after one year	Annual maintenance after first year warranty period expires.

Carryover History

None

Equipment - Fire

Self-Contained Breathing Apparatus (SCBA)	FY 2024	\$26,000	CERF
	FY 2025	\$27,820	CERF
	FY 2026	\$29,768	CERF
	FY 2027	\$31,852	CERF
	FY 2028	\$34,082	CERF

Critical
 Recommended
 Contingent on Funding

Original Purchase Date FY 2016
Cost \$110,200
Repairs (through 11/30) \$0



Project Description & Justification

This project aims to upgrade and replace 4 self-contained breathing apparatus (SCBAs) each fiscal year over the next 5 years. This equipment is a critical part of the firefighter’s personal protective equipment (PPE). The NFPA standard for SCBAs update is every five years. Upgrades enhance the safety of firefighters when operating in an IDLH (immediately dangerous to life and health) atmosphere. Future replacements will be purchased on a yearly schedule to avoid large expenditures in one fiscal year.

Project Alternative

The Village applies for grants through the Assistance to Firefighters Grant Program (AFG) for 18 SCBA’s, which is the maximum number of units we can apply for under grant guidelines. The grant covers 95% of the cost of the equipment and the Village must contribute the remaining 5%. The Village would have to utilize the CERF to fund the cost of the remaining two SCBAs.

Purchasing new SCBAs will require the Village to contribute a one-time expense for seven SCBA face pieces and to equip all personnel and spare units on each vehicle. All compressed air bottles require hydrostatic testing every five years and the purchase of new equipment will provide a savings to cover those costs.

The alternative to this purchase is to continue maintaining outdated, non-compliant (NFPA Standard) air packs that provide sufficient protection when operating properly.


Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$2,000 in maintenance costs for annual testing and \$1,000 in parts replacement.	Continue annual maintenance & flow testing after second year.

Carryover History

None

Equipment - Public Works

Stump Grinder	FY 2025	\$75,000	CERF
<input type="radio"/> Critical <input checked="" type="radio"/> Recommended <input type="radio"/> Contingent on Funding			
Make	Carlton		
Model	7500		
Purchase Cost	\$20,000		
Purchased	FY 2000		
Useful Life	15 years		
Current Life	22 years		

Project Description & Justification

This equipment grinds tree stumps utilizing a rotating cutting disk that chips away the tree stump located on the Village right-of-way (typically the parkway). It is the only piece of equipment in the Village’s fleet that can perform this operation.

Total Equipment Hours	1,249	Date	12/2/2022
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Recent Maintenance Costs

Date	Maintenance Performed	Cost
7/2013	Replace fan belt	\$12.00
9/2013	Replace worn cutting teeth	\$150.00
8/2014	Replace worn cutting teeth	\$200.00
9/2014	Replace fan belt	\$825.00
9/2014	Replace worn cutting teeth	\$175.00
4/2015	Replace remote control	\$678.45
1/2019	oil change and oil filter, fuel filter and hydraulic filter replaced	\$15.14
12/2019	Oil change, fuel filter and hydraulic filter changed	\$22.38
12/2020	Oil change and oil , fuel and hydraulic filters	\$22.36
7/2021	Replace cutting wheel bearings, 4 pockets and 7 teeth.	\$950.00
1/2022	Oil change and oil filter. Hydraulic and fuel filter change	\$30.22
Total		\$3,080.55

Project Alternative

Alternatives to replacing the stump grinder are as follows:

1. Defer replacing the system until it breaks down completely.
2. Purchase a used stump grinder.
3. Lease a stump grinder.
4. Outsource all stump grinding services.
5. Incorporate stump grinding into the tree removal contract and maintain the current unit to grind stumps from in-house tree removals. This would reduce the workload on this piece of equipment by half or more and extend the life of the stumper.

Staff will analyze other alternatives and evaluate closer to the scheduled replacement of this equipment.

Operational Impact

Although there are alternatives for performing and/or providing for the removal of parkway tree stumps, not performing or providing this service would create trip hazard liabilities to the Village by eliminating the Village’s capacity to remove tree stumps.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$350.00	Routine Annual Maintenance and periodic repairs

Carryover History

The unit was originally scheduled for replacement in FY 2015, but since there have not been any significant maintenance issues, Staff recommends deferring its replacement to FY 2025.

Equipment - Public Works

Stainless Steel V-Box Salt Spreader (Large) FY 2025 \$23,000 CERF

Critical Recommended Contingent on Funding

Make Swenson
 Model
 Year 2006
 Purchase Cost \$14,424
 Purchased FY 2007
 Useful Life 12 years
 Current Life 16 years



Project Description & Justification

The Village owns and utilizes three large front-line v-box salt spreaders that are used for snow fighting operations. This unit is also equipped with a liquid pre-wetting system that is used to melt snow and ice when temperatures are below twenty degrees.

Total Vehicle Miles	N/A
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Recent Maintenance Costs

Date	Maintenance Performed	Cost
1/2019	Hose for auger replaced	149.82
1/2022	Nozzles for pre wetting system	28.20
Total		\$178.02

Project Alternative

Contractual salting and snow removal.

Operational Impact

Not having this unit would reduce the Village’s ability to salt roadways by 33%.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$50.00	Routine Annual Maintenance and periodic repairs

Carryover History

The unit was initially scheduled for replacement in FY 2019, but since there have not been any significant maintenance issues, Staff recommends deferring its replacement to FY 2025. The spreader will then be re-evaluated for replacement.

Equipment - Public Works

Stainless Steel V-Box Salt Spreader (Small #1) FY 2025 \$20,000 CERF

Critical Recommended Contingent on Funding

Make Swenson
 Model
 Year 2013
 Purchase Cost \$13,749
 Purchased FY 2013
 Useful Life 12 years
 Current Life 10 years



Project Description & Justification

The Village owns and utilizes three large front-line v-box salt spreaders used for snow fighting operations. This unit is also equipped with a liquid pre-wetting system used to melt snow and ice when temperatures are below twenty degrees.

Total Vehicle Miles	N/A
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Recent Maintenance Costs

Date	Maintenance Performed	Cost
11/2013	Replaced liquid holding tank	\$350.00
11/2015	Replaced rubber hose and fittings	\$67.64
9/2020	Rebuild Calcium chloride pump	\$250.00
11/2021	Spinner Motor	\$340.68
Total		\$1,008.32

Project Alternative

Contractual salting and snow removal.

Operational Impact

Not having this unit would reduce the Village’s ability to salt roadways by 33%.


Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$100.00	Routine Annual Maintenance and periodic repairs

Carryover History

None

Equipment - Public Works

Sewer Televising System		FY 2026	\$91,000	CERF/WS
		<input checked="" type="radio"/> Critical	<input type="radio"/> Recommended	<input type="radio"/> Contingent on Funding
Make	Envirosight			
Model	Rover "X"			
Year	2016			
Purchase Cost	\$71,200			
Purchased	FY 2016			
Useful Life	10 years			
Current Life	7 years			

Project Description & Justification

This equipment is used by Public Works personnel to televise and visually inspect the interior of the Village's sewer mains to identify cracks, breaks, and failing sections. This maintenance program is performed during routine and emergency televising situations. The process of sewer televising involves first cleaning the sewer pipe (sewer jetting) and then lowering a motorized camera into a manhole. Using the controls handset, the motorized and lighted camera system then travels through the cleaned pipe, documenting the condition of the interior of the sewer pipe and, where visible, private lateral connections. This equipment is also used in emergencies where a sewer problem can be quickly televised, analyzed, and documented.

Recent Maintenance Costs

Date	Maintenance Performed	Cost
9/2018	Repair camera cable	\$450.00
8/2019	Repair camera joystick	\$397.27
6/2020	Repair handheld controller	\$1,145.50
7/2020	Repair camera cable	\$600.00
9/2020	Repair camera reel	\$844.69
9/2022	Replaced joystick and cord for hand held unit	\$1,427.55
Total		\$4,865.01

Project Alternative

During the mid-1990s, the Village outsourced production televising of nearly all sewer mains in the Village. Those videos (VHS tape recordings that were later converted to CD) were used to identify and prioritize sewer point repairs (remove/replace sewer sections in poor condition) and candidates for sewer relining.

In 2011, after addressing nearly all of the sewer problems via point repairs and relining, Public Works initiated an in-house sewer televising program to identify issues with the Village's sewer system that have developed since the 1990s. 2012 was the first year Public Works tracked how many lineal feet of sewer has been televised in-

The Village's combined sewer system is critically important infrastructure. Visually inspecting the sewer system (during emergency and non-emergency situations) on a routine schedule is critical to maintaining the pipes in good condition to convey storm and sanitary flow effectively.

Alternatives to replacing the sewer televising equipment are as follows:

1. Defer replacing the system until it breaks down completely.
2. Purchase a new televising system.
3. Lease a televising system.
4. Outsource all sewer televising services.

Operational Impact

Although there are alternatives for performing/providing this infrastructure maintenance program, not performing or providing this service would compromise the Village’s efforts to proactively eliminate cracks, breaks, and failing sections of Village sewers that could result in sewer backups into homes and businesses.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$1,200.00	Routine Annual Maintenance and periodic repairs

Carryover History

None

Equipment - Public Works

Asphalt Kettle **FY 2025** **\$35,000** **CERF**

Critical Recommended Contingent on Funding

Make Stepp Manufacturing
 Model SPH-2.0
 Purchase Cost \$14,445
 Purchased FY 2008
 Useful Life 15 years
 Current Life 16 years



Project Description & Justification

This tandem axle trailer is used for transporting cold patch material. The trailer is equipped with a diesel fuel-fired burner capable of heating hot and cold patch material to the proper temperature.

Recent Maintenance Costs

Date	Maintenance Performed	Cost
4/2016	Repair leaf springs	\$300.00
7/2017	Replace battery	\$100.00
12/2017	Replace tires	\$300.00
Total		\$700.00

Project Alternative

Contract all pothole and permanent patching services.

Operational Impact

Without this equipment, patching potholes would have to be done from the back of a dump truck. The Village would not have the ability to work with a hot patch (permanent) asphalt material.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$100.00	Routine Annual Maintenance and periodic repairs

Carryover History

This purchase was carried over from FY 2023 to FY 2025.

Equipment - Public Works

Salt Brine Equipment		FY 2025	\$26,000	CERF
<input type="radio"/> Critical		<input checked="" type="radio"/> Recommended	<input type="radio"/> Contingent on Funding	
<i>Make</i>	SnowEx			
<i>Model</i>	Brine Pro 2000			
<i>Year</i>	2017			
<i>Purchase Cost</i>	\$20,000			
<i>Purchased</i>	FY 2017			
<i>Useful Life</i>	8 years			
<i>Current Life</i>	6 years			



Project Description & Justification

This equipment produces a salt brine solution that is applied to roadways in advance of a winter weather event. The solution provides melting at the onset of an event and helps prevent snow and ice from bonding with the pavement. This proactive technique has become popular in recent years and improves winter road conditions while reducing overall material and operating costs.

Recent Maintenance Costs

Date	Maintenance Performed	Cost
12/2018	Add aux. filter	\$125.00
12/2019	Rebuilt pump and replaced bearings	\$250.00
Total		\$375.00

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$100.00	Routine Annual Maintenance and periodic repairs

Carryover History

None

Equipment - Public Works / Water and Sewer

6" Trash Pump #1	FY 2025	\$22,000	CERF/WS
<input checked="" type="radio"/> Critical	<input type="radio"/> Recommended	<input type="radio"/> Contingent on Funding	
Make	Wacker		
Model			
Purchase Cost	\$9,600	*Purchased used	
Purchased	FY 2009		
Useful Life	15 years		
Current Life	14 years		



Project Description & Justification

The Village owns two six-inch trash pumps capable of pumping water at up to 1,300 gallons per minute. These pumps dewater streets and sewers during flood events.

Total Equipment Hours	310	Date	12/2/2022
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Recent Maintenance Costs

Date	Maintenance Performed	Cost
8/2020	Replace batteries	\$300.00
Total		\$300.00

Project Alternative

The alternative is to rent this pump as needed; however, supplies of this pump are limited and may not be available when needed.

Operational Impact

Not having this equipment limits the Village's ability to respond to flood events. That may impact multiple residents.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$150.00	Routine Annual Maintenance and periodic repairs

Carryover History

The unit was initially scheduled for replacement in FY 2024, but since there have not been any significant maintenance issues, Staff recommends deferring its replacement to FY 2025. The pump will then be re-evaluated for replacement.

Equipment - Public Works

Electric Vehicle Charging Station - Fleet Planning	FY 2024	\$50,000	CIF
	FY 2025	\$50,000	CIF
	FY 2026	\$50,000	CIF
	FY 2027	\$50,000	CIF
	FY 2028	\$50,000	CIF

- Critical
 Recommended
 Contingent on Funding

Make
 Model
 Purchase Cost
 Purchased
 Useful Life
 Current Life New equipment



Project Description & Justification

The Village purchased and installed a Level 2 electric vehicle charging station behind Village Hall on Central Avenue in FY 2022. In FY 2023, the Village plans to complete a study to identify viable locations for future stations throughout the Village. Pending the results of the study, \$50,000 is budgeted for the installation of new chargers in future years.

Recent Maintenance Costs

Date	Maintenance Performed	Cost
	No Maintenance to date	
Total		\$0.00

Project Alternative

The alternative is to continue to replace Village vehicles with standard combustion engine vehicles.

Operational Impact

There is no current impact to Village Operations related to this project.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$0.00	Routine Annual Maintenance and periodic repairs

Carryover History

None

INFORMATION TECHNOLOGY

Information Technology – Five Year Capital Improvement Program

The Village’s Information Technology (IT) function includes purchasing and maintaining all computer systems and personal computers, providing technical support to all systems, and supervising Village consultants and vendors. The Village outsources its day-to-day and project-specific IT support services to its current vendor, ClientFirst. In FY 2019, ClientFirst updated the Village's IT Strategic Plan with recommendations from that plan incorporated into the CIP. This plan evaluated the Village’s hardware and software capabilities to determine any recommended improvements that could be made to meet the Village’s business needs fully.

The following improvements are proposed for FY 2024:

Equipment	Cost of Equipment	Funding Source	This Project is:
Network Improvements	\$ 43,900	CIF	Recommended
Software Upgrades	\$ 114,100	CIF	Recommended
Computer Replacements	\$ 125,000	CIF	Contingent
Audio Visual System	\$ 15,000	CIF	Contingent
Total	\$ 298,000		

Each project in the CIP is categorized by the requesting department as follows:

Critical- The project must be completed in the year recommended due to safety or operational needs or as mandated by law.

These projects are highlighted in yellow.

Recommended- The project will significantly improve operations or safety. The project is strongly recommended for funding in the year recommended or the year after.

Contingent on Funding- The project would benefit the Village and improve service levels but is only recommended if funds are available.

Village of River Forest, Illinois
Five Year Capital Improvement Program
Information Technology
Fiscal Year 2024 Budget

	This Project is:	Fiscal Year					Five Year Total	Funding Source
		2024	2025	2026	2027	2028		
Network Improvements	Recommended	43,900	-	-	13,000	-	56,900	CIF
Software Upgrades	Recommended	114,100	75,000	75,000	-	-	264,100	CIF
Computer Replacements	Contingent	125,000	40,000	40,000	40,000	40,000	285,000	CIF
Audio Visual System Replacement	Contingent	15,000	-	-	-	-	15,000	CIF
Total		298,000	115,000	115,000	53,000	40,000	621,000	

Proposed Funding Source	Fiscal Year					Five Year Total
	2024	2025	2026	2027	2028	
Capital Improvement Fund (CIF)	298,000	115,000	115,000	53,000	40,000	621,000
Totals	298,000	115,000	115,000	53,000	40,000	621,000

Information Technology

Network Improvements	FY 2024	\$43,900	CIF
	FY 2025	\$0	CIF
	FY 2026	\$0	CIF
	FY 2027	\$13,000	CIF
	FY 2028	\$0	CIF

Critical

Recommended

Contingent on Funding

Spending History

FY 2023	\$	115,000
FY 2022	\$	-
FY 2021	\$	37,000
FY 2020	\$	12,500
FY 2019	\$	18,300

Project Description & Justification

Recommended for FY 2024

Switch Replacement - \$43,900

A switch is a piece of hardware that connects other devices, including servers and computers, by using packet switching to receive and forward data to the destination device. The Village has three sets of switches, two edge switches, and one core switch. Best practice is to replace these switches on a seven-year cycle. The two edge switches were scheduled for replacement in FY 2023 but deferred. Due to the lead time for this item, the installation would be for FY 2024. This cost includes the replacement of all switches and required patch cables and labor to install and properly configure.

Recommended for FY 2027

Camera Switch Replacement - \$13,000

A switch is a piece of hardware that connects other devices, in this case, servers and computers, by using packet switching to receive and forward data to the destination device. The set of switches dedicated to the Village's camera system will require replacement in FY 2027.

Five-Year Network Capital Project Cost Summary

Switch Replacement	
Hardware/Software/Licensing	\$33,000
Consulting	\$10,900
Camera Switch Replacement	
Hardware/Software/Licensing	\$11,000
Consulting	\$2,000
Total	\$56,900

Project Alternative

Alternatives to all projects include continuing with the status quo or deferring the projects to a later date; however, it is not recommended. Projects deferred from FY 2022 to FY 2023 are now critical to avoid network outages and the potential for expensive repairs with the current server system. The Village continues to move toward managing its computer network based on best practices, and these recommendations are consistent with that approach.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$0	N/A

Information Technology

Software Upgrades	FY 2024	\$114,100	CIF
	FY 2025	\$75,000	CIF
	FY 2026	\$75,000	CIF
	FY 2027	\$0	CIF
	FY 2028	\$0	CIF

Critical

Recommended

Contingent on Funding

Spending History

FY 2023	\$	101,000	Projected	Includes \$75,000 for ERP
FY 2022	\$	-		
FY 2021	\$	423,100		
FY 2020	\$	230,600		
FY 2019	\$	40,000		

Project Description & Justification

Recommended for FY 2024

ERP System Sustainability Planning Contribution - \$75,000

The Village utilizes Springbrook as its ERP tool. Currently, this system supports budgeting, payroll, accounts payable and receivable, building permits, and more. Use of the system is critical for day-to-day and long-term Village operations. It is recommended that the Village make annual contributions to prepare for and fund the enhancement, improvement, or replacement of the ERP system in the next one to four years. Scheduled contributions of \$75,000 in FY 2021 and FY 2022 were deferred to FY 2025 and FY 2026.

Laserfiche Gap Analysis and Improvement Plan - \$13,100

This project has been in the CIP since FY 2020 but is being deferred again to FY 2023 due to funding requests for priority projects. The Village has been utilizing the Laserfiche document imaging program for several years to store Village records electronically. This has reduced physical storage needs at the Village Hall and improved productivity by making records easier to locate and reproduce when needed. While leveraged heavily by the Village today, Laserfiche can serve more purposes in the future. These services include an online web portal to improve records searches, online form expansion, and better integration with GIS. Due to the complexity of some parts of the system and the scope of the work, a plan is recommended to outline best practices and workflows for the Village to use moving forward.

Laserfiche Upgrades - \$20,000

The Village anticipates implementing improvements and upgrades to the Laserfiche system in FY 2024 that are products of the improvement plan. Various upgrades to the Laserfiche system, over time, will allow the Village to achieve efficiencies and improve access to records.

Training for Office 365 - \$6,000

The migration to Office 365 will bring a change in the user experience for employees who use the Microsoft suite of products daily. To ensure a smooth transition and to help employees create efficiencies in their work by utilizing improved software tools, training is being recommended to compliment the recommended upgrade to Office 365.

Recommended for FY 2024

Five-Year Software Capital Project Cost Summary

ERP System Sustainability Planning Contribution	
Hardware/Software/Licensing	\$75,000
Consulting	\$0
Laserfiche Gap Analysis and Improvement Plan	
Hardware/Software/Licensing	\$10,100
Implementation Services	\$3,000
Office 365 Upgrade	
Hardware/Software/Licensing	\$0
Implementation Services	\$0
Training for Office 365	
Hardware/Software/Licensing	\$0
Consulting	\$6,000
Laserfiche Upgrades	
Hardware/Software/Licensing	\$18,000
Consulting	\$2,000
Total	\$114,100

Project Alternative

ERP contributions could be deferred or lowered but could increase the cost if left to be a one-time payment. Laserfiche improvements could also be deferred to proceed with more critical projects. Staff can continue to utilize the current functions of Laserfiche as is today.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$8,550 in FY 2024	<i>Laserfiche:</i> Annual maintenance and licensing fee for Laserfiche is currently \$5,550. Adding features such as WebLink would increase the annual cost by \$3,000.
\$36,000	<i>Office 365:</i> Annual subscription fees are projected to be \$36,000 and are subject to rate increases.

Information Technology

Computer Replacements	FY 2024	\$125,000	CIF
	FY 2025	\$40,000	CIF
	FY 2026	\$40,000	CIF
	FY 2027	\$40,000	CIF
	FY 2028	\$40,000	CIF

Critical

Recommended

Contingent on Funding

Spending History

FY 2023	\$	47,000	Projected
FY 2022	\$	18,845	
FY 2021	\$	38,000	
FY 2020	\$	124,070	
FY 2019	\$	38,000	

Project Description & Justification

Recommended for FY 2024

Public Safety In-Vehicle Laptops - \$125,000

Funding in FY 2024 is higher than other years due to replacing Police and Fire Department in-vehicle ruggedized laptops. Laptops in public safety vehicles are specialized Panasonic Toughbooks tailored to the operating environment (a vehicle) and nearly constant usage for 24-hour shift operations. These machines are recommended to be replaced every four years to maintain a stable and responsive platform for public safety personnel and ensure minimal downtime. It is recommended that the entire fleet of computers be replaced at one time to avoid differences in models that can cause operational issues for both the Public Safety Departments and IT. This cost also includes accessory items such as in-car mounts.

Recommended for FY 2025-2028

PC Replacement - \$40,000

This program aims to upgrade the central processing units (CPUs) of the Village desktop and laptop computer inventory. The estimated service life of a computer is four to six years; however, the costs of maintaining a machine can increase after its warranty has expired. Replacements are prioritized based upon employee job responsibilities, and some workstations may be assigned older but serviceable PCs. In contrast, other workstations may receive a new computer more frequently. Currently, the Village owns approximately 50 desktop computers and 50 laptop computers.

Staff and the Village's IT consultant updated an inventory of Village-owned IT/communication equipment, identified warranty periods for each piece, and determined a replacement schedule. Based on that information, equipment is rotated out when warranties expire. Funding IT replacements in this manner standardizes equipment throughout the organization, allows the Village to obtain bulk purchase pricing, improves IT support service efficiency, improves staff efficiency with fewer projected system interruptions, enhances system security and avoids unnecessary spikes in IT expenses.

The Village has identified additional users that will be assigned laptops to replace their desktop computers as they are cycled out. While laptop computers are more expensive than desktop computers, this will allow more access to work remotely if needed or appropriate.

Periodic replacement of peripheral equipment such as monitors, keyboards, and printers may still be required on an ad hoc basis, and money has been set aside for that purpose in the General Fund.

Five-Year Computer Replacement Capital Project Cost Summary

PC Replacement	
Hardware/Software/Licensing	\$30,000
Consulting	\$10,000
Public Safety In-Vehicle Laptops	
Hardware/Software/Licensing	\$108,000
Consulting	\$17,000
Total	\$165,000

Project Alternative

Funding for this project in FY 2023 was deferred. If this project is not funded, computers will continue to be replaced in smaller quantities over a longer time period, potentially reducing the productivity of the units and the ability to support newer versions of software. A possible alternative to the spike in FY 2024 is splitting the cost of the public safety in-vehicle laptops over two fiscal years. This is not recommended due to the complications created by having multiple models in the field; however, if this option is selected, staff will work to ensure that the number of models is minimized.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
\$1,000	Minor maintenance costs to update software, monitors, and minor repairs

Information Technology

Audio Visual System Replacement	FY 2024	\$15,000	CIF
	FY 2025	\$0	CIF
	FY 2026	\$0	CIF
	FY 2027	\$0	CIF
	FY 2028	\$0	CIF

Critical
 Recommended
 Contingent on Funding

Spending History

FY 2020 \$ 90,000

Project Description & Justification

Community Room Technology Upgrade-\$15,000

The Village's AV system was replaced in FY20. Over the past few years, meetings have become reliant on Zoom and other hybrid technologies. To improve the meeting experience for Board members and residents, it is recommended that the Village invest in integrating existing technologies with Zoom and add an additional monitor for Village Board meetings.

Project Alternative

Staff will continue to monitor system performance, annual maintenance costs and determine whether its replacement should be deferred.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
N/A	N/A

STREETS, SIDEWALKS AND ALLEYS

**Village of River Forest, Illinois
Five Year Capital Improvement Program
Streets, Sidewalks, Alleys
Fiscal Year 2024 Budget**

	This Project is:	Fiscal Year					Five Year	Funding Source
		2024	2025	2026	2027	2028	Total	
Street Patching Program	Critical	100,000	100,000	100,000	100,000	100,000	500,000	MFT/WS
50/50 Sidewalk, Curb & Gutter	Critical	65,000	65,000	65,000	65,000	65,000	325,000	GF/WS
Alley Improvement Program	Recommended	60,000	60,000	60,000	60,000	60,000	300,000	CIF
Parking Lot Improvements	Contingent	150,000	65,000	30,000	-	-	245,000	CIF & CIF/PR
Street Improvement Program (SIP)	Critical	650,000	650,000	650,000	650,000	650,000	3,250,000	MFT/WS
Street Maintenance Program	Critical	100,000	100,000	100,000	100,000	100,000	500,000	GF/MFT
Traffic Signals	Recommended	40,000	-	-	-	-	40,000	CIF
Bicycle Plan Implementation	Recommended	46,000	-	-	-	-	46,000	CIF
REBUILD Illinois Project	Recommended	736,279	-	-	-	-	736,279	MFT
Traffic Control Installations	Contingent	165,000	-	-	-	-	165,000	GF
Total		2,112,279	1,040,000	1,005,000	975,000	975,000	6,107,279	

Proposed Funding Source	Fiscal Year					Five Year
	2024	2025	2026	2027	2028	Total
General Fund (GF)	270,000	105,000	105,000	105,000	105,000	690,000
Motor Fuel Tax (MFT)	1,226,279	490,000	490,000	490,000	490,000	3,186,279
Water and Sewer Fund (WS)	70,000	70,000	70,000	70,000	70,000	350,000
Capital Improvement Fund (CIF)	296,000	125,000	60,000	60,000	60,000	601,000
CIF/Parking Reserve (CIF/PR)	-	-	30,000	-	-	30,000
Infrastructure Improvement Bond Fund (IIBF)	250,000	250,000	250,000	250,000	250,000	1,250,000
Totals	2,112,279	1,040,000	1,005,000	975,000	975,000	6,107,279

Streets, Sidewalks, Alleys - Public Works

Street Patching Program

Streets, Alleys and Parking Lots

	MFT	WS
FY 2024	\$90,000	\$10,000
FY 2025	\$90,000	\$10,000
FY 2026	\$90,000	\$10,000
FY 2027	\$90,000	\$10,000
FY 2028	\$90,000	\$10,000

Critical

Recommended

Contingent on Funding

Spending History

Year	GF	WS	Total
FY 2023	\$ 85,283	\$ 10,000	\$ 95,283
FY 2022	\$ 57,438	\$ 10,000	\$ 67,438
FY 2021	\$ 80,421	\$ 10,000	\$ 90,421
FY 2020	\$ 72,600	\$ 10,000	\$ 82,600
FY 2019	\$ 48,976	\$ 10,000	\$ 58,976

Program Description & Justification

This program aims to maintain and improve surface conditions of Village streets, alleys, and parking lots by patching defective areas. This program is intended for pavements of all condition ratings to prolong their useful lives. An annual funding level of \$90,000 to \$100,000 over the next five years is recommended to accomplish this goal. These funding levels are estimates and reflect inflationary increases for construction.

Village Staff annually inspects all streets and areas of pavement failure are placed on a patching list, which is provided to the Village's contractor. Village Staff also includes alleys and parking lots in their inspections and identifies patching needs on all pavements throughout the Village. Asphalt pavement patching utilizes hot mix asphalt (HMA), the standard material approved by the Illinois Department of Transportation for surface repairs. Two inches (thickness) of the failing surface pavement is milled and replaced with new HMA unless deeper patches are required. This patching process is more permanent and resilient than an asphalt "cold" patch. The ideal timing for this maintenance project is when streets are evaluated with a good condition rating but showing signs of early deterioration (cracking, potholes, etc.).

Included in this street patching program are Water and Sewer funds (\$10,000 annually) to install HMA patches on street openings created to repair the Village's water and sewer systems.

FY 2024 Recommended Project

In FY 2024, a total of \$100,000 is recommended for this maintenance project. Locations are identified for patching on a continual basis.

Program Alternative

The primary alternative is to resurface the street. Resurfacing, which is a more costly process, involves not only the replacement of defective surfaces but also additional surface areas that have not begun to deteriorate.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Streets, Sidewalks, Alleys - Public Works

50/50 Sidewalk, Curb & Gutter

Sidewalks, Aprons, and Curb

	GF	WS
FY 2024	\$55,000	\$10,000
FY 2025	\$55,000	\$10,000
FY 2026	\$55,000	\$10,000
FY 2027	\$55,000	\$10,000
FY 2028	\$55,000	\$10,000

Critical

Recommended

Contingent on Funding

Spending History

Year	GF	WS	Total
FY 2023	\$ 51,954	\$ 10,000	\$ 61,954
FY 2022	\$ 54,636	\$ 10,000	\$ 64,636
FY 2021	\$ 55,579	\$ 10,000	\$ 65,579
FY 2020	\$ 55,089	\$ 10,000	\$ 65,089
FY 2019	\$ 55,658	\$ 10,000	\$ 65,658

Program Description & Justification

This program aims to improve the overall condition of public sidewalks and curb/gutters throughout the Village. The objective is to eliminate all trip hazards for pedestrians and bring all sidewalk ramps into compliance with the Americans with Disabilities Act (ADA) requirements. An annual funding level of \$50,000-\$75,000 is recommended to accomplish these objectives. Failure to implement a sidewalk improvement program to repair deteriorated/damaged sidewalks can expose the Village to liability resulting from trips and falls.

For this program, the Village is divided into three geographical areas. Village Staff inspects one area each year. Over a three-year period, all public sidewalks are inspected. Additionally, Staff has begun analyzing sidewalk ramp criteria at as many locations as time allows, optimizing the replacement of sidewalk ramps over time to ensure compliance with ADA requirements. Trip hazards are rated according to the displacement of adjoining sidewalk squares.

Furthermore, Staff intends to investigate the possibility of including mud-jacking to remove trip hazards. This is a more cost-effective means of removing trip hazards as compared to full replacement, which is the current practice. The following table identifies the sidewalk condition ratings, description of condition, and the recommended action:

Sidewalk	Joint Displacement	Recommended Action
A	> 1/2" but < or = 1"	Consider Replacement
B	>1" but < 1 1/2"	Recommend Replacement
C	>1 1/2" with loose/missing pieces	Replace immediately

The Village offers participation in the 50/50 sidewalk replacement cost-share program during annual inspections upon request for sidewalks with a "B" rating. A copy of the inspection form is delivered to property owners describing the sidewalk's condition and requesting their participation. The Village replaces all sidewalks with a condition "C" rating. The Village also installs detectable warning pads located at street crossings and intersections designed for the visually impaired. The following is a summary of proposed expenditures for FY 2024:

General

Fund

Sidewalk – Condition C (100% Village):	\$35,000
Sidewalk – Condition A or B (50/50):	\$10,000 (revenue - \$5,000)

Driveway Aprons (100% Resident):	\$5,000 (revenue - \$5,000)
Detectable Warning Pads (100% Village):	\$5,000
<u>Water and Sewer Fund</u>	
Curb/gutter (100% Village):	\$10,000

Sidewalk and Curb Annual Inspection Areas:

<u>Area No.</u>	<u>Area Limits</u>	<u>Inspection Years</u>
1	Des Plaines River to Harlem Avenue/Hawthorne Avenue to Chicago Avenue	2024, 2027, 2030
2	Thatcher Avenue to Harlem Avenue/Chicago Avenue to Greenfield Street	2025, 2028, 2031
3	Thatcher Avenue to Harlem Avenue/Greenfield Street to North Avenue Thatcher Avenue to Lathrop Avenue/Madison Street to Hawthorne Avenue	2023, 2026, 2029

In addition to the annual inspection of the aforementioned designated areas, Village Staff inspects all sidewalks close to schools, parks, and commercial/retail areas every year.

The Village also allows property owners to replace their driveway aprons and private courtesy walks within the public right of way through this program at 100% cost to the property owner (full payment due to the Village before the commencement of work). The primary benefit to the property owner is that they receive competitively bid pricing for their improvement.

Program Alternative

Although the preferred option is sidewalk replacement, alternatives to this program involve the installation of an asphalt cold patch in the displaced joints and/or grinding off the edge of the raised sidewalk. Not only is the patching option aesthetically unattractive, but the asphalt can also break loose and re-expose the displaced sidewalk, which re-establishes liability to the Village and increases maintenance costs.

Another option is mud-jacking, which is a process of filling cavities or voids beneath settling concrete. The Village does not currently own equipment to perform this mud-jacking operation.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Streets, Sidewalks, Alleys - Public Works

Alley Improvement Program	FY 2024	\$60,000	CIF
	FY 2025	\$60,000	CIF
	FY 2026	\$60,000	CIF
	FY 2027	\$60,000	CIF
	FY 2028	\$60,000	CIF

Critical

Recommended

Contingent on Funding

Spending History

FY 2023	\$2,911,569 (Projected)
FY 2022	\$1,671,115 (4 Alleys @ Linden/Franklin)
FY 2021	\$230,767 (Thatcher Ave Alley)
FY 2020	\$860,079 (Green Alley [3] and Thomas St. Alley Improvements)
FY 2019	\$193,740 (Gale Ave Alley)

Project Description & Justification

With the reconstruction of all alleys to be completed within FY23, work throughout these locations will now shift to ongoing maintenance. This work is extremely important to ensure that the intended function of the alleys (to capture stormwater runoff) can continue to operate at an efficient level. A minimum annual funding level of \$60,000 is recommended to accomplish this objective. This funding level should allow for maintenance as-needed at each location.

The Village has a total of 35 alleys, nearly all of which have recently been reconstructed using some form of permeable pavement.

FY 2024 Recommended Projects

In FY 2024, a total of \$60,000 is recommended for this maintenance project. This is based on an anticipated "heavy" cleaning cycle once every three years, with "light" cleaning to be performed three times each year that heavy cleaning is not performed. Light cleaning will consist of a restorative street sweeper removing all debris on top of the pavers. It is unlikely that this will remove any material other than what is resting at-grade. The heavy cleaning will include removal of joint aggregate via pressurized water. The dislocated material will be removed and new joint aggregate will be added.

Program Alternative

The alternative to this approach is to have Public Works Operations sweep the alleys as needed. However, the type of sweeper that the Village owns is not ideal for this application. Additionally, regular sweeping, while beneficial, will not be able to remove all contaminants. This approach would ultimately lead to the permeable pavers losing their permeability, at which time alley flooding would occur during rain events.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Streets, Sidewalks, Alleys - Public Works

Parking Lot Improvements	FY 2024	\$150,000	CIF
	FY 2025	\$65,000	CIF
	FY 2026	\$30,000	CIF/Parking Reserve
	FY 2027	\$0	CIF
	FY 2028	\$0	CIF

Critical

Recommended

Contingent on Funding

Spending History

FY 2023	\$	-	
FY 2022	\$	-	
FY 2021	\$	-	
FY 2020	\$	56,500	(East Thatcher Commuter Lot)
FY 2019	\$	-	

Program Description & Justification

This program aims to improve the condition of the parking/driving surfaces of Village-owned parking lots. The Village owns and/or maintains six parking lots:

- A. Village Hall – 400 Park Avenue – **Resurfacing Scheduled for FY 2025**
- B. Public Works Garage – 45 Forest Avenue - **Reconstruction Scheduled for FY 2024**
- C. Southeast corner of Lake Street and Park Avenue
- D. West Commuter Lot – 400 block of Thatcher Avenue
- E. East Commuter Lot – 400 block of Thatcher Avenue
- F. Lot at 7915-7919 North Avenue – adjacent to CVS parking lot - **Reconstruction Scheduled for FY 2026**

Several options are available for improving parking lots, including complete reconstruction, resurfacing, asphalt patching, seal-coating, and crack sealing.

FY 2024 Recommended Projects

The parking lot at the Village Public Works Garage (45 Forest Ave) was originally scheduled for reconstruction in FY 2023. Due to delays associated with the planned reconstruction of the salt storage shed, the paving work has been pushed back to FY 2024. This parking lot endures a great deal of stress due to the heavy equipment associated with the Public Works Operations Team. As such, the pavement has severely deteriorated over time and requires repair.

