



# Memo

To: Planning Commission Members

Cc: Jennifer Frey, Planning Director

From: Marina Neumaier, Finance Director

Subject: Capital Improvement Program

Date: August 16, 2016

Robert R. Nix II, *Supervisor*  
Sue A. Hillebrand, *Clerk*  
Marjorie F. Banner, *Treasurer*  
Marvin Gans, *Trustee*  
Symantha Heath, *Trustee*  
Mindy Herrmann, *Trustee*  
Fred Shadko, *Trustee*

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Enclosed for your consideration is the Northville Township 2017-2022 Capital Improvement Plan (CIP). The Township is required to prepare a CIP plan pursuant to the Michigan Planning and Enabling Act (see below):

**MICHIGAN PLANNING ENABLING ACT (EXCERPT) Act 33 of 2008: 125.3865 Capital improvements program of public structures and improvements; preparation; basis.**

(1) To further the desirable future development of the local unit of government under the master plan, a planning commission, after adoption of a master plan, shall annually prepare a capital improvements program of public structures and improvements, unless the planning commission is exempted from this requirement by charter or otherwise. If the planning commission is exempted, the legislative body either shall prepare and adopt a capital improvements program, separate from or as a part of the annual budget, or shall delegate the preparation of the capital improvements program to the chief elected official or a nonelected administrative official, subject to final approval by the legislative body. The capital improvements program shall show those public structures and improvements, in the general order of their priority, that in the commission's judgment will be needed or desirable and can be undertaken within the ensuing 6-year period. The capital improvements program shall be based upon the requirements of the local unit of government for all types of public structures and improvements. Consequently, each agency or department of the local unit of government with authority for public structures or improvements shall upon request furnish the planning commission with lists, plans, and estimates of time and cost of those public structures and improvements.

**(2) Any township may prepare and adopt a capital improvement program. However, subsection (1) is only mandatory for a township if the township, alone or jointly with 1 or more other local units of government, owns or operates a water supply or sewage disposal system.**

**History:** 2008, Act 33, Eff. Sept. 1, 2008  
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## **The Capital Improvement Program (CIP) Overview**

The Capital Improvement Program is a comprehensive plan of the Township's anticipated future needs for facilities and infrastructure, and should provide the framework for realizing the community's goals and objectives. The CIP includes estimated costs and time-lines for each project. The program is neither a commitment, nor a limitation to a particular cost or project. The program is a guide intended to assist the Board in allocating limited resources in designating capital funding. Priority rankings do not necessarily correspond to funding sequence.

The CIP is a flexible document, necessarily meant to be reevaluated and amended each year. By approving the CIP, the Planning Commission acknowledges that these projects represent a reasonable interpretation of the pending needs of the Township.

# NORTHVILLE TOWNSHIP, MICHIGAN 2017- 2022 CAPITAL IMPROVEMENT PLAN

*Charter Township of Northville, Michigan. A six-year capital improvement plan (CIP) and an annual update of that plan is required under the Michigan Planning Enabling Act of 2008. The CIP identifies multi-year capital improvements and projects for purposes of long-range planning for the Township.*

## *Capital Improvements Program*

Charter Township of Northville, Michigan  
2017-2022

### Overview

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The Township of Northville's Capital Improvements Program (CIP) is a planning tool, with a goal to identify capital improvement needs over a six-year period from 2016-2021. The CIP is an opportunity to formulate strategic long-term policy decisions that extends beyond the current budget year. The CIP helps track multi-year projects that may require planning, design, land acquisition and construction. The projects identified in the CIP represent the Township of Northville's plan to serve residents and anticipate the needs of a growing and dynamic community. The following documents were considered in preparation of the CIP:

- Land Use Master Plan(adopted August 16, 2007)
- Pathway Gap Analysis (prepared August 2012)

### Definition of a Capital Improvement

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A capital improvement is defined as any new equipment, construction, acquisition or improvement to public lands, buildings or structures in excess of \$5,000 with a minimum life expectancy of one year. Maintenance-oriented, operational or continuous expenditures are not considered to be capital improvements.

The CIP allows for responsible and thoughtful planning of future major expenditures that are not necessarily financed or automatically included in the annual budgeting process. All capital projects, however, as they pertain to the definition of capital improvements above should be part of this CIP. Specifically, the purpose of the CIP is to:

- Identify and evaluate the needs for public facilities.
- Determine cost estimates for each capital project submitted.
- Determine if there will be future operating costs for such projects.
- Determine potential sources of funding for such projects.
- Adopt policies for implementing capital improvement construction.
- Anticipate and pre-plan projects with an emphasis on seizing opportunities for partnerships and alternative funding.

### Impact of Capital Budget on the Operating Budget

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As new policies and programs are approved, both the operating and capital budgets are impacted. For example, an increase in service levels approved as part

# **Northville Township, Michigan 2017-2022 Capital Improvement Plan**

of the operating budget would have long-term effects on the Capital Improvements Program. Conversely, a restrictive change to the use of long-term debt would slow capital programs.

Regardless of the difference between the operating and capital budgets, the two are interdependent. Budgetary policy states that all foreseeable operating costs related to capital projects be estimated and provided for as part of the review process associated with the Capital Improvements Program. In addition, departments are required to include costs associated with operating and maintaining capital projects that are requested for the upcoming year.

## **Legal Basis of the Capital Improvements Program**

The development and the adoption of a CIP are driven by a statutory requirement at the State level. The State of Michigan has set forth the requirement of a CIP under the Michigan Planning Enabling Act, Act 33 of 2008. The following excerpt from the Act sets for the requirement:

*"... (2) Any Township may prepare and adopt a capital improvement program. However, subsection (1) is only mandatory for a Township if the Township alone or jointly with one or more other local units of government, owns or operates a water supply or sewage disposal system."*

## **Planning and Benefits of the Capital Improvements Program**

The CIP is first and foremost, a planning tool. It can be quite useful as a primary guide in implementing the Master Plan. With thoughtful foresight and review as a result of a CIP, the many outstanding capital projects that communities are faced with implementing every year, can be viewed as one package, rather than as small, fragmented groups or lists, with no unified sense of focus and direction.

When capital improvements begin with careful planning and study, the Township of Northville's chances for receiving state and federal grants are greatly enhanced. Some grants require the inclusion of a CIP with their application. Formulation of a CIP assists those involved to look at alternative funding mechanisms that might not have been considered before. Instead of relying on local revenue sources alone, the CIP allows the Township to think more creatively to fulfill Master Plan goals and policies. The CIP often avoids reactive planning, and instead replaces it with balanced growth initiatives.

## **Program Funding**

There are multiple methods available to local governments for financing capital improvement projects. Since capital improvements require large outlays of capital for any given project, it is often necessary to pursue multiple solutions for financing projects.

The Capital Improvement Plan is simply that – a plan. As such, projects are subject to change based on new or shifting service needs, special financing opportunities, or

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emerging needs. Because priorities can change, projects included in outward planning years are not guaranteed for funding.

## **General Obligation (G.O.) Bonds**

These types of bonds are especially useful for financing large municipal projects such as infrastructure improvements. They require voter approval and are generally used for projects that will benefit the residents of the entire community.

When the Township sells G.O. Bonds, the purchaser is basically lending money to the Township. The amount of the bond, plus interest is repaid through property taxes that the Township, as the issuing authority, has the power to levy at the level necessary and within state guidelines to retire the debt.

A variation of the G.O. Bonds is the G.O. Limited Tax Bonds which can be repaid through tax millage. The interest rate for this type if issue is slightly higher than for the G.O. Bonds, and though voter approval is not required, a referendum period is afforded to the citizenry to challenge the proposed bond resolution.

## **Revenue Bonds**

These bonds are generally sold as a means for constructing revenue-producing facilities such as water and sewer systems, and other such facilities that produce tolls, fees, rental charges, etc. Security for and payment of revenue bonds are typically based upon the revenue-producing facility or activity rather than the economic or taxpaying base.

## **Federal Grants**

Funding is made available to cities through Federal grants and programs. Grants are usually subject-specific, and require application by the local government for consideration. Amounts of grants vary, and are determined by the grantor through criteria-based processes. The availability of grants is usually a competitive process, so creative and effective grant writing is crucial to receiving funding for capital improvement projects.

## **Building Authority**

The Township of Northville has a Building Authority that functions as a mechanism to facilitate the selling of bonds to finance public improvements. These bonds can be used as funding for buildings and recreational uses. Though voter approval is not required, a referendum period is afforded to the citizenry to challenge the proposed bond resolution. This is the mechanism used in the construction of the Township Hall.

## **Enterprise Funds**

Enterprise funds are typically established for services such as water, sewer, recreation, and housing. Revenues are generated primarily through user charges and connection fees from those who benefit from the improvements.

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## **Developer Contributions**

Developers as part of subdivision and site planning requirements may provide infrastructure, open space and recreational facilities. Developers may contribute a share of funds to the government entity, or install the facilities themselves as local need arises, and/or during the construction process. Once completed, the local government entity may agree to maintain the facilities.

## **Millage**

Property taxes are based upon the local millage rate. Revenue received from property taxes may be used for capital improvements, but such improvements are usually smaller scale and less expensive.

## **Miscellaneous Funding Options**

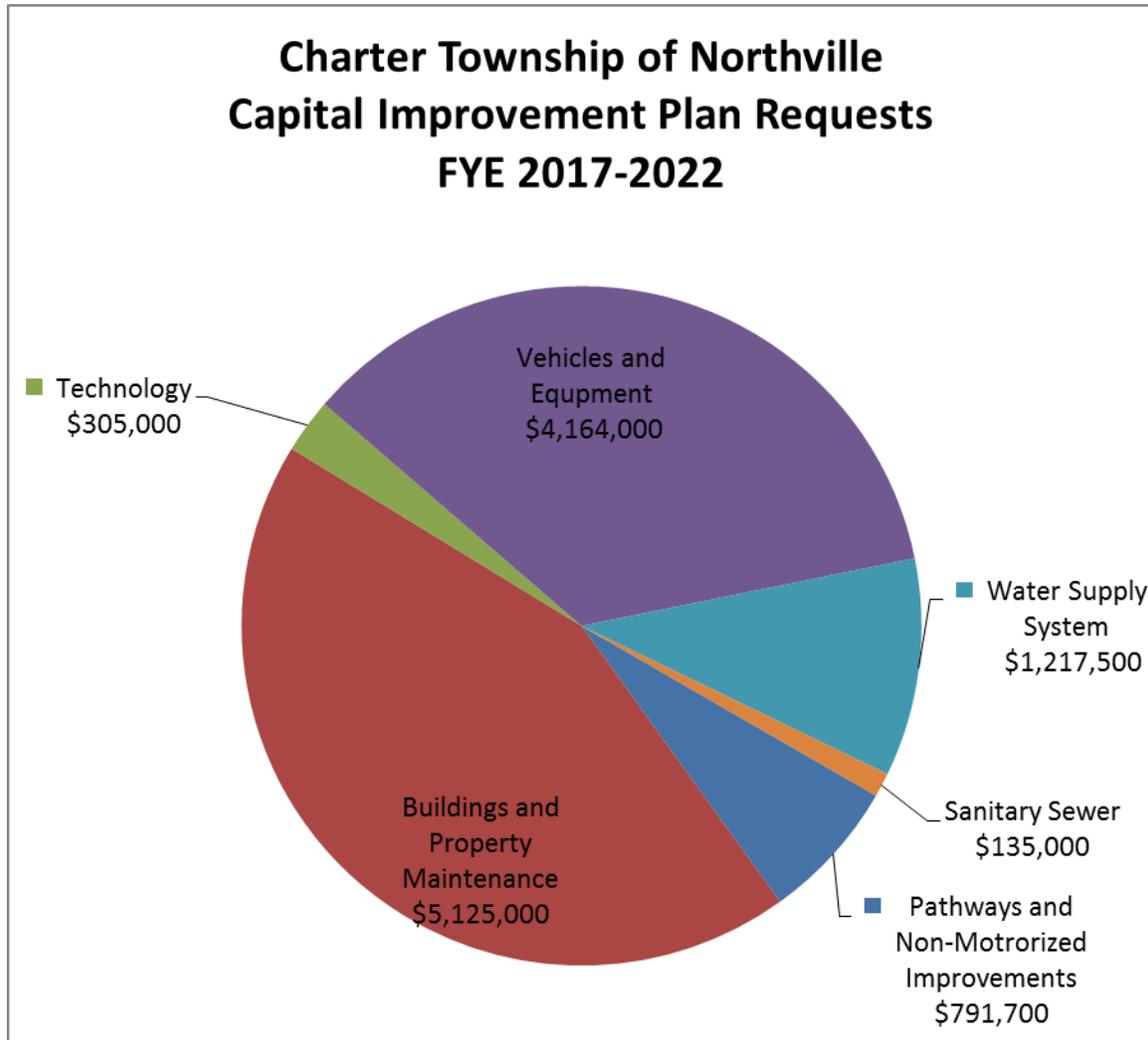
There are additional methods that are suitable for funding capital improvements. Examples of alternative funding methods are Tax Increment Financing (TIF), Facility User Fees, etc.

# Northville Township, Michigan 2017-2022 Capital Improvement Plan

## Project Summary

The following tables include project summaries with estimated costs over the six-year period. The first column identifies an item number and the tables are followed by a numeric Project Description.

The projects listed in the graph below represent all projects that have been submitted, and are not reflective of any approved budget amounts.



## 2016-2021 Project Descriptions

### Pathways and non-motorized improvements

- 1. 5' Wide Non-Motorized Pathway (6 Mile Road, East of Beck Road)**  
Two tenths of a mile (943 linear feet) of five foot wide concrete pathway on the north side of Six Mile Road, east of Beck Road. The project will fill in two

## **Northville Township, Michigan 2017-2022 Capital Improvement Plan**

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small gaps and complete the section of path on the north side of 6 Mile Road, between Sheldon Road and Beck Road. The project also includes approximately 23 street trees to be planted between the pathway and 6 Mile Road. The Township will purchase the street trees with funds from the Woodland Fund, if the adjacent homeowners will accept the maintenance responsibility for them. The project was identified as a 2013 project, but with the opportunity to do the 8 Mile/Beck Road pathways as part of the Oakland County Road project, this project was deferred. The pathway is a high priority project based on the pathway matrix gap analysis. The required road right of way to complete the project exists. The pathway will provide access from the Hills of Crestwood subdivision to the high school, Millennium Park, and a significant portion of the Township's non-motorized pathway system. The pathway will require maintenance and repair in the future.

### **2. 5' Wide Non-Motorized Pathway (6 Mile Road, West of Beck Road)**

One tenth of a mile (600 linear feet) of five foot wide concrete pathway on the north side of 6 Mile Road, west of Beck Road. The project will fill a small gap and complete the section of pathway on the north side of 6 Mile Road, between Beck Road and Ridge Road. The project also includes approximately 15 street trees to be planted between the pathway and 6 Mile Road. The Township will purchase the street trees with funds from the Woodland Fund, if the adjacent homeowners will accept the maintenance responsibility for them. The project was identified as a 2013 project, but with the opportunity to do the 8 Mile/Beck pathways as part of the Oakland County Road project, this project was deferred. The project will provide access to a significant portion of the Township's non-motorized pathway system for the residents of Stonewater. The pathway will require maintenance and repair in the future.

### **3. 10' Wide Non-Motorized Pathway (Ridge Road)**

Thirty-two hundredths of a mile (1,693 linear feet) of ten foot wide asphalt pathway on the east side of Ridge Road, south of 7 Mile Road. The project also includes approximately 42 street trees to be planted between the pathway and Ridge Road. The Township will purchase the street trees with funds from the Woodland Fund, if the adjacent homeowners will accept the maintenance responsibility for them. The pathway is a high priority based on the pathway matrix gap analysis. The project will fill in two gaps and complete the section of pathway on the east side of Ridge Road, between 6 and 7 Mile Roads. The pathway will also provide a connection into Maybury State Park, on the south side of the park, and access to a significant portion of the Township's pathway system for many residents residing on the western edge of the Township. The pathway will require maintenance and repair in the future.

### **4. 10' Wide Non-Motorized Pathway (Bradner Road)**

Seventy-four hundredths of a mile (3,895 linear feet) of ten foot wide asphalt pathway on the east and west sides of Bradner Road between 5 and 6 Mile Roads (from Ladywood Drive to Norham Street on the east side and in front of Whisperwood Subdivision on the west side). The project also includes approximately 86 street trees to be planted between the pathway and

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Bradner Road. The Township will purchase the street trees with funds from the Woodland Replacement Fund, if the adjacent homeowners will accept the maintenance responsibility for them. The pathway is a high priority based on the pathway matrix gap analysis. With the exception of a parcel located on the west side of the road, the required right of way exists to complete this project. A non-motorized pathway in this location will provide an off road route for many kids who walk to Meads Mill Middle School and will serve several hundred households within subdivisions along Bradner Road. Bradner Road is not on any county plans for improvement in the near future and the area is already developed, so the pathway will not be done as part of a land development project. However, the full right of way is available for all but a fraction of the project area and as a result the project can be accomplished without being removed in the future. The pathway will require maintenance and repair in the future.

**5. Twenty 21 Plan Implementation – .78 Miles of Path**

Seventy-eight hundredths of a mile (4,100 linear feet) of ten foot wide asphalt pathway along the south side of 7 Mile Road. The project will also include approximately 100 street trees to be planted between the pathway and 7 Mile Road. The project is consistent with the adopted 7 Mile Road Master Plan. The project represents a start to the future development of the site and will provide visible improvements along 7 Mile Road. The project will require maintenance of the path and street trees.

**6. 5' Wide Non-Motorized Pathway (Silver Springs Drive)**

Sixty-one hundredths of a mile (3,209 linear feet) of five foot wide concrete pathway on the east side of Silver Springs Drive, between 7 Mile Road and 8 Mile Road. The pathway is a high priority project based on the pathway matrix gap analysis and will complete the section of pathway between 7 Mile Road and 8 Mile Road. The required road right of way to complete the project exists. The project is scheduled to coincide with the timing of Silver Spring Drive reconstruction project. The pathway will require maintenance and repair in the future.

**7. 10' Wide Non-Motorized Pathway (8 Mile Road)**

Seventy-six hundredths of a mile (4,012 linear feet) of ten foot wide asphalt pathway on the south side of 8 Mile Road, from Silver Springs Drive to Spring Lane. The project also includes approximately 100 street trees to be planted between the pathway and 8 Mile Road. The Township will purchase the street trees with funds from the Woodland Replacement Fund, if the adjacent homeowners will accept the maintenance responsibility for them. The pathway is a mid-range priority based on the pathway matrix gap analysis, but is identified in the Capital Improvement Plan (CIP) to coincide with Wayne County's planned road improvement project. The project will complete a significant segment along 8 Mile Road and tie into the I-275 pathway. The pathway will require maintenance and repair in the future.

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## Buildings and Property Maintenance

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**8. Jail Cell Renovation**

This project would require approval by the Department of Justice prior to starting in order to leverage forfeiture funding.

**9. Fire Station #2 Construction**

Architectural and engineering services required to initiate construction of a second fire station within the Township. A second station is necessary to improve response times to the northeast area of the community. Currently the road system and travel distances do not allow easy or timely access to a part of the community. There are also operational issues which will be addressed.

## Technology

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**10. Microsoft Office/Windows 10 Upgrade**

Replace the current Township's Microsoft Office products with a hosted Microsoft Office solution. This project will also upgrade all computers from Windows 7 to the Windows 10 platform. This will allow the Township to stay up-to-date with the computers' operating systems and software to avoid current software End of Life. This project will also allow the Township to continue to utilize critical software systems that require new operating systems and allow for the continued use of Microsoft Office products. This project will require ongoing an annual software maintenance fee which will include all ongoing upgrades to both Microsoft Office and Windows platforms.

**11. Wireless Network Upgrade**

This project will create a corporate and public wireless network throughout all four Township buildings. This will allow for the use of more mobile device integrations with software systems like BS&A, CMMS (Computerized Maintenance Management System), and more. This project will eliminate the need to provide wired connections to Thin Client computers and IP based phones. The Township will then be able to eliminate the four internet contracts currently being utilized.

**12. Website Upgrade and Redesign**

The Northville Township website upgrade and redesign project will include a redesigned web interface along with an updated content management platform. This project will require an annual hosting fee which will include all ongoing upgrades to the content management software platform.

**13. Firewall and Networking Upgrade**

This project will upgrade and replace existing Cisco networking equipment. This is needed to maintain current network service levels. Current networking infrastructure has reached its expected useful life.

# Northville Township, Michigan 2017-2022 Capital Improvement Plan

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## Vehicles and Equipment

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### 14. **Replace Police Patrol Vehicles**

In each fiscal year, per contract, the Police Department will need to replace four patrol units used for road patrol. The oldest four vehicles will be taken out of service and stripped of all emergency equipment. The vehicles will be replaced with the current year model Ford Police Interceptor sedans. The new vehicles will also need to be equipped with emergency equipment and decal with the Township insignia.

### 15. **Detective Bureau Vehicle Lease**

The Police Department will need to replace one leased vehicle per year for the next six years due to expiring leases. The vehicles are currently assigned to the Detective Bureau and are used for a variety of purposes which include: surveillances, undercover work by road patrol officers, and daily duties performed by the detectives.

### 16. **Replace Thermal Imaging Cameras**

The Fire Department's thermal imaging cameras will be at the end of their service life. They are an important tool for ensuring a continued safe work environment for the firefighters of the Township.

### 17. **Election Equipment**

In 2005, the Township, in conjunction with the State of Michigan, received a Federal Help America Vote Act Grant (HAVA) that provided Optical Scan Voting Tabulators and an Election Management system for all Michigan communities. An additional grant was received to purchase the ADA compliant AutoMARK Voter Assist Terminals. The election equipment provided in 2005 with the State's Federal Grant money is nearing the end of its usefulness and Michigan will require local communities to replace the old election equipment in 2017. The state has informed communities it will be necessary they share in the expense to upgrade to new and improved election equipment. The state does not know how much local communities will need to contribute and they continue to seek approval of legislation to secure additional funding to add to the remaining HAVA grant money, thus reducing the local community's participation. In 2015, the Township reduced the number of precincts from sixteen to twelve in anticipation of the requirement to purchase new election equipment and if grant opportunities are available, the Township will meet all qualifications necessary to secure the maximum percentage of funding or reimbursement, which is made available.

### 18. **Bullet proof vests**

The Police Department is contractually bound to supply bullet proof vests to all officers. The Department has applied for a grant through the Bulletproof Vest Partnership (BVP), and if awarded, the Office of Justice Program will pay up to 50% of the costs of vests purchased for officers.

## Northville Township, Michigan 2017-2022 Capital Improvement Plan

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**19. Replace 2002 Engine 2**

Vehicle is approaching the end of its reliable service life. By replacing the vehicle, the Fire Department should initially realize a reduction in maintenance costs, as the vehicle will be more reliable and under warranty.

**20. Facility Maintenance Van**

Facility Maintenance is currently using a 2002 GMC utility van to carry tools, supplies, and parts for the purpose of building maintenance. The existing van has well over 100,000 miles and was purchased from Canton Township in 2016. At the time of purchase it was expected to last for two years of service before needing to replace it. A similar vehicle would be purchased. This vehicle is needed so facility maintenance staff can provide service in a timely fashion at any time of day or night.

**21. VHF Radio Control Stations**

Three VHF Radio Control Stations are approaching the end of their reliable service life. The original system was purchased in 1995. These control stations handle tornado sirens, paging fire departments, and inner city radio. Initially the Department should realize a reduction in maintenance costs as the counsels will be more reliable and also under warranty.

**22. Replace Taser Equipment**

The Township Board authorized the purchase of Taser X2 in 2013; a less lethal conducted energy weapon that propels wires which penetrate a suspect's skin or clothing causing an Electro Muscular Disruption that affects the sensory and motor nervous system causing incapacitation. The Taser X2 is a state of the art Electronic Control Device that has the capability of shooting 2 cartridges without reloading. The officer can control which cartridge the X2 fires and he/she can control which probes are energized after they have been deployed. The recommended replacement schedule is five years.

**23. Replace 2007 Rescue 3 (Ambulance)**

Vehicle is approaching the end of its reliable service life. Initially the Fire Department should realize a reduction in maintenance costs as the vehicle will be more reliable and under warranty. There is a possibility to secure better pricing by purchasing Rescue 2 and Rescue 3 together.

**24. Replace 2013 Rescue 2 (Ambulance)**

Vehicle is approaching the end of its reliable service life. Initially the Fire Department should realize a reduction in maintenance costs as the vehicle will be more reliable and under warranty. There is a possibility to secure better pricing by purchasing Rescue 2 and Rescue 3 together.

**25. Water and Sewer Pick-Up Truck with Plow Attachment**

Purchase new F-150 Ford Pickup Truck with plow attachments. This is a replacement vehicle for the Water and Sewer which is used in winter to plow our parking lots and then used for maintenance in the summer. This will replace an existing 2009 vehicle which will be auctioned off.

## Northville Township, Michigan 2017-2022 Capital Improvement Plan

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- 26. Water and Sewer radio read tower and equipment**  
Design and construct radio read tower and equipment so all meters can be read from two locations within the Township. This will help to maintain customer service levels and find more efficient ways to complete services. This will allow more efficient use of staff and will reduce the time to read meters. This project will also require some additional equipment.
- 27. Replace 2015 Ford Expedition - Fire Chief Vehicle**  
Vehicle is approaching the end of its reliable service life. Initially the Department should realize a reduction in maintenance costs as the vehicle will be more reliable and also under warranty. Cost includes vehicle markings, emergency lights and siren, radio installation, equipment storage systems, etc. The vehicle will be used by the Fire Chief.
- 28. Replace 2008 Ford Expedition - EMS Coordinator Vehicle**  
Vehicle is approaching the end of its reliable service life. Initially the Department should realize a reduction in maintenance costs as the vehicle will be more reliable and also under warranty. Cost includes vehicle markings, emergency lights and siren, radio installation, equipment storage systems, etc. The vehicle will be used by the EMS Coordinator.
- 29. Replace 2007 Fire Engine 1**  
Vehicle is approaching the end of its reliable service life. By replacing the vehicle, the Fire Department should initially realize a reduction in maintenance costs, as the vehicle will be more reliable and under warranty.
- 30. Replace 2013 Rescue 1 (Ambulance)**  
Vehicle is approaching the end of its reliable service life. Initially the Fire Department should realize a reduction in maintenance costs as the vehicle will be more reliable and under warranty.
- 31. Replace 2015 Ford Expedition - Command One**  
Vehicle is approaching the end of its reliable service life. Initially the Department should realize a reduction in maintenance costs as the vehicle will be more reliable and also under warranty. Cost includes vehicle markings, emergency lights and siren, radio installation, equipment storage systems, etc. This vehicle will serve as a command vehicle and will be staffed by a Command Officer (Lieutenant). This vehicle will be used for daily details, emergencies and, on a limited basis, will be deployed on non-emergency public service calls.
- 32. Replace 2008 Ford Expedition - Fire Inspector Vehicle**  
Vehicle is approaching the end of its reliable service life. Initially the Department should realize a reduction in maintenance costs as the vehicle will be more reliable and also under warranty. Cost includes vehicle markings, emergency lights and siren, radio installation, equipment storage systems, etc. The vehicle will be used by the Fire Inspector.

## **Northville Township, Michigan 2017-2022 Capital Improvement Plan**

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### **33. Water & Sewer 4x4 Vehicle – Superintendent**

This is a replacement vehicle for the Water and Sewer Department Superintendent. It is used by the Superintendent to assure 24 hour access to operate the Township's water and sewer systems. Industry recommendations are that vehicles should be replaced at 100,000 miles or 10 years old. This vehicle will replace a 2014 Ford Explorer with over 100,000 miles on it. The six year old vehicle being replaced will be moved into the Building Department to replace an old inspector vehicle. This project will allow existing staff to complete their job requirements while maintaining customer service levels.

### **34. Replace Monitor/Defibrillators**

Units are approaching the end of their reliable service life. Initially, the Fire Department should realize a reduction in maintenance costs, as the units will be more reliable and under warranty.

### **35. Water and Sewer Tandem Dump Truck**

This vehicle will be added to the fleet of vehicles and equipment to be available for water main repairs which we anticipate to increase with the age of the system. This is a new piece of equipment, which will be needed to maintain current service levels and will require no additional staffing.

### **36. Replace 44 Portable Police Radios**

Forty-four portable radios are approaching the end of their reliable service life. By replacing them, the Police Department should initially realize a reduction in maintenance costs, as the radios will be more reliable and under warranty.

### **37. Replace Dispatch Radio Consoles**

Dispatch Radio Consoles are approaching the end of their reliable service life. By replacing them, the Police Department should initially realize a reduction in maintenance costs, as the consoles will be more reliable and under warranty.

## **Water Supply System**

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### **38. Booster Station Improvements**

This project will replace two 40 horsepower motors and pumps with two 75 horsepower motors and pumps. The design will also comprise increasing the pipe size to manage the additional pumping capacity. This will be done to maintain current service levels of the water system while reducing the Township's peak hour demand. This reduction in the Township's peak hour demand will help to reduce the wholesale rate the Township pays to the Great Lakes Water Authority and also reduce costs of operations.

### **39. Paint Elevated Water Tank**

This project is required to ensure the proper maintenance of the Township water system. To maintain the integrity of the tank, it should be painted every ten years. Continuing this maintenance routine will ensure the design life of the tank is met.

## Sanitary Sewer Collection System

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### 40. **SAW Grant List of Projects**

Provide matching funds to complete the SAW Grant List of projects, which includes completing the GIS database for the Township's sanitary sewer system and purchasing technical equipment to help with the management and maintenance of the system. Information collected includes condition of pipes and structures, cleanliness of pipe segments, areas where grease buildup is an issue, locations of sewer backups, accurate location of asset, periodic cost of maintenance tracked by pipe length or structure, and computer generated reporting. Township has goal of completing the GIS database for all of its assets. The asset management system will be used for the cost efficient operation of the system, thereby helping to minimize the cost of operations which is reflected in the rate structure our customers receive. Township will be better able to track and maintain its assets. Tracking the asset guarantees proper cleaning schedules and helps identify problem areas so greater attention can be focused on the maintenance process in these areas. Tracking also helps determine when replacement or relining should occur. Asset management also helps to improve the efficiency and timing needed to file reports with the State of Michigan. This also helps form the Township's defense for sewer backup litigation.

# Northville Township, Michigan 2017-2022 Capital Improvement Plan

FY 2017-2022 Six Year Capital Improvement Plan							
Project Descriptions	Capital Outlay Requests						
PATHWAYS AND NON-MOTORIZED IMPROVEMENTS	POTENTIAL FUNDING SOURCE/NOTES	2017	2018	2019	2020	2021	2022
5' wide non-motorized pathway (6 Mile Road, east of Beck)	Project depends on funding source becoming available	\$ -	\$ 34,000	\$ -	\$ -	\$ -	\$ -
5' wide non-motorized pathway (6 Mile Road, west of Beck)	Project depends on funding source becoming available	-	20,700	-	-	-	-
10' wide non-motorized pathway (Ridge Road)	Project depends on funding source becoming available	-	-	123,000	-	-	-
10' wide non-motorized pathway (Bradner Road)	Project depends on funding source becoming available	-	-	-	172,000	-	-
.78 miles (4,100 linear feet) of 10' wide asphalt pathway along the south side of 7 Mile Road	Project depends on funding source becoming available	-	-	-	-	187,000	-
5' wide non-motorized pathway (Silver Springs Drive, between 7 and 8 Mile Roads)	Project depends on funding source becoming available	-	-	-	-	-	71,500
10' wide non-motorized pathway (8 Mile Road)	Project depends on funding source becoming available	-	-	-	-	-	183,500
<b>PATHWAYS AND NON-MOTORIZED IMPROVEMENTS</b>	<b>Total</b>	<b>\$ -</b>	<b>\$ 54,700</b>	<b>\$ 123,000</b>	<b>\$ 172,000</b>	<b>\$ 187,000</b>	<b>\$ 255,000</b>
BUILDINGS AND PROPERTY IMPROVEMENTS	POTENTIAL FUNDING SOURCE/NOTES	2017	2018	2019	2020	2021	2022
Jail Cell Renovation	Federal Forfeiture/State Forfeiture	\$ -	\$ -	\$ -	\$ -	\$ 25,000	\$ 600,000
New Fire Station (serve northeast area of the community)	Project depends on funding source becoming available	-	-	-	-	-	4,500,000
<b>BUILDINGS AND PROPERTY IMPROVEMENTS</b>	<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 25,000</b>	<b>\$5,100,000</b>
TECHNOLOGY	POTENTIAL FUNDING SOURCE/NOTES	2017	2018	2019	2020	2021	2022
Microsoft Office/Windows 10 Upgrade	General Fund/Public Safety	\$ 90,000	\$ -	\$ -	\$ -	\$ -	\$ -
Wireless Network Upgrade	General Fund/Public Safety	35,000	-	-	-	-	-
Website Upgrade and Redesign	General Fund/Public Safety	-	30,000	-	-	-	-
Firewall and Networking Upgrade	General Fund/Public Safety	-	-	-	150,000	-	-
<b>TECHNOLOGY</b>	<b>Total</b>	<b>\$ 125,000</b>	<b>\$ 30,000</b>	<b>\$ -</b>	<b>\$ 150,000</b>	<b>\$ -</b>	<b>\$ -</b>
VEHICLES AND EQUIPMENT	POTENTIAL FUNDING SOURCE/NOTES	2017	2018	2019	2020	2021	2022
Replace four patrol vehicles	Public Safety Fund/Police Division	\$ 191,000	\$ 191,000	\$ 191,000	\$ 191,000	\$ 191,000	\$ 191,000
Detective bureau vehicle lease	Public Safety Fund/Police Division	15,000	15,000	15,000	15,000	15,000	15,000
Replace thermal imaging cameras	Public Safety Fund/Fire Division	10,000	-	-	-	10,000	-
Election equipment	Capital Projects Fund	24,000	-	-	-	-	-
Bullet proof vests	Public Safety Fund/Pending approval of Federal Grant	50,000	-	-	-	-	-
Replace 2002 Fire Engine Two	Public Safety Fund/Fire Division	475,000	-	-	-	-	-
Facility Maintenance Van	General Fund	-	25,000	-	-	-	-
VHF Radio control stations	Public Safety Fund/Police Division	-	20,000	-	-	-	-
Replace taser equipment	Public Safety Fund/Police Division/Drug Forfeiture	-	50,000	-	-	-	-
Replace 2007 Fire Rescue Three (ambulance)	Public Safety Fund/Fire Division	-	230,000	-	-	-	-
Replace 2013 Fire Rescue Two (ambulance)	Public Safety/Fire Division	-	230,000	-	-	-	-
Ford F-350 Pickup 4x4 with Plow Attachment	Water & Sewer Fund	-	40,000	-	-	-	-

# Northville Township, Michigan 2017-2022 Capital Improvement Plan

VEHICLES AND EQUIPMENT (continued)	POTENTIAL FUNDING SOURCE/NOTES	2017	2018	2019	2020	2021	2022
Water & Sewer Radio Read Tower and Equipment	Water & Sewer Fund	\$ -	\$ 90,000	\$ -	\$ -	\$ -	\$ -
Replace 2015 Ford Expedition (Deputy Director of Fire Services)	Public Safety/Fire Division	-	-	35,000	-	-	-
Replace 2008 Expedition (EMS Coordinator)	Public Safety/Fire Division	-	-	35,000	-	-	-
Replace 2007 Fire Engine One	Public Safety Fund/Fire Division	-	-	475,000	-	-	-
Replace 2013 Fire Rescue One (ambulance)	Public Safety/Fire Division	-	-	-	230,000	-	-
Replace 2015 Ford Expedition (Command One)	Public Safety/Fire Division	-	-	-	35,000	-	-
Replace 2008 Expedition (Fire Inspector)	Public Safety/Fire Division	-	-	-	35,000	-	-
Water & Sewer 4x4 vehicle - Superintendent	Water & Sewer Fund	-	-	-	33,000	-	-
Replace monitor/defibrillators	Public Safety Fund/Fire Division	-	-	-	-	120,000	-
Water & Sewer Tandem Dump Truck	Water & Sewer Fund	-	-	-	-	80,000	-
Replace 44 portable radios	Public Safety Fund/Police Division	-	-	-	-	-	220,000
Replace Dispatch radio consoles	Public Safety Fund/Police Division	-	-	-	-	-	376,000
<b>VEHICLES AND EQUIPMENT</b>	<b>Total</b>	<b>\$ 765,000</b>	<b>\$ 891,000</b>	<b>\$ 751,000</b>	<b>\$ 539,000</b>	<b>\$ 416,000</b>	<b>\$ 802,000</b>
<b>WATER SUPPLY SYSTEM</b>	<b>POTENTIAL FUNDING SOURCE/NOTES</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Booster Station Improvements	Water & Sewer Fund	\$ 1,092,500	\$ -	\$ -	\$ -	\$ -	\$ -
Paint elevated water tank	Water & Sewer Fund	-	-	-	125,000	-	-
<b>WATER SUPPLY SYSTEM</b>	<b>Total</b>	<b>\$1,092,500</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 125,000</b>	<b>\$ -</b>	<b>\$ -</b>
<b>SANITARY SEWER COLLECTION SYSTEM</b>	<b>POTENTIAL FUNDING SOURCE/NOTES</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
SAW Grant Matching Funds	Water & Sewer Fund / SAW Grant Award	\$ 45,000	\$ 45,000	\$ 45,000	\$ -	\$ -	\$ -
<b>SANITARY SEWER COLLECTION SYSTEM</b>	<b>Total</b>	<b>\$ 45,000</b>	<b>\$ 45,000</b>	<b>\$ 45,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

<b>Grand Total</b>	<b>\$2,027,500</b>	<b>\$ 1,020,700</b>	<b>\$ 919,000</b>	<b>\$ 986,000</b>	<b>\$ 628,000</b>	<b>\$6,157,000</b>
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