Village of Vernon

Shiawassee County, Michigan

Capital Improvement Plan

2022-2027

June 29, 2022

VILLAGE OF VERNON

CAPITAL IMPROVEMENT PLAN
FY 2022-2027

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VILLAGE OF VERNON

CAPITAL IMPROVEMENT PLAN
FY 2022-2027

INTRODUCTION

A Capital Improvements Plan (CIP) is a multi-year planning instrument used to identify needs and financing sources for large-scale public expenditures which are expected to have a relatively long service life. The main objectives of a CIP is to:

- Facilitate the orderly planning and implementation of infrastructure improvements.
- Maintain, preserve, and protect the Village's existing infrastructure.
- Provide for the acquisition or scheduled replacement of equipment.
- Ensure that capital improvements are consistent with the goals and policies of the governing body and the residents of the community.

A comprehensive CIP is an essential tool for the planning and development of the social, physical, and economic wellbeing of the community. The CIP informs the Village residents and stakeholders on how the municipality plans to address significant capital needs over the next six years. Expenditures such as regular vehicle replacement and projects to maintain existing infrastructure are included. If known, proposed funding sources are also identified for each project or equipment. A six-year CIP period is generally considered to be the most suitable. A two or three year time period is too short for effective programming because the planning and financing of major improvement projects generally take a longer period of time. Conversely, a period of seven or more years may project the program too far into the future to be of practical value.

A Capital Improvement is a project or cost, which generally meets the following criteria:

- Has a useful life of at least three (3) years.
- Costs $10,000 or more.
- The cost does not reoccur annually.
- It is not an operating expense related to the maintenance of capital equipment or capital improvements.

Capital improvements may include new structures or facilities (i.e. public buildings, sanitary sewer mains, storm sewers, major/local roadways, recreational facilities); acquisition of land for a public purpose; repairs, replacement, or purchase of major equipment; large scale replacement or rehabilitation of facilities; and the costs of engineering or architectural studies and services relative to the individual capital improvement project.

CIP DEVELOPMENT PROCESS

Preparation of the CIP is done under the authority of Michigan Planning Enabling Act (PA 33 of 2008) to assist the Village in financial planning. The CIP is dynamic and is reviewed and updated annually by Village Administration with review by the Planning Commission. Each year all projects included with the CIP are reviewed, a new call for projects is made, and adjustments are made to the existing projects to reflect potential changes in the funding required, changes in condition, or the recommended timeline for completion or procurement. A new year of programming is also added each year to the replace the year funded in the annual operating budget.

This review and update of the six-year capital improvement plan is completed between the months of January and March to correspond with the Village's annual budget review process. The CIP is used to develop the capital project portion of the annual budget. Approval of the CIP by the planning commission does not mean that they grant final approval of all projects contained within the plan. By approving the CIP, the planning commission acknowledges that these projects represent a reasonable interpretation of the upcoming needs for the community and that projects contained in the first year of the plan are suitable for inclusion in the upcoming budget.

CIP RANKING SYSTEM

High Priority

Urgent, high priority projects that should be done if at all possible. These include projects that are required to complete a major public improvement that would address an emergency, or remedy a condition potentially dangerous to public health, safety, and welfare; projects that would maintain compliance with or remedy non-compliance of regulatory requirements; projects that would address infrastructure identified as failing or rapidly deteriorating; and projects that would provide facilities or equipment critical for the community and vital for the economic stability of the Village. A special effort shall be made to find sufficient funding for all the projects in this group.

Medium Priority

Medium priority and desirable projects that should be done as funding becomes available. These include projects that would benefit the community, and projects that are adequately planned, but not absolutely required at this time. These projects should be deferred to a subsequent year if budget reductions are necessary.

Low Priority

Low priority projects are desirable but not essential and can be postponed without detriment to present services.

BUDGET AND FINANCING

It should be noted that prioritization of the projects and equipment is not tied to the availability of funds. While account balances and revenues for funding sources are taken into account, the Village's analysis of potential available revenue sources is not necessarily related to how project proposals and equipment are ranked. Financing of capital improvements can be accomplished in a variety of ways and all funding sources should be considered. The goal is to examine and consider all potential funding options available at the onset of the yearly CIP review and planning process. If funding is available, projects identified in the CIP shall be included in the proposed budget for the next fiscal year.

FUNDING SOURCES

Because capital improvement projects involve the outlay of substantial funds, numerous sources are necessary to provide financing. The following is a summary of the funding sources for projects included in this capital improvement plan.

Enterprise (Reserve) Funds

Enterprise funds are accumulated in advance for capital requirements. Enterprise funds not only pay for capital improvements, but also for the day-to-day operations of community services. General Funds are also used to fund the Village's Public Works, Police, and Parks & Recreation Departments. Sewer funds are used for capital improvements and the day-to-day operation of the Village's sanitary sewer collection and treatment system. Sewer enterprise

fund dollars can only be used on projects related to the Village's waste water system.

Bonds

When the Village sells bonds, purchasers are, in effect, lending the community money. The money is repaid, with interest, from taxes or fees over the years. The logic behind issuing bonds (or "floating a bond issue") for capital projects is that citizens who benefit from the capital improvements over a period of time should help the community pay for them. Bonds may be issued as general obligation bonds or as revenue bonds.