Program Alternative

Not performing any surface maintenance, particularly for lots with deteriorating conditions, will result in total pavement failure and require reconstruction (of base and surface), which is significantly higher in cost than resurfacing. Extensive pavement patching, crack sealing, and seal-coating are cost-effective options. They may slow down the progression of potholes, but the pavement patching needs will be ongoing and could allow for the continued deterioration of the pavement’s base. This deterioration will significantly increase eventual resurfacing costs.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Streets, Sidewalks, Alleys - Public Works

Street Improvement Program

	MFT	WS	IIBF
FY 2024	\$350,000	\$50,000	\$250,000
FY 2025	\$350,000	\$50,000	\$250,000
FY 2026	\$350,000	\$50,000	\$250,000
FY 2027	\$350,000	\$50,000	\$250,000
FY 2028	\$350,000	\$50,000	\$250,000

Critical

Recommended

Contingent on Funding

Spending History

Year	MFT	WS	IIBF	Total
FY 2023	\$ 95,071	\$ 44,841	\$ 250,000	\$ 389,912 (Projected)
FY 2022	\$ 326,058	\$ 50,000	\$ 205,219	\$ 581,277
FY 2021	\$ 412,000	\$ 50,000	\$ 275,000	\$ 737,000
FY 2020	\$ 230,658	\$ 50,000	\$ 283,902	\$ 564,561
FY 2019	\$ 150,000	\$ 50,000	\$ 181,689	\$ 381,689

Program Description & Justification

This program aims to improve the condition of local streets. Its objective is to improve all streets with condition ratings of “Fair” or “Poor” to condition ratings of “Good” to “Excellent.” This program does not include capital improvements on state routes.

In years past, Village Staff would visually inspect all local streets and rate them according to the pavement condition. In 2018, however, Staff began utilizing a consultant to help analyze Village roadways for the sole purpose of pavement ratings. This consultant uses cell phone images of the road (taken at 10' intervals) to evaluate roadway conditions. The analysis at each point is compiled with others along the same block, and a rating is established. Streets rated “Poor” or “Fair” are prioritized for one of the construction options (rehabilitation, resurfacing, or reconstruction) depending on the condition, location, and estimated traffic volumes. The timing in improving streets is critical. Waiting too long to address street repairs will result in further deterioration, at which time a more costly repair becomes necessary.

Streets		
Surface Condition	Pavement Rating	Estimated Remaining Life*
Excellent	0-1.5	15 to 20 years
Good	1.6-2.5	10 to 15 years
Fair	2.6-3.5	6 to 10 years
Poor	3.6-4.5	2 to 5 years

*Life estimate is based upon time frame needed for resurfacing assuming a regular maintenance program.

FY 2024 Recommended Projects

<u>Street</u>	<u>Replacement Cost</u>
1. Park Avenue (Greenfield to North)	\$96,550.00
2. Franklin Avenue (Greenfield to North)	\$96,550.00
3. Keystone Avenue (Lake to Oak)	\$118,600.00
4. Clinton Place (Oak to Chicago)	\$52,500.00
5. Clinton Place (Central to Lake)	\$35,800.00

The projected construction cost to resurface these streets and make other associated improvements is \$400,000. Construction engineering will be performed in-house.

While the Capital Improvement Plan proposes funding for street improvements through FY 2028, these locations have not yet been determined. Staff recommends a minimum funding level of \$400,000 each year, with specific locations selected based on annual street rating surveys.

Program Alternative

Not performing any roadway maintenance, particularly for streets in “Poor” condition, will result in total pavement failure and require reconstruction (of base and surface), which is significantly higher in cost than resurfacing.

Extensive pavement patching may be somewhat cost-effective initially for streets with a “Fair” condition rating. It may slow down the progression of potholes, but the pavement patching needs will be ongoing. This is likely to promote the continued deterioration of the street’s base, significantly increasing eventual resurfacing costs.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Streets, Sidewalks, Alleys - Public Works

Street Maintenance Program	FY 2024	\$50,000	GF	\$50,000	MFT
	FY 2025	\$50,000	GF	\$50,000	MFT
	FY 2026	\$50,000	GF	\$50,000	MFT
	FY 2027	\$50,000	GF	\$50,000	MFT
	FY 2028	\$50,000	GF	\$50,000	MFT

Critical

Recommended

Contingent on Funding

Spending History

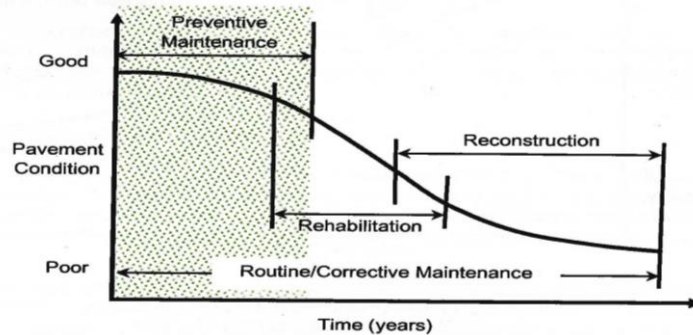
	Crack Sealing	Preservation	Total
FY 2023	\$ 50,002	\$ 40,613	\$ 90,615
FY 2022	\$ 49,298	\$ -	\$ 49,298
FY 2021	\$ 43,400	\$ 50,000	\$ 93,400
FY 2020	\$ 29,553	\$ 51,905	\$ 81,458
FY 2019	\$ 45,900	\$ 43,722	\$ 89,622

Program Description & Justification

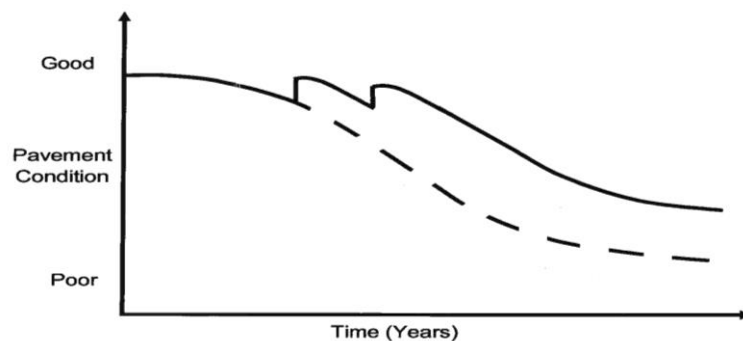
Over the past few years, the Village has utilized a High-Density Mineral Bond known as HA5 to help prolong the life of selected roadways as part of a Pavement Preservation Project. As this approach helps to extend the life of the pavement, it ultimately minimizes the overall cost of the pavement life cycle. As a result, Staff will be specifying the same product again in FY 2024.

Village Staff believes the practice of Crack Sealing to be invaluable. Ideally, this work is completed when the pavement is still in good condition with minimal cracking. This approach enables a pavement in good condition to remain as such for longer, which ultimately extends the life of the pavement and minimizes the overall cost of the pavement life cycle.

The following figure demonstrates the relationship between pavement condition and typical types of pavement preservation and /or street improvements:



The following figure demonstrates how preventative maintenance can extend pavement performance:



FY 2024 Recommended Projects

With the Village continuing to resurface a significant number of streets on an annual basis, Staff recommends maintaining a budget of \$50,000 for crack sealing and \$50,000 for pavement preservation. This budget will enable Staff to maintain these recently resurfaced pavements in good condition in hopes of preventing them from deteriorating as rapidly as they otherwise would.

Streets that are candidates for crack sealing and pavement preservation will be determined in late winter/early spring to maximize each application's efficiency.

Program Alternative

The alternative is to defer this project to minimize disruption to residents who are working from home due to the ongoing COVID-19 pandemic. Another alternative is a reactive maintenance program that will accelerate the deterioration of Village streets. These maintenance programs, along with pavement patching, will prolong the useful life of Village streets. By not pursuing these maintenance programs, the following infrastructure improvements will be necessary at more frequent intervals:

- Resurfacing: This is a more costly improvement that requires removing and replacing the existing worn pavement and minimal base improvement. This type of construction is typically completed over several weeks. On the other hand, rejuvenation can be completed in a few hours.
- Reconstruction: This is a significantly more costly improvement that is necessary when surface pavement and extensive base failure occur.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Streets, Sidewalks, Alleys - Public Works

Traffic Signals	FY 2024	\$40,000	CIF
	FY 2025	\$0	CIF
	FY 2026	\$0	CIF
	FY 2027	\$0	CIF
	FY 2028	\$0	CIF

Critical

Recommended

Contingent on Funding

Spending History

FY 2023	\$8,000 (Projected)
FY 2022	\$0
FY 2021	\$0
FY 2020	\$169,236 (Lake and Thatcher Signal Upgrade Project)
FY 2019	\$13,065.78 (Traffic Signal Engineering Design)

Project Description & Justification

A Traffic Signal Evaluation was performed in FY 2018 to determine if the left-turn arrow indicators were needed at the traffic signals in the Village where they currently are not in place. Modifications were recommended at the intersections of Thatcher Avenue with Chicago Avenue and Lake Street. The accommodation of left-turn arrows at both intersections was outlined by the Traffic Signal Evaluation completed by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) in July 2017. The traffic signal upgrade project for the Lake and Thatcher intersection was completed in April 2020 and included the addition of turn signals for vehicles turning in each direction.

Staff proposes the following project to upgrade this portion of the traffic signal system within the Village:

FY 2024 Recommended Project

Chicago Avenue at Thatcher Avenue Construction: Traffic signal modifications, add pedestrian crossings on north and west legs, add left-turn arrows for East and West. Sidewalk/ADA and pavement marking upgrades, new ramps in NW corner, revise crosswalks to high-visibility markings, traffic control & protection. This project was previously planned for FY 2022 and is now scheduled for FY 2024 with design/permitting scheduled to be completed in FY 2023.

Construction Costs	\$ 40,000
Total	\$ 40,000

Project Alternative

The alternative to this project is not to complete the recommendation project, which may cause higher congestion levels during peak travel times. This project can be deferred if deemed too costly to be implemented in the immediate future.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Streets, Sidewalks, Alleys - Public Works

Bicycle Plan Implementation	FY 2024	\$46,000	CIF
	FY 2025	\$0	CIF
	FY 2026	\$0	CIF
	FY 2027	\$0	CIF
	FY 2028	\$0	CIF

Critical
 Recommended
 Contingent on Funding

Spending History

FY 2023	\$0
FY 2022	\$0
FY 2021	\$131,410.74 (Bike Plan phase I)
FY 2020	\$0
FY 2019	\$0

Project Description & Justification

This project aims to implement the proposed improvements recommended as part of the Village Bicycle Plan that was prepared in 2019. The bike plan was established to provide a safe, comfortable, and defined network of bicycle facilities that serves all ages and abilities and connects to key destinations in the Village, the adjoining communities, and the nearby Forest Preserves and regional trails. As part of this plan, many traffic control sign installations and pavement marking improvements were recommended.

FY 2024 Recommended Project

Implementing portions of the Bicycle Plan on certain IDOT routes was originally scheduled for FY 2023, including any signage and striping installations. However, the IDOT approval process has continued well beyond what was originally anticipated. Locations along Thatcher Avenue, North Avenue, and Harlem Avenue areas would not be included in this portion of the implementation due to the feasibility of sidepaths that are no longer being considered and to avoid duplicative work with the ongoing design of a potential bike trail along Thatcher Avenue adjacent to the Des Plaines River by the Intergovernmental Coalition Phase I Study Trail Advisory Group. This implementation phase includes Lake Street and the eastern portion of Madison Street.

Project Alternative

The alternative to this project is to maintain the status quo, and/or implementation could be delayed and phased in over time.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Streets, Sidewalks, Alleys - Public Works

REBUILD Illinois Project

FY 2024	\$736,279	MFT
FY 2025	\$0	MFT
FY 2026	\$0	MFT

Critical

Recommended

Contingent on Funding

Program Description & Justification

This project is based on newly available funding from the Illinois Department of Transportation (IDOT), known as the REBUILD Illinois capital program. These grants will be made available to the Village over three years (FY 2021-FY 2023) through a series of six disbursements. Each disbursement is in the amount of \$122,713.13.

While these grants are received and designated similar to the Village's annual Motor Fuel Tax (MFT) disbursements, they must be accounted for separately. In addition, the funds must be used for a bondable capital improvement with an average useful life of greater than or equal to 13 years. Funding must be associated with an identified project (or projects) within one year of receipt, but funding does not have to be expended until July 1, 2025.

FY 2024 Recommended Projects

This project will be expected to be in the form of a roadway resurfacing project, not unlike the Village's annual Street Improvement Project. The FY 2024 construction season will see a single resurfacing project bid and constructed utilizing these funds. MFT funds can also be used to supplement REBUILD funds for this project.

At the completion of this project, all REBUILD funds amounting to \$736,279 will have been expended.

Program Alternative

If these funds are not spent by the IDOT-designated deadline of July 1, 2025, they will be forfeited by the Village. Based on the types of construction allowed by IDOT and the type of work typically conducted in the Village, a roadway resurfacing project appears to be the most feasible project to be completed with these funds.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Streets, Sidewalks, Alleys - Public Works

Traffic Control Installations	FY 2024	\$165,000	GF
	FY 2025	\$0	GF
	FY 2026	\$0	GF
	FY 2027	\$0	GF
	FY 2028	\$0	GF

Critical
 Recommended
 Contingent on Funding

Spending History

FY 2023 \$16,615 Installation of temporary barriers

Project Description & Justification

This project aims to replace the temporary traffic control installations in the Northeast corner of the Village with permanent traffic control installations in addition to anticipated maintenance costs. Following the conclusion of the Village Wide Traffic Study, additional funds may be needed for the installation of temporary/permanent traffic controls throughout the Village.

FY 2024 Recommended Project

Currently, four locations in northeast River Forest need temporary installations to be replaced with permanent installations. A cul-de-sac will be installed on Bonnie Brae, at the south edge of the east/west alley near North Ave. A partial cul-de-sac will be installed on Clinton Place, at the south edge of the east/west alley, blocking southbound traffic but allowing northbound traffic to continue to North Ave. Both LeMoyné and Greenfield will be converted to a one-way (eastbound) streets between Harlem Ave and the north/south alley, with “right-out only” curb diverters to allow for southbound turns onto Harlem Ave only. These changes are consistent with the existing traffic patterns resulting from the temporary installations. Further installations may be necessary pending the completion of the Village-Wide Traffic Study, however, those costs are not known at this time.

Project Alternative

The alternative to this project is to maintain the existing temporary barriers and delay installation of permanent barriers or to remove the modifications altogether.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

WATER AND SEWER IMPROVEMENTS

Water and Sewer Improvements – Five Year Capital Improvement Program

This section of the Capital Improvement Plan identifies funding for sewer and water improvements, which are scheduled to continue through FY 2028. The Village’s sewer and water system is comprised of the following:

Type of Sewer	Number of Miles
Combined Sanitary Sewer	33.13
Storm Sewer	3.37
Water Main	40

Improvements planned for FY 2024 include:

Improvement	Cost	Funding Source	Nature of Project
Sewer Lining	140,000	WS	Critical
Sewer Point Repairs	35,000	WS	Critical
Stormwater Master Plan	250,000	WS	Recommended
Water Tower Improvements	25,000	WS	Critical
Water Meter Replacement Program	10,000	WS	Critical
Water Main Replacement	215,000	WS	Critical
Hydrant Replacement	10,000	WS	Recommended
Lead Service Line Replacement Program	50,000	WS	Recommended
Basement Protection Subsidy Program	59,000	WS	Recommended
Sewer Lateral Repair Reimbursement Program	50,000	WS	Recommended
Total	844,000		

Each project in the CIP is categorized by the requesting department as follows:

Critical- The project must be completed in the year recommended due to safety or operational needs or as mandated by law.

Critical projects are highlighted in yellow.

Recommended- The project will significantly improve operations or safety. The project is strongly recommended for funding in the year recommended or the year after.

Contingent on Funding- The project would benefit the Village and improve service levels but is only recommended if funds are available.

**Village of River Forest, Illinois
Five Year Capital Improvement Program
Water and Sewer Improvements
Fiscal Year 2024 Budget**

This Project is:	Fiscal Year					Five Year Total	Funding Source	
	2024	2025	2026	2027	2028			
Sewer System								
Sewer Lining	Critical	140,000	140,000	140,000	140,000	140,000	700,000	WS
Sewer Point Repairs	Critical	35,000	35,000	35,000	35,000	35,000	175,000	WS
Stormwater Master Plan	Recommended	250,000	250,000	250,000	250,000	250,000	1,250,000	WS
Pumping Station								
Water Distribution Improvements	Contingent	-	-	125,000	-	-	125,000	WS
Water Distribution Improvements								
Water Tower Improvements	Critical	25,000	-	-	-	-	25,000	WS
Water Meter Replacements	Critical	10,000	16,000	28,000	38,000	68,000	160,000	WS
Water Main Replacement	Critical	215,000	450,000	400,000	400,000	400,000	1,865,000	WS
Hydrant Replacement	Recommended	10,000	10,000	10,000	10,000	10,000	50,000	WS
Lead Service Line Replacement Program	Recommended	50,000	50,000	50,000	50,000	50,000	250,000	WS
Basement Protection Subsidy Program	Recommended	59,000	59,000	59,000	59,000	59,000	295,000	WS
Sewer Lateral Repair Reimbursement Program	Recommended	50,000	50,000	50,000	50,000	50,000	250,000	WS
Total		844,000	1,060,000	1,147,000	1,032,000	1,062,000	5,145,000	

Proposed Funding Source	Fiscal Year					Five Year Total
	2024	2025	2026	2027	2028	
Water and Sewer Fund (WS)	844,000	1,060,000	1,147,000	1,032,000	1,062,000	5,145,000
Totals	844,000	1,060,000	1,147,000	1,032,000	1,062,000	5,145,000

Water and Sewer Improvements - Public Works

Sewer Lining Program	FY 2024	\$140,000	WS
Public Sewers	FY 2025	\$140,000	WS
	FY 2026	\$140,000	WS
	FY 2027	\$140,000	WS
	FY 2028	\$140,000	WS

Critical

Recommended

Contingent on Funding

Spending History

FY 2023	\$	127,300	
FY 2022	\$	149,349	
FY 2021	\$	125,163	
FY 2020	\$	113,207	
FY 2019	\$	150,545	(including MH lining)

Program Description & Justification

The purpose of this program is to improve the Village's sewer system and prevent costly repairs associated with failing sewer mains (collapsed, cracked, etc.). The objective is to evaluate the conditions of sewer mains (via televising), identify those in the worst condition, and perform the lining of as many sections as possible. In some situations, sewer mains may have failed beyond the ability to line, and a point repair (or replacement of a section) may be necessary. The Village's sewer system is a critically important infrastructure system.

The Water and Sewer Rate Study completed by Baxter & Woodman in FY 2017 recommends an annual funding level of \$140,000 for this program. This allows the relining of damaged sewer main and the start of a systematic approach to relining all sewers throughout the village, regardless of their condition. The Village is undergoing an update to the Water and Sewer Rate Study, and the recommended funding level may increase in the future as a result.

The sewer lining process includes inserting a sleeve made of flexible material in the existing pipe. The sleeve is then filled with steam or water heated to a high temperature for curing and hardening. This process provides the existing failing pipes with the structural support needed to continue their service and avoid a costly complete replacement. This product has a life expectancy of 50-100 years.

In addition to the typical sewer lining completed each year, Village Staff also identifies locations for manhole lining and bench repairs, if needed. As part of the lining operation, potential locations are researched throughout the winter and work is completed in the summer. This work allows the manholes to be sealed and stabilized without requiring excavation. This work intends to prevent sinkholes and other pavement failures from occurring due to the decay of the interior walls and base of existing manholes.

Since the Village's first sewer lining project, nearly 57,997 lineal feet of sewers have been lined, representing approximately 34% of the total sewer mains owned/maintained by the Village (approximately 171,000 lineal feet).

In 2011, the Public Works Department developed an in-house sewer televising program. Public Works Staff reviews the video recordings, and the sections of failing sewer mains are identified and prioritized. This in-house sewer televising program has identified sewer mains in poor condition that will be lined in the coming years. Extreme weather conditions and the ongoing root growth of trees have accelerated the rate of deterioration of the Village's combined sewers.

The following table identifies the sewer condition ratings, description of condition, and the recommended action:

Condition Rating	Condition Description	Recommended Action
A	Random cracking/Some roots	Continue monitoring
B	Medium cracking/Medium root problem	Line in one to three years
C	Heavy cracking/Heavy root problem	Line immediately
D	Structural damage/Fully blocked by roots	Requires replacement

FY 2024 Recommended Project

Specific project locations will be determined during the winter months. Public Works Staff will review all sewer televising completed throughout the year by the Operations Department. Each televised sewer line will be rated with the most severely deteriorated sewers selected for lining. Other sections may also be lined based on the need for a point repair.

Program Alternative

Once the pipe's structural integrity is severely affected, beyond the ability to line, the sole option is to perform an open-trench point repair that will require heavy street construction, temporary interruption of traffic flow, and costs associated with restoring the street's driving surface. The preferred and more cost-effective option for improving sewer mains is sewer lining.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Water and Sewer Improvements - Public Works

Sewer Point Repairs	FY 2024	\$35,000	WS
Public Sewers	FY 2025	\$35,000	WS
	FY 2026	\$35,000	WS
	FY 2027	\$35,000	WS
	FY 2028	\$35,000	WS

Critical

Recommended

Contingent on Funding

Spending History

FY 2023	\$	7,950
FY 2022	\$	18,000
FY 2021	\$	28,800
FY 2020	\$	29,270
FY 2019	\$	23,445

Program Description & Justification

The purpose of this program is to improve the Village’s sewer system by replacing failing (collapsed, cracked, etc.) sections of the sewer main (also referred to as point repairs). Staff’s objective is to evaluate the conditions of sewer mains (via televising), identify those in the worst condition, and perform relining of as many sections as possible. In some situations, sewer mains may have failed beyond the ability to reline, and a point repair may be necessary. Most point repairs are made on an emergency basis and can be costly. The Village regularly budgets \$35,000 for point repairs.

In 2011, Public Works began an ongoing in-house sewer televising program. Village Staff reviews the video recordings to identify sections of failing sewer mains for point repair.

Program Alternative

Once the pipe's structural integrity is severely affected, beyond the ability to reline, the sole option is to perform an open-trench point repair.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Water and Sewer Improvements - Public Works

Water Distribution System - Pumping Station	FY 2024	\$0	WS
	FY 2025	\$0	WS
	FY 2026	\$125,000	WS
	FY 2027	\$0	WS
	FY 2028	\$0	WS

Critical

Recommended

Contingent on Funding

Spending History

FY 2023	\$	-
FY 2022	\$	-
FY 2021	\$	17,200
FY 2020	\$	7,800
FY 2019	\$	16,825

Project Description & Justification

The Village purchases all of its potable water from the City of Chicago for general consumption and fire suppression). The water received from Chicago is treated before arriving at the Village’s water distribution system, where it is stored and treated again before entering the water distribution system for consumption. The Pumping Station is where the following components of the Village’s water distribution system are located:

- SCADA (Supervisory Control and Data Acquisition) system: a computer system that monitors and controls various components and equipment
- Three Pumps
 - Pump #1: 100 horsepower; 1,540 gallons per minute
 - Pump #2: 150 horsepower; 2,350 gallons per minute
 - Pump #3: 125 horsepower; 1,750 gallons per minute
- 40 valves
- Four meters: two for incoming water from the City of Chicago (located at an off-site location) and two for incoming/outgoing water at the Pumping Station.
- Water treatment system (sodium hypochlorite)
- Two underground storage reservoirs
 - 2.0 million gallon storage capacity
 - 0.5 million gallon storage capacity
- Emergency generator: backup power source in the event of a power outage (see CERF).

The following prioritized facility improvement is recommended in the next two to five years:

Repair/Improvement	Estimated Cost	Year
1. Replace Pump #1	\$125,000	FY 2026
Total	\$125,000	

Pump Replacement - Pump No. 1 should be replaced in-kind. Based on a review of the Village's three current pumps, Pump No. 1 is recommended to be replaced within the next three to five years. The pump capacity is adequate and the pump is found to be well-maintained, however, the overall age of the pump is cause for concern in that its replacement should be planned.

Project Alternative

There are no salient alternatives to maintaining the Village’s water distribution system as it is the system that provides potable water to the entire community. Deferring these projects would result in emergency repairs that could increase project costs (compared to soliciting bids/proposals).

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Water and Sewer Improvements - Public Works

Water Tower Improvements

Water & Sewer



FY 2024	\$25,000	WS
FY 2025	\$0	WS
FY 2026	\$0	WS
FY 2027	\$0	WS
FY 2028	\$0	WS

Critical

Recommended

Contingent on Funding

Spending History

FY 2023	\$	-
FY 2022	\$	
FY 2021	\$	
FY 2020	\$	274,915 (Water Tower Re-Painting Project)
FY 2019	\$	-

Project Description & Justification

Cathodic protection systems are installed in steel water tanks to protect and extend the life of the interior coatings by controlling surface corrosion. It was recommended by the painting contractor that recoated the tower in FY 2020 that the Village reinstall a cathodic protection system after the water tower was repainted.

The following critical and recommended facility improvements should be completed in FY 2024:

Repair/Improvement	Estimated Cost	Year
1. Reinstall cathodic protection system	\$25,000	FY 2024
Total	\$25,000	

Project Alternative

There are no salient alternatives to these improvements and maintenance projects as the water tower is a critically important part of the Village's water distribution system. Deferring these projects would result in emergency repairs that could increase project costs (compared to soliciting bids/proposals).

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Water and Sewer Improvements - Public Works

Water Meter Replacement Program	FY 2024	\$10,000	WS
	FY 2025	\$16,000	WS
	FY 2026	\$28,000	WS
	FY 2027	\$38,000	WS
	FY 2028	\$68,000	WS

Critical

Recommended

Contingent on Funding

Spending History

FY 2023	\$0	
FY 2022	\$0	costs incorporated into AMI project
FY 2021	\$7,500	continuation of program to replace all meters over 20 years of age
FY 2020	\$22,000	continuation of program to replace all meters over 20 years of age
FY 2019	\$16,000	continuation of program to replace all meters over 20 years of age

Program Description & Justification

This program aims to improve the metering accuracy of Village-owned commercial and residential water meters. Water Division employees tested meters in the 15 to 20 year age category and found some did not meet AWWA (American Water Works Association) standards for meter accuracy. Although not a standard, studies recommend replacing residential water meters every 15 to 20 years. Water meters can be damaged and deteriorate with age, thus producing inaccurate readings. Inaccurate readings will give misleading information regarding water usage, make leak detection difficult, and result in lost revenue for the system. Funds requested over the spreadsheet total below are for accessories associated with meter replacements (nuts, bolts, gaskets, seals and sealing wire, flanges, and meter couplings). In FY 2024, the Village plans to replace 22 meters/chambers from our 10 to 10.5 year old stock and it will cost \$9,574 plus nominal cost of additional equipment. Future years account for anticipated cost increases for meters/chambers and the increase in quantity needing to be replaced in those years.

Qty.	Size	Ea.	Cost	Fiscal Year	Meter Quantity
0	0.625	\$128.00	\$0.00	FY 2024	22
0	0.75	\$145.00	\$0.00	FY 2025	47
1	1	\$192.00	\$192.00	FY 2026	74
15	1.5	\$395.00	\$5,925.00	FY 2027	85
5	2	\$433.00	\$2,165.00	FY 2028	147
1	3	\$1,292.00	\$1,292.00		
22		Meter cost	\$9,574.00		
		Add'l Equip	Nominal		
		Total cost	\$9,574.00		

Program Alternative

As the Village's water metering system is critically important as a source of revenue, it is vital to plan/budget for replacing water meters that have reached or exceeded the end of their useful service life. The primary alternative to this program is to not budget/plan for water meter replacements and respond to metering failures and inaccuracies as they occur. An alternative to the Village incurring the costs of the new meters is requiring that the building/property owners incur a portion or all of the new meter costs.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Water and Sewer Improvements - Public Works

Water Main Replacement Program	FY 2024	\$215,000	WS
	FY 2025	\$450,000	WS
	FY 2026	\$400,000	WS
	FY 2027	\$400,000	WS
	FY 2028	\$400,000	WS

Critical

Recommended

Contingent on Funding

Spending History

FY 2023	\$	-	
FY 2022	\$	146,274	(Lead Service Line Replacement Program)
FY 2021	\$	575,000	(FY 2020 and FY 2021 Projects both completed in FY 2021)
FY 2020	\$	-	
FY 2019	\$	318,712	

Program Description & Justification

This program aims to improve the condition of the Village’s water distribution system by replacing aging and deteriorating infrastructure or by installing new infrastructure where a need becomes apparent. This approach helps reduce costly water main breaks and the associated water loss. The Village’s water distribution system is a critically important infrastructure system.

