2014-2020

CAPITAL IMPROVEMENT PROGRAM COMMITTEE

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Planning Committee Version

NOTE: The capital improvements that will be included in the proposed budget are restricted by the funds available. The Water & Sewer Fund is an Enterprise Fund, and therefore City Council does not formally adopt a budget for these projects.

INTRODUCTION

The City of Novi's Capital Improvement Program (CIP) is a planning tool, with a goal to identify and schedule capital improvements over a six-year period from 2014-2020. The CIP is an opportunity to formulate strategic long-term policy decisions that extend beyond the fiscal year 2014-2015 budget year. Each year, the City of Novi invests significant time and resources to design, construct, and maintain the infrastructure and facilities needed to deliver municipal services to residents and businesses. Because of the high costs associated with building and maintaining capital assets, the City must carefully balance the need for such assets with our requirements to sustain a strong financial position.

Novi's CIP is a six year balanced plan that addresses projects that are needed, or will be needed, across a broad spectrum of areas. Annually, a significant amount of effort is expounded to update the CIP to ensure not only critical needs are being met, but also that the cost, scope and timing of all projects are coordinated throughout. Coordinating the timing of different projects in the same location is particularly important since it helps us to minimize service disruptions.

A capital improvement is defined as any new equipment, construction, acquisition or improvement to public lands, buildings or structures in excess of \$25,000 with a minimum life expectancy of five years. Maintenance-oriented, operational or continuous expenditures are not considered to be capital improvements. Capital projects include design and construction, as well as the acquisition of land and the purchase of fixed assets. A fixed assets or equipment include vehicles that are priced over the \$25,000; threshold; fire apparatuses, and plow trucks are commonly found under this category.

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.

The projects identified in the CIP represent the City of Novi'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:

- Master Plan for Land Use (adopted December 1, 2004, including amendments adopted August 25, 2010)
- Water System Master Plan Report (adopted November 24, 2008)
- Storm Water Master Plan Update (adopted February 12, 2007)
- Capacity Management Operations & Maintenance Report on the City's Sanitary Sewage Collection System (March 27, 2007)
- Community Recreation Plan, including Americans with Disabilities Act Transition Plan, (2009-2013)
- Pathway and Sidewalk Prioritization Analysis and Process (adopted November 2012)
- Non-Motorized Master Plan (February 2011)
- Parking Lot Inventory and Maintenance Plan (2014)

2014-2020 Overview

The CIP helps track multi-year projects that may require planning, design, land acquisition and construction.

Definition of a Capital Improvement

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.

Impact of Capital Budget on the Operating Budget

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 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 Capital Improvements Program has been authorized by the Michigan Planning Enabling Act (Public Act 33 of 2008). This mandate gives responsibility for preparing a CIP to local Planning Commission bodies, and reads as follows:

125.3865 Capital improvements program of public structures and improvements; preparation; basis.

Section. 65:

"(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."

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 for Land Use. 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 City of Novi'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 City to think more creatively to fulfill Master Plan for Land Use goals and policies. The CIP often avoids reactive planning, and instead replaces it with balanced growth initiatives.

CIP DEVELOPMENT PROCESS

Capital improvement planning has proven to be a year-round process, with City departments continually re-evaluating and prioritizing their capital needs. However, the process is most involved from September through December. It is during this period that City staff identify and prioritize projects, estimate project costs, determine available resources, balance project requests within the available resources, and, ultimately, submit a recommended program/piece of infrastructure to the Capital Improvement Program sub-committee and ultimately to the City's Planning Commission. A collaboration between the City Manager's office, Engineering Division and the Finance Department coordinates the annual update of the six-year CIP as part of the annual budget process. Department staff also forecast revenues for the various funds used to finance capital projects, and set the financial parameters for the development of the CIP. Capital projects originate in the operating departments where subject matter experts identify needs based on master planning documents and other technical criteria. All requests are submitted and the financial parameters established and a preliminary plan is prepared for the review of the CIP Committee comprised of three City Council members and two members from the Planning Commission. The Committee recommends to the City's Planning Commission for ultimate approval prior to it being included in the City Manager's annual budget which is presented and considered by the City Council. The following is an overview of the CIP development process:

August – September: Operating departments identify projects, define project scopes, prepare cost estimates, and prioritize projects based on direction received from the City Manager and City Leadership Team. Department directors review project requests before final submittal.

October: Capital project requests are submitted to the Engineering Division for evaluation and inclusion to the CIP database.

December: The CIP is presented to the City Manager's office for evaluation and consideration making necessary adjustments as needed.

February: The CIP Sub-Committee receives the CIP and offers its recommendations during its annual meeting.

March: A public hearing takes place during a Planning Commission meeting. Following the public hearing the Commission approves the Capital Improvement Program. City Administration finalizes the recommended CIP for the consideration of the City Council.

April: The CIP is included in the City Manager's proposed budget which is presented to the City Council and by City Charter needs to be approved by the second meeting in May.