Weight and Gas Tax

Based on a formula set by the State of Michigan, the Village of Vernon receives a portion of the tax placed on motor fuel and highway usage in the state. The restrictions placed on the expenditure of these funds ensure that they will be spent on transportation-related projects or operations and services. 75% of the funds received by the Village each year are allocated to major streets, with the remaining 25% being allocated to local streets. These funds are commonly called Act 51 funds.

Tax Increment Financing (TIF)

TIF is a municipal financing tool that can be used to renovate or redevelop declining areas while improving their tax base. TIP applies the increase in various state and local taxes that result from a redevelopment project to pay for project-related public improvements. For purposes of financing activities with the Village of Vernon's downtown district, the Downtown Development Authority adopted a 20-year TIF plan in 2006. Public Act 281 of 1986, the Local Development Finance Authority Act and Public Act 450 of 1980, the Tax Incremental Financing Act authorizes TIF.

Federal and State Funds

The federal and state governments make funds available to communities through numerous grant and loan programs. Some funds are tied directly to a specific program. The community has discretion, within certain guidelines, over the expenditure of others. Examples of federal and state funding sources include the Michigan Department of Environmental Quality (MDEQ), Michigan Department of Transportation (MDOT), Michigan Economic Development Corporation (MEDC), and United States Department of Agriculture (USDA).

Special Assessments

Capital improvements that benefit particular properties, rather than a community as a whole, may be financed more equitably by special assessment. Financing is provided by those who directly benefit. Local improvements often financed by this method are street improvements.

Capital Improvements Plan
List by Category

Village of Vernon
Capital Improvement Program

FY 2022-2027

Summary

of Expenditures by Category

Department	Project Title	Priority	Funding Source	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
BUILDINGS AND GROUNDS								
Village Govt.	Backup Generator	Low	General Fund					TBD
Village Govt.	Back Porch Repairs & Painting	Medium	General Fund	TBD				
DPW	Back Garge Door	Low	General Fund					TBD
POLICE								
Police	Replacement of Police Vehicle	High	USDA RD and General Funds	$45,000				
PARKS AND RECREATION								
Parks and Rec.	Dugout for Ballfield	Low	General Fund					$15,000
Parks and Rec.	Park Restroom	High	General Fund and DNR Grant		TBD			
Parks and Rec.	Pavilion Roof Replacements	Med	General Fund			$20,000		
Parks and Rec.	Tennis and Basketball Court Repairs	High	General Fund		$30,000			
DDA								
DDA	DDA Storage Shed	Low	DDA					TBD
DDA	Main Street Streetscape Improvements	Medium	DDA			TBD		
DDA	Parking lot	Low	DDA		TBD			

Department	Project Title	Priority	Funding Source	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
DPW								
DPW	Side by Side	Low	General Fund				TBD	
DPW	New Salt Shed and 250 Gallon Disel Tank	Med	General Fund			TBD		
SEWER SYSTEM								
DPW	Village Wide WastewaterRepairs	High	Sewer System		$50,000			
DPW	Lift Station Pump	Med	Sewer System				$25,000	
STORM SYSTEM								
DPW	Miscellaneous Storm Sewer Repairs	High	Local Streets; Major Streets	$10,000	$10,000	$10,000	$10,000	$10,000
LOCAL STREETS								
DPW	Maple Street Bridge Repairs	High	Local Streets		TBD			
DPW	Local Street Reconstruction and Resurfacing	High	Local Streets		$60,000			
DPW	Local Streets Preventative Maintenance	Med	Local Streets	$10,000	$10,000	$10,000	$10,000	$10,000
MAJOR STREETS								
DPW	Main Street Bridge Replacement-Construction	High	Major Streets			$1,029,000		
DPW	Main Street Bridge Replacement-Design Engineering	High	Major Streets		$102,900			
DPW	Main Street Bridge Replacement-Const. Engineering	High	Major Streets		$154,350			
DPW	Major Street Preventative Maintenance	Med	Major Streets	$15,000	$15,000	$15,000	$15,000	$15,000
SIDEWALKS								
DPW	Annual Sidewalk Replacement & Repairs	Med	Sidewalks	$5,000	$5,000	$5,000	$5,000	$5,000

Department	Project Title	Priority	Funding Source	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Total Expenditures				$75,000	$377,250	$ 1,089,000.00	$65,000	$40,000

Capital Improvements Project Profiles

Category:

Buildings & Grounds

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: Village

Project Title: Backup Generator

Project Category: Buildings & Grounds

Project Location: Village Hall

Department Priority: Medium

Funding Source: General Fund

Overall Priority: Low

Project Description:

Backup gas generator for Village Hall. Cost estimates/ quotes should be obtained to evaluate potential costs.

Project Justification:

Village Hall currently does not have a backup generator in case of power outage.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost					TBD

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: Village Gevernment

Project Title: Back Porch Repairs & Painting

Project Category: Building and Grounds

Project Location: Village Hall

Department Priority: Low

Funding Source: General Fund

Overall Priority: Medium

Project Description:

Repair broken and uneven concrete on back porch, sidkewalk and paint building where paint is coming off back.

Project Justification:

Village Hall back porch is uneven and a tripping hazard.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost	TBD				

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: DPW

Project Title: DPW Garage Door

Project Category: Building and Grounds

Project Location: Village Hall back Garage

Department Priority: Low

Funding Source: General Fund

Overall Priority: Low

Project Description:

Replace Garage Door that is in need or repairs from being hit.

Project Justification:

Garage door behind Village Hall needs replaced.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost					TBD

Capital Improvements Project Profiles

Category:

Police

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: Police

Project Title: Police Patrol Unit

Project Category: Police

Project Location: Police Department

Department Priority: High

Funding Source: USDA RD Funding $10,000 and General Funds $30,000

Overall Priority: High

Project Description:

Scheduled replacement of police vehicle and equipment to maintain a maximum age of approximately five (5) years.

Project Justification:

The continued rollover of vehicles provides for lower maintence costs and vehicle downtime. Funding and financing will be explored.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost	$45,000				

Capital Improvements Project Profiles

Category:

Parks and Recreation

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: Parks & Recreation

Project Title: Dugout for Ballfield

Project Category: Parks & Recreation

Project Location: Crawford

Department Priority: Low

Funding Source: General Fund

Overall Priority: Low

Project Description:

Dugouts for ball field.

Project Justification:

Community has expressed interest in having dugouts at ball field.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost					$15,000

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: Parks & Recreation

Project Title: Park Restroom

Project Category: Parks & Recreation

Project Location: Crawford

Department Priority: Low

Funding Source: General Fund

Overall Priority: High

Project Description:

Build a waterless vault public restroom.

Project Justification:

Currently the Village is paying $115 a month for one porta-john. Every year the price goes up.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost			TBD		

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: Parks & Recreation

Project Title: Pavilion Roof Replacement

Project Category: Parks & Recreation

Project Location: Crawford

Department Priority: Medium

Funding Source: General Fund

Overall Priority: Medium

Project Description:

Replacement of pavilion roof materials. Costs are estimated and no quotes have been solicited. DPW would like replaced with a metal roof.

Project Justification:

Pavilion roofs were installed in ____ and will likely be in need of replacement in this planning period.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost			$20,000		

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: Parks & Recreation

Project Title: Tennis and Basketball Court Repairs

Project Category: Parks & Recreation

Project Location: Crawford

Department Priority: High

Funding Source: General Fund

Overall Priority: High

Project Description:

Basketball and Tennis Court surface repairs and/or replacement. Costs are estimated.

Project Justification:

Existing surface is deteriorating and repairs are necessary.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost		$30,000			

Capital Improvements Project Profiles

Category:

Downtown Development Authority (DDA)

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: DDA

Project Title: DDA Storage Shed

Project Category: DDA

Project Location: Village Property

Department Priority: Low

Funding Source: DDA

Overall Priority: Low

Project Description:

Consider putting up a small shed to store all of the DDA equipment and supplies in one location.

Project Justification:

DDA Christmas Decerations are in three different spots and other supplies and equipment are at the library.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost					TBD

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: DDA

Project Title: Main Street Streetscape Improvements

Project Category: DDA

Project Location: Main St between Walnut & Church

Department Priority: Medium

Funding Source: DDA

Overall Priority: Medium

Project Description:

Replace ten (10) trees along Main Street between Walnut Street ad Church Street.

Project Justification:

Tree replacement on both sides of street is desired.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost			TBD		

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: DDA

Project Title: Parking Lot

Project Category: DDA

Project Location: 132 Main St.

Department Priority: High

Funding Source: DDA

Overall Priority: Low

Project Description:

Purchase and Install parking lot at 132 Main Street. Make location of a farmers market once a week.

Project Justification:

Make for more parking in the downtown and a perminant farmers market location in the Village.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost		TBD			

Capital Improvements Project Profiles

Category:

Department of Public Works

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: DPW

Project Title: Side by Side

Project Category: Department of Public

Project Location: DPW Storage

Department Priority: Low

Funding Source: General Fund

Overall Priority: Low

Project Description:

Purchase a side by side to help with different tasks around town.

Project Justification:

Use to collect trash downtown and at parks. Water hanging baskets. Remove snow and other jobs that come up.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost				TBD	

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: DPW

Project Title: New Salt Shed and 250 Gallon Disel Tank

Project Category: DPW

Project Location: DPW Storage

Department Priority: Low

Funding Source: General Fund

Overall Priority: Medium

Project Description:

New salt storage facility to approximately double capacity of the current storage shed. New 250 gallon above ground disel storage tank to be located on same grounds as ne storage shed. Costs will need to be explored as project is considered for completion. May want to consider building large enough to store all DPW equipment and make a new DPW office.

Project Justification:

Current storage shed lacks capacity to store excess salt inventory. Recommended to include the new disel tank with salt storage facility project.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost			TBD		

Capital Improvements Project Profiles

Category:

Sewer System

Wastewater System

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: DPW

Project Title: Village-Wide Wastewater Repairs

Project Category: Sewer System

Project Location: Village Wide

Department Priority: High

Funding Source: Sewer System

Overall Priority: High

Project Description:

Sealing and pressure grouting of approximately 600 joints and cracks throughout the Village's sanitary sewer system to eliminate infiltration. In 2016 the Village completed a portion of the wastewater system repairs needed to eliminate I/I. Village will need to explore additional funding sources to address the remainder of the system. Sanitary sewers identified as needing replacement are not included in this project.

Project Justification:

CCTV work completed as part of MDEQ SAW project identified areas of infiltration into the wastewater system. A portion of these areas were addressed immediately in 2016 using available sewer funds. The ACO that was issued by the State of Michigan in 2007 requires the Village to eliminate I/I into wastewater system. As a result, addressing these additional sources of infiltration through pipe joints is a priority.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost		$50,000			

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: DPW

Project Title: Lift Station Pump

Project Category: Sewer System

Project Location: Olive Street Lift Station

Department Priority: Low

Funding Source: Sewer System

Overall Priority: Medium

Project Description:

Rehabilitation of two (2) submersible sewage pumps (never know when one might go out).

Project Justification:

Rehabilitation is anticipated to be necessary in approximately 4-5 years based on past performance history.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost				$25,000	

Capital Improvements Project Profiles

Category:

Storm System

Storm Water System

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: DPW

Project Title: Miscellaneous Storm Sewer Repairs

Project Category: Storm System

Project Location: Village-wide

Department Priority: Medium

Funding Source: Local Streets, Major Streets

Overall Priority: High

Project Description:

Reconstruction or rehabilitation of failing storm sewer structures village wide.

Project Justification:

Storm sewer structures and inlets require corrective action to maintain structural integrity.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost	$10,000	$10,000	$10.00	$10,000	$10,000

Capital Improvements Project Profiles

Category:

Local Streets

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: DPW

Project Title: Maple Street Bridge Repairs

Project Category: Local Street

Project Location: Maple Street over Holly Drain

Department Priority: Medium

Funding Source: Local Streets

Overall Priority: High

Project Description:

Deck, superstructure, and approach repairs as identified in latest bridge inspection.

Project Justification:

Repairs are recommended to maintain integrity of bridge. See inspection report in file.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost		TBD			

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: DPW

Project Title: Local Streets Reconstruction and Resurfacing

Project Category: Local Street

Project Location: Village-Wide

Department Priority: Medium

Funding Source: Local Streets

Overall Priority: High

Project Description:

Rehabilitation of local streets by resurfacing, reconstruction, or crushing and shaping. Improvements may include curb and gutter, subbase, aggregate base, and pavement as needed. Drainage improvements and other utility upgrades will be evaluated on a street-by-street basis to be included as necessary. Street improvement projects shall be coordinated with sanitary sewer and storm sewer improvement projects identified within this plan and the Village's sanitary sewer and storm sewer asset management plans. See 2017 Road Report for existing road conditions. Streets identified as "poor" condition (PASER 1-4) require structural improvements.

Project Justification:

The 2017 Village of Vernon Road Report identified that 52% of the Village's local and major streets have a PASER rating of 4 or less, indicating that full depth repairs, asphalt overlays, or reconstruction treatment measures are required. Streets will continue to deteriorate and the required treatment method will increase in cost over time. Streets with a PASER rating 1-4 are beyond less expensive treatment options and may need applicable utility replacements. Storm sewer replacement and/or repairs identified in the Village's Storm Sewer System Asset Management Plan shall be completed at the time of the street rehabilitation project.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost		$60,000			

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: DPW

Project Title: Local Streets Preventative Maintenance

Project Category: Local Street

Project Location: Village-Wide

Department Priority: Medium

Funding Source: Local Streets

Overall Priority: Medium

Project Description:

Based upon the PASER ratings for the Village streets, preventative maintenance is used on a yearly basis to extend the life of pavements that are in fairly good condition. Streets in fair to good condition may receive crack sealing, seal coating, or thin overlays.

Project Justification:

In order to keep the Village's streets at a certain level of service over the years, there is a need to include preventative maintenance measures to maintain the integrity of the fair to good condition roads. Preventative maintenance is a cost-effective treatment applied to an existing street to retard further deterioration and maintain the life of those streets that have not yet failed.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost	$10,000	$10,000	$10,000	$10,000	$ 10,000.00

Capital Improvements Project Profiles

Category:

Major Streets

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: DPW

Project Title: Main Street Bridge Replacement-Construction

Project Category: Major Streets

Project Location: Main Street over Holly Drain

Department Priority: High

Funding Source: MDOT Local Bridge (95%) and Major Street Fund (5%)

Overall Priority: High

Project Description:

Replacement of the Main Street Bridge over Holly Drain. Village will be applying for FY2022 MDOT Local Bridge Program funding for a maximum of 95% construction cost participation from federal and/or state funds. Village will be responsible for 5% of construction and 100% of design engineering, permitting, right-of-way, and construction engineering. Estimated replacement costs determined for previous funding applications.

Project Justification:

Bridge has deteriorated to an extent that replacement is necessary. Bridge inspection report completed by Rowe identified box beams in poor condition, spalls and cracks in fascia beams, abutments within the waterway that constrict flow and have no scour protection. Bridge was constructed in 1965 and is the Village's #1 priority for funding.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost			$1,029,000		

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: DPW

Project Title: Main Street Bridge Replacement-Design Engineering

Project Category: Major Streets

Project Location: Main Street over Holly Drain

Department Priority: High

Funding Source: Major Streets

Overall Priority: High

Project Description:

Replacement of the Main Street Bridge over Holly Drain. Village will be applying for FY2022 MDOT Local Bridge Program funding for a maximum of 95% construction cost participation from federal and/or state funds. Village will be responsible for 5% of construction and 100% of design engineering, permitting, right-of-way, and construction engineering. Design engineering to be completed in fiscal year prior to construction. Estimated design engineering cost is 10% of estimated construction costs for budgeting purposes.

Project Justification:

Bridge has deteriorated to an extent that replacement is necessary. Bridge inspection report completed by Rowe identified box beams in poor condition, spalls and cracks in fascia beams, abutments within the waterway that constrict flow and have no scour protection. Bridge was constructed in 1965 and is the Village's #1 priority for funding.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost		$102,900			

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: DPW

Project Title: Main Street Bridge Replacement-Const. Engineering

Project Category: Major Streets

Project Location: Main Street over Holly Drain

Department Priority: High

Funding Source: Major Streets

Overall Priority: High

Project Description:

Replacement of the Main Street Bridge over Holly Drain. Village will be applying for FY2022 MDOT Local Bridge Program funding for a maximum of 95% construction cost participation from federal and/or state funds. Village will be responsible for 5% of construction and 100% of design engineering, permitting, right-of-way, and construction engineering. Estimated construction engineering cost is 15% of estimated construction costs for budgeting purposes.

Project Justification:

Bridge has deteriorated to an extent that replacement is necessary. Bridge inspection report completed by Rowe identified box beams in poor condition, spalls and cracks in fascia beams, abutments within the waterway that constrict flow and have no scour protection. Bridge was constructed in 1965 and is the Village's #1 priority for funding.

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost		$154,350			

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: DPW

Project Title: Major Street Preventative Maintenance

Project Category: Major Streets

Project Location: Village-Wide

Department Priority: Medium

Funding Source: Major Streets

Overall Priority: Medium

Project Description:

Based upon the PASER ratings for the Village streets, preventative maintenance is used on a yearly basis to extend the life of pavements that are in fairly good condition. Streets in fair to good condition may receive crack sealing, seal coating, or thin overlays. Pavement markings are also replaced as needed.

Project Justification:

In order to keep the Village's streets at a certain level of service over the years, there is a need to include preventative maintenance measures to maintain the integrity of the fair to good condition roads. Preventative maintenance is a cost-effective treatment applied to an existing street to retard further deterioration and maintain the life of those streets that have not yet failed

Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost	$15,000	$15,000	$15,000	$15,000	$15,000

Capital Improvements Project Profiles

Category:

Sidewalks

Village of Vernon
Capital Improvement Project Profile
FY 2022-2027

Department: DPW

Project Title: Annual Sidewalk Replacement and Repairs

Project Category: Sidewalks

Project Location: Village- Wide

Department Priority: Medium

Funding Source: General Fund

Overall Priority: Medium

Project Description:

Annual repair and replacement of damaged or missing sidewalk segments Village wide.

Project Justification:

Repairs are needed due to heaved or unlevel walking surfaces to help prevent trip and fall incidents and improve pedestrian safety.

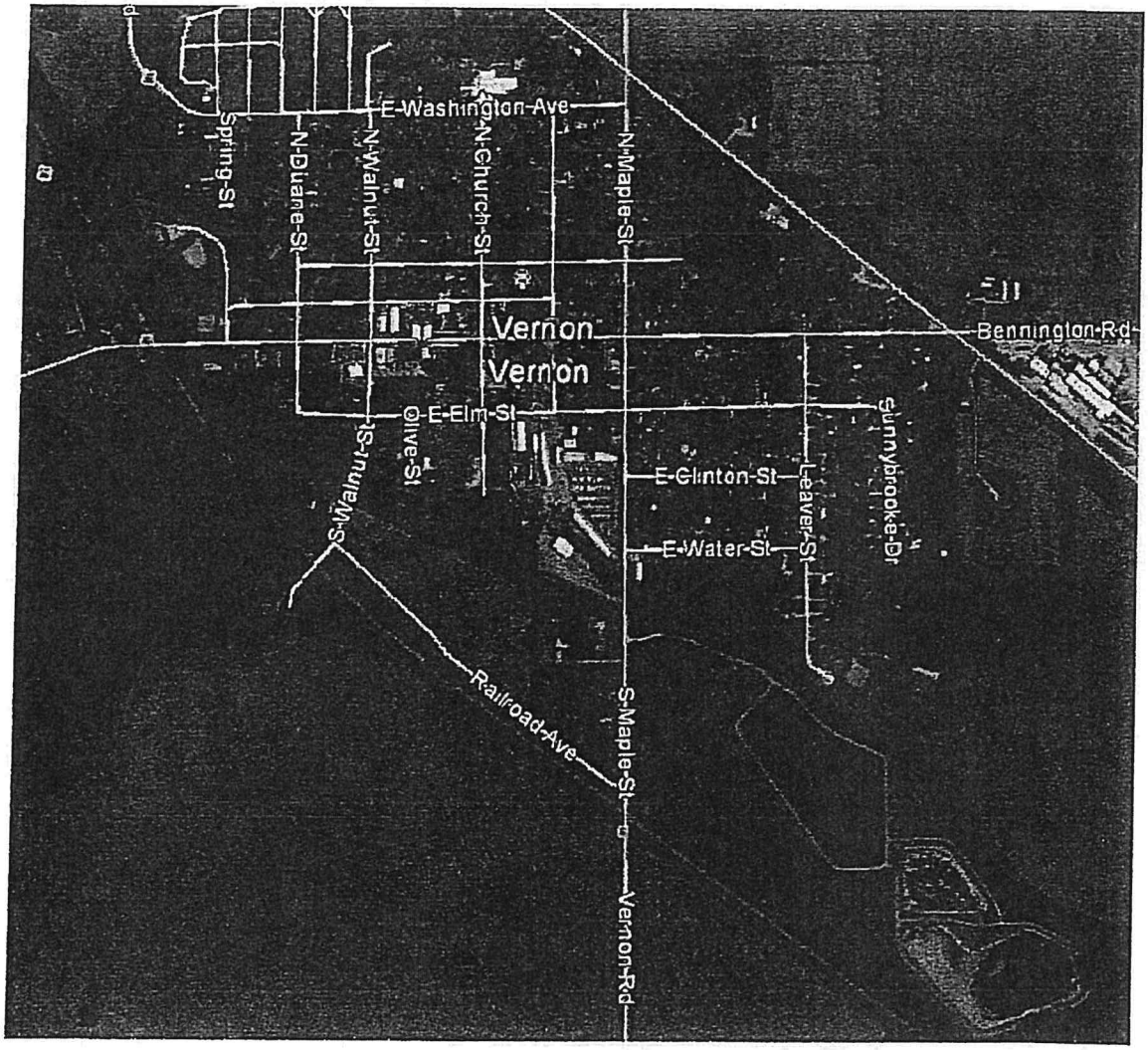
Fiscal Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Est. Cost	$5,000	$5,000	$5,000	$5,000	$5,000

Appendix A

VILLAGE OF
VERNON
MICHIGAN
EST. 1871

2017 ROAD REPORT

The Village maintains 6.44 miles of roads. Made up of 2.89 miles of Major Streets and 3.55 miles of Local Streets.



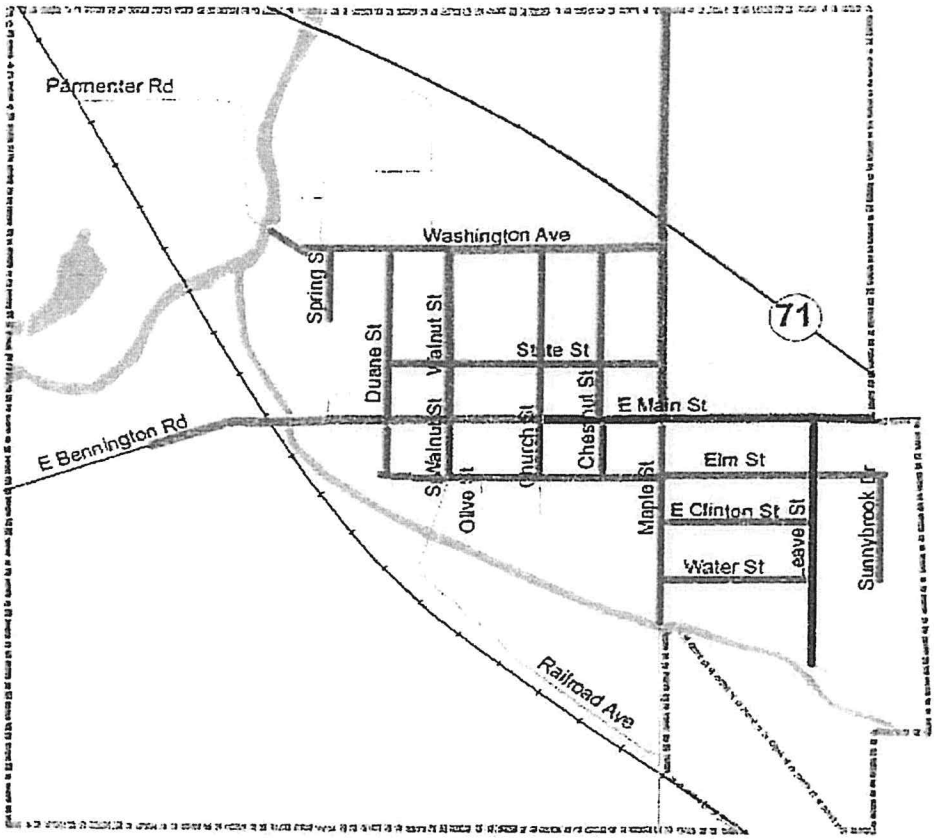
Each of the streets have been assigned a PASER rating. The Pavement Surface Evaluation and Rating (PASER) System has been adopted by the State of Michigan as a method to properly assess roads. PASER is a "windshield" road rating system that uses a 1 to 10 rating scale, with a value of 10 representing a new road and a value of 1 representing a failed road. Condition ratings are assigned by monitoring the type and amount of visual defects along a road segment while driving the segment. The following is the PASER rating system that addresses condition and treatment measures.

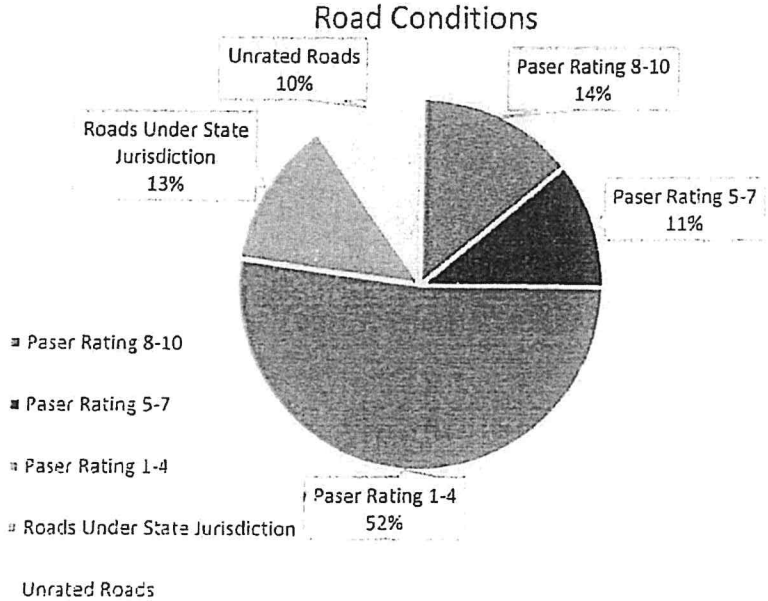
Rating system

Surface rating	Visible distress*	General condition/ treatment measures
10 Excellent	None.	New pavement. No maintenance required.
9 Excellent	Traffic wear in wheelpath. Slight map cracking or pop-outs.	Recent concrete overlay or joint rehabilitation. Like new condition. No maintenance required.
8 Very Good	Pop-outs, map cracking, or minor surface defects. Slight surface scaling. Partial loss of joint sealant. Isolated meander cracks, tight or well sealed. Isolated cracks at manholes, tight or well sealed.	More surface wear or slight defects. Little or no maintenance required.
7 Good	More extensive surface scaling. Some open joints. Isolated transverse or longitudinal cracks, tight or well sealed. Some manhole displacement and cracking. First utility patch, in good condition. First noticeable settlement or heave area.	First sign of transverse cracks (all tight); first utility patch. More extensive surface scaling. Seal open joints and other routine maintenance.
6 Good	Moderate scaling in several locations. A few isolated surface spalls. Shallow reinforcement causing cracks. Several corner cracks, tight or well sealed. Open (¼" wide) longitudinal or transverse joints and more frequent transverse cracks (some open ¼").	First signs of shallow reinforcement or corner cracking. Needs general joint and crack sealing. Scaled areas could be overlaid.
5 Fair	Moderate to severe polishing or scaling over 25% of the surface. High reinforcing steel causing surface spalling. Some joints and cracks have begun spalling. First signs of joint or crack faulting (¼"). Multiple corner cracks with broken pieces. Moderate settlement or frost heave areas. Patching showing distress.	First signs of joint or crack spalling or faulting. Grind to repair surface defects. Some partial depth patching or joint repairs needed.
4 Fair	Severe polishing, scaling, map cracking, or spalling over 50% of the area. Joints and cracks show moderate to severe spalling. Pumping and faulting of joints (½") with fair ride. Several slabs have multiple transverse or meander cracks with moderate spalling. Spalled area broken into several pieces. Corner cracks with missing pieces or patches. Pavement blowups.	Needs some full depth repairs, grinding, and/or asphalt overlay to correct surface defects.
3 Poor	Most joints and cracks are open, with multiple parallel cracks, severe spalling, or faulting. D-cracking is evident. Severe faulting (1") giving poor ride. Extensive patching in fair to poor condition. Many transverse and meander cracks, open and severely spalled.	Needs extensive full depth patching plus some full slab replacement.
2 Very Poor	Extensive slab cracking, severely spalled and patched. Joints failed. Patching in very poor condition. Severe and extensive settlements or frost heaves.	Recycle and/or rebuild pavement.
1 Failed	Restricted speed. Extensive potholes. Almost total loss of pavement integrity.	Total reconstruction.

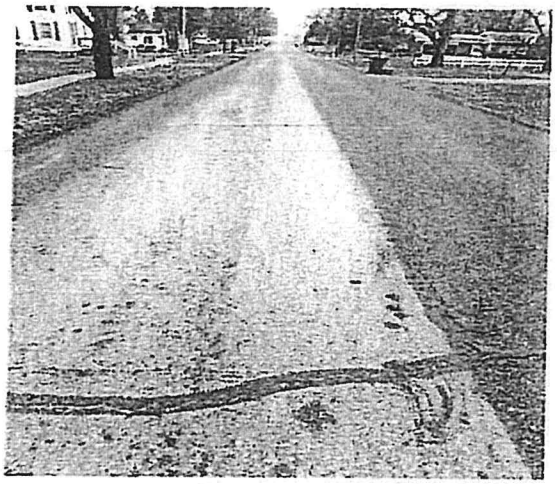
Rating 8-10
Rating 5-7
Rating 1-4
Roads Under State Jurisdiction
Local Road (Not Rated)

0.1 0.05 0 0.1
Miles





PASER rating of 8-10, "Good" condition, requires Routine Maintenance.
Routine maintenance is the day-to-day maintenance activities that are scheduled, such as street sweeping, drainage clearing, gravel shoulder grading and sealing cracks to prevent standing water and water penetration.



North Maple St.

East Main St.

PASER rating of 5-7, "Fair" condition, requires Capital Preventive Maintenance.
Capital preventive maintenance (CPM) is a planned set of cost effective treatments to an existing roadway system that protect the pavement structure, slow the rate of pavement deterioration and/or correct pavement surface deficiencies. Surface treatments are targeted at pavement surface defects primarily caused by the environment and by pavement material deficiencies. Potential treatments include partial depth joint repairs, seal coating, and resurfacing.

South Leaver St.

West Main St.

PASER rating of 1-4, "Poor" condition, requires Structural Improvements.
This category includes work which addresses the structural integrity of a road, such as full depth repairs, a major overlay or reconstruction.

Water St.

East Elm St.

Estimated cost for various fixes.

Mill & Resurface:	$35 per lane ft.
Base Crush, Shape & Resurface:	$70 per lane ft.
Total reconstruct with curb/gutter/sewer:	$275 per lane ft.

Example: Mill & Resurface of a 1 Mile segment of road with 2 lanes (10,560 feet per lane) would cost approximately $369,600.00.

These prices are average based on actual project costs in Shiawassee & Genesee County for 2016.

Funding Road Improvements

Special Assessment	328 parcels @ $80.00	$26,240.00
Act 51 Funding yearly average (tied to State gas tax)		$65,000.00
(Approx 25% of Act 51 funds is transferred to fund local streets)		

History of Street Work

2012
- Main Street, M-71 to Spring Street (Total Reconstruct with DDA limits, Mill & Resurface outside DDA limits)

2009
- Maple Street, M-71 to Main Street (Mill & Resurface)

2006
- Leaver Street, Main Street to south end

2005
- Elm Street, Walnut Street to Maple Street
- Chestnut Street, Main Street to Elm Street
- Church Street, Main Street to Elm Street
- Walnut Street, Main Street to Elm Street

2000
- Village Hall parking lot
- Walnut Street, area between Elm Street and bridge (RR tracks)
- Olive Street, Elm Street south to end
- Church Street, Elm Street south to end
- Maple Street, Glaser's tracks south to RR tracks
- Main Street, M-71 to 300' west (concrete)
- Sunnybrooke Drive (pavement patching)

1998
- Washington Avenue, Walnut Street to Maple Street
- Church Street, Main Street to Washington Avenue
- Elm Street, Leaver Street to Maple Street
- Spring Street, Washington Avenue to south end
- Alley north of Main Street, Duane Street to Chestnut Street
- Crawford Memorial Park drive
- Main Street/Maple Street, intersection repair
- Main Street/Walnut Street, intersection repair
- Main Street/Maple Street, curbing (S/E corner)

1997
- Washington Avenue, Walnut Street to bridge
- State Street, Duane Street to Maple Street
- Walnut Street, Main Street to Washington Avenue
- Duane Street, Main Street to Washington Avenue
- Basketball court, Sexton Memorial Park

1995
- Clinton Street, Maple Street to Leaver Street
- Duane Street, Main Street to Elm Street
- Spring Street, Main Street to north end
- Alley north of Main Street, Spring Street to Duane Street
- Elm Street, Walnut Street to Duane Street
- Crawford Memorial Park drive

1992
- Elm Street, Walnut Street to Maple Street
- Chestnut Street, Main Street to Elm Street
- Leaver Street, Main Street to end

1991
- Main Street, east to west limits
- Elm Street, Leaver Street to Sunnybrooke Drive
- Sunnybrooke Drive, Elm Street to end

1989
- Chestnut Street, Main Street to Washington Avenue
- Maple Street, M-71 to Water Street

1988
- Walnut Street, Main Street to Elm Street
- Main Street, M-71 to 300' west (2" resurface)
- Maple Street, Water Street to RR tracks

1981
- Elm Street, Maple Street to Church Street
- Washington Avenue, Maple Street to Walnut Street

1975
- Chestnut Street, Elm Street to Main Street
- Church Street, Elm Street to Main Street
- Maple Street, Glaser's tracks to south limits
- Main Street, RR tracks to 250' west
- Maple Street/M-71, intersection repair
- Water Street, Maple Street to Leaver Street
- State Street, Maple Street east to end

Appendix B