The Village has approximately 40 miles of water main. The majority of the water mains are between 50 and 80 years old. On average, there are approximately seven water main breaks per year. It has been proven that as water mains become old and reach the end of their useful lives, performance deteriorates and results in high maintenance costs, loss of hydraulic capacity and water quality, and a significant increase in customer complaints. The AWWA recommends replacing one percent of the distribution system every year.

Each year, Village Staff analyzes failing or problematic sections of water main to determine the need to replace specific water mains based on history and number of breaks, outdated size, or any other defective condition. This analysis is reviewed along with all identified needs for improvement based on the Water Distribution Model Report performed by Strand Associates Engineering in 2018.

FY 2024 Recommended Projects

The proposed project for FY 2024 includes the installation of an 8" water main on two (alternating) blocks of LeMoyné (from Park Avenue to Franklin Avenue and Ashland Avenue to Lathrop Avenue) as identified in the 2018 Strand Water Distribution System Modeling Report.

The cost estimate for this project is as follows:

- \$175,000 for construction
- \$40,000 for project engineering (design and construction)

Future Water Main Projects

Staff reviews the modeling report and evaluates the Village’s water distribution system and trends in water main breaks annually to identify and prioritize future projects. Staff has identified the following water system improvement project(s) for possible future fiscal years:

- FY 2025 - Install an 8" water main on two of the remaining four alternating blocks of LeMoyné (from Jackson Avenue to Monroe Avenue, from William Street to Clinton Place and from Bonnie Brae to Harlem Avenue) as identified in the 2018 Strand Water Distribution System Modeling Report.

Program Alternative

As the Village’s water distribution system is a critically important infrastructure system, it is vital to plan/budget for replacing water mains that have reached or exceeded the end of their useful service life. The primary alternative to this program is to not budget/plan for water main replacement projects and respond to water main breaks as they occur, which could lead to more significant budget impacts.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Water and Sewer Improvements - Public Works

Hydrant Replacement Program	FY 2024	\$10,000	WS
	FY 2025	\$10,000	WS
	FY 2026	\$10,000	WS
	FY 2027	\$10,000	WS
	FY 2028	\$10,000	WS

Critical

Recommended

Contingent on Funding

Spending History

FY 2023	\$	10,000 (Projected)
FY 2022	\$	-
FY 2021	\$	6,000 Hydrant and two valves installed by in-house staff.
FY 2020	\$	-
FY 2019	\$	-

Program Description & Justification

The Village’s fire hydrant system is a critically important infrastructure system. The Village owns and operates approximately 446 fire hydrants. The purpose of this program is to maintain all of the Village’s fire hydrants in excellent operating condition. The Village’s Fire Department conducts a Village-wide hydrant flushing program each year. During the hydrant flushing events, Fire Department personnel identify hydrants in need of repair and provide a list of those hydrants to the Public Works Department to coordinate and/or make the necessary repairs. Hydrants that are not in operating condition or are identified as being too low for proper operation are prioritized for immediate repair or replacement.

FY 2024 Recommended Project

The Public Works and Fire Departments identify hydrants as operational but “too low” (less than 18 inches from the ground to port), which prevents the hydrant wrench from rotating freely around the main/steamer port and slows the time required to connect the fire hose to the hydrant. Hydrants with a low flow rate due to a small supply line are also identified. Each year Village Staff attempts to replace these hydrants to eliminate any that do not operate efficiently or provide high flow rates. Public Works staff can often "rebuild" existing hydrants instead of replacement. This process involves the replacement of the inner workings of the hydrant and is more cost-effective than a complete replacement.

Program Alternative

The Village’s fire hydrant system is critically important infrastructure. It is essential to budget for replacing hydrants that have reached or exceeded the end of their useful service lives. The primary alternative to this program is to not budget/plan for hydrant replacement and make more costly emergency repairs.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Water and Sewer Improvements - Public Works

Lead Service Line Replacement Reimbursement Program

FY 2024	\$50,000	WS
FY 2025	\$50,000	WS
FY 2026	\$50,000	WS
FY 2027	\$50,000	WS
FY 2028	\$50,000	WS

Critical

Recommended

Contingent on Funding

Spending History

FY 2023	\$	155,000 (Projected)
FY 2022	\$	146,274

Project Description & Justification

Beginning in FY 2022, the Village increased its efforts to remove lead from the water system by creating a reimbursement program for property owners who choose to electively replace lead water services. In the first year, it is projected that there will be more than 20 property owners who have completed this work as part of the reimbursement program.

A portion of the reimbursement is made at 100% for the Village-portion of the water service and 50% for the property-owner-portion of the water service. Additional costs such as permit fees, interior plumbing modifications (related to the water service replacement) are also reimbursable at 50%. The maximum reimbursement per property owner is capped at \$7,500.

Staff recommends an annual funding level of \$50,000, which will allow for the replacement of 7-8 lead water services based on average reimbursements issued so far. Additional funding sources will continue to be researched to further supplement this current effort.

Project Alternative

The alternative is to require property owners to fund lead water service replacements 100% without providing any funding assistance from the Village.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Water and Sewer Improvements - Public Works

Basement Protection Subsidy Program

FY 2024	\$59,000	WS
FY 2025	\$59,000	WS
FY 2026	\$59,000	WS
FY 2027	\$59,000	WS
FY 2028	\$59,000	WS

Critical

Recommended

Contingent on Funding

Spending History

FY 2023	\$	53,000 (Projected)
FY 2022	\$	100,350
FY 2021	\$	119,548
FY 2020	\$	25,710
FY 2019	\$	58,054

Project Description & Justification

In 1995, the Village initiated a subsidy program to help provide financial assistance to property owners interested in installing flood-prevention infrastructure. The intent of this program is to offset a portion of the expense that a property owner will incur when safeguarding their building from sewer back-ups. The following projects are eligible for the subsidy program: overhead sewer connection, modified overhead sewer connection, and backflow prevention valve.

Depending on the location of the property, eligible expenses are reimbursed at different rates. Three zones have been established, based on the frequency of sewer backups and other criteria, with the respective levels of funding as follows:

- 1) Standard – 50% of eligible costs are reimbursed up to \$4,000
- 2) High Risk (HR) – 80% of eligible costs are reimbursed up to \$6,000
- 3) High Risk Low Access (HRLA) - 80% of eligible costs are reimbursed up to \$7,500

Costs such as permit fees and work directly related to the excavation and installation of new infrastructure are eligible for reimbursement. The reimbursement per property owner is capped based on the zones outlined above.

Staff recommends an annual funding level of \$59,000, split based on the zone:

- 1) \$32,000 for Standard
- 2) \$12,000 for HR
- 3) \$15,000 for HRLA

This allows for approximately 12 flood prevention infrastructure installations, based on average reimbursements issued so far.

Project Alternative

The alternative is to not provide any funding assistance from the Village.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Water and Sewer Improvements - Public Works

Sewer Lateral Repair Reimbursement Program

FY 2024	\$50,000	WS
FY 2025	\$50,000	WS
FY 2026	\$50,000	WS
FY 2027	\$50,000	WS
FY 2028	\$50,000	WS

Critical

Recommended

Contingent on Funding

Spending History

FY 2023	\$	28,000 (Projected)
FY 2022	\$	36,650

Project Description & Justification

Beginning in FY 2022, the Village created a subsidy program to help with the cost of repairing structural damage to sewer lateral lines within the roadway at residential properties.

The reimbursement for structural damage repairs is a 50% match. Costs such as permit fees and work directly related to the excavation, sewer lateral replacement, and roadway restoration are eligible for reimbursement. The maximum reimbursement per property owner is capped at \$7,500.

Staff recommends an annual funding level of \$50,000, which will allow for the replacement of approximately 7 damaged sewer lateral lines.

Project Alternative

The alternative is to not provide any funding assistance from the Village.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None

Water and Sewer Improvements - Public Works

Stormwater Master Plan	FY 2024	\$250,000	WS
	FY 2025	\$250,000	WS
	FY 2026	\$250,000	WS
	FY 2027	\$250,000	WS
	FY 2028	\$250,000	WS

Critical

Recommended

Contingent on Funding

Spending History

FY 2023	\$	106,709 (Projected)
FY 2022	\$	88,601

Project Description & Justification

Over the past few years yard and alley flooding have become more and more prevalent, along with sewer back-up. In May, 2020 the Village experienced a heavy rain which was followed by a flooding event caused by a significant increase in the water elevation of the Des Plaines River. This event caused significant sewer back-up to residences and led to standing water at various locations throughout the Village.

In an effort to combat increased severity in rain events, undersized municipal sewers and increases in impervious area associated with development, the Village Board recommended that a Stormwater Master Plan (SMP) be created. This SMP would allow the Village to conduct a comprehensive analysis of the Village and to identify areas of concern that may require attention. It would also identify and prioritize Capital Improvement Plan (CIP) Projects that may be implemented to help mitigate the impacts of stormwater on the Village.

The planning stage of the SMP will be completed in FY 2023 and preliminary, future-year expenditures have been identified based on this planning. These expenditures will vary based on more detailed design and cost estimation as well as the Village Board’s desired level of protection.

Project Alternative

The alternative is to continue to address stormwater issues as they arise and are made a priority, which does not allow for a comprehensive analysis and solution on a Village-wide basis.

Project Impact

Annual \$ Impact on Operating Budget	Description of Operating Budget Impact
None	None