OPERATING BUDGET IMPACT

The Capital Improvement Program has direct and sometimes significant impacts on Novi's operating budget. Upon their completion, most capital projects require ongoing costs for operation and maintenance. New buildings require electricity, water and sewer service, and maintenance and repair. New roads require regular sweeping as well as periodic crack filling and sealing, patching, milling, minor resurfacing, and replacement of stripes and markings. New parks and landscaped rights-of-way (such as medians and streets shoulders) require irrigation, fertilizing, mowing, and trimming. Some projects, such as a recreation center, require additional employees.

Departments submitting capital projects estimate the operations and maintenance costs of each project based on cost guidelines that are updated each year. The departments also consider any additional revenues or savings the city can reasonably expect to recognize upon completion of the project. For example, membership fees from a new recreation center help to offset the increased operating costs. The net operating costs are included not only in the project request, but also in the long-range forecasts of the respective funds to ensure that we properly account for operating budget impacts of all capital projects.

| | | Fiscal Year 14-15 | Fiscal Year 15-16 | Fiscal Year 16-17 | Fiscal Year 17-18 | Fiscal Year 18-19 | Fiscal Year 19-20 |
|--------------------------|-----------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | | Budget | | ected | 17-10 | Forecast | 19-20 |
| | Leveraged Funds | | | | \$800,000 | \$0.00 | \$0.00 |
| Roads | City Costs | | | | | \$5,319,500 | |
| | Leveraged Funds | | | | | \$0.00 | \$0.00 |
| Intersections & Signals | City Costs | | | \$929,750 | \$222,900 | \$440,000 | \$260,000 |
| Cide and a Debleman | Leveraged Funds | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$733,384 | \$0.00 |
| Sidewalks & Pathways | City Costs | \$1,207,890 | \$457,124 | \$330,797 | \$2,959,868 | \$1,650,283 | \$4,539,137 |
| Storm Sewer & Drainage | Leveraged Funds | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Stofffi Sewer & Drainage | City Costs | \$540,605 | \$1,806,430 | \$361,732 | \$87,137 | \$853,457 | \$1,316,820 |
| Sanitary Sewer | Leveraged Funds | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Sariirary Sew er | City Costs | \$794,000 | \$350,000 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Water Distribution | Leveraged Funds | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Water Distribution | City Costs | \$1,128,000 | \$1,745,000 | \$834,000 | \$1,421,500 | \$0.00 | \$0.00 |
| Parks | Leveraged Funds | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$189,600 |
| TURS | City Costs | \$283,140 | \$571,102 | \$524,637 | \$1,371,885 | \$1,527,065 | \$449,680 |
| Equipment | Leveraged Funds | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Едогритсти | City Costs | | \$769,825 | \$803,500 | \$1,296,700 | \$922,603 | \$1,250,400 |
| Buildings & Property | Leveraged Funds | | \$0.00 | | | \$0.00 | \$0.00 |
| bendings & Property | City Costs | \$513,900 | \$616,351 | \$12,930,033 | \$657,200 | \$33,600 | \$75,245 |
| | TOTAL | \$7,791,391 | \$18,028,256 | \$22,359,249 | \$16,670,037 | \$11,479,892 | \$13,211,432 |

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 creative solutions for financing projects.

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 usually are used for projects that will benefit the residents of the entire community.

When the City sells G.O. Bonds, the purchaser is basically lending money to the City. The amount of the bond, plus interest is repaid through property taxes that the City, 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. (i.e. Novi Ice Arena, and Meadowbrook Commons). 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 City of Novi 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 ice arena and the older adult housing facility.

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.

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.

Special Assessments

Special assessment financing allows local government to collect special taxes from owners of property directly benefiting from capital improvements. These types of improvements often include streets and sidewalks, sanitary sewer, storm drainage, and water distribution systems.

Gas and Weight Tax

The City of Novi receives a formula-rated share of motor fuel and highway usage taxes from the State of Michigan to be utilized for transportation and maintenance-related projects.

Millage

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

General Fund

The General Fund for the City of Novi may be used for capital improvements; however, it is not the intent of the CIP to earmark these funds for projects. Instead, smaller scale, less expensive capital projects with a high priority could be funded as line items.

State Shared Revenue

In addition to the Gas and Weight Taxes above which are shared revenue, the City receives its share of various taxes and fees from programs and requirements by the State of Michigan.

Public/Private Partnership

This type of financing has become increasingly popular in areas where creative financing is fostered. In many communities the local revenue share may not support some types of public improvements. In contrast, private developers may avoid taking on a project where the infrastructure cost far exceeds profitability. This method of funding brings both the public sector and private contributor together to share in the costs of a project, or a part of a project, which inevitably lessens the overall financial burden falling onto a single source.

Miscellaneous Funding

There are additional methods that are suitable for funding capital improvements. Examples of alternative funding methods are Tax Increment Financing (TIF), Impact Fees, Facility User Fees, etc. Current State legislation does not permit some of these funding methods, which have been used successfully in other states. Changes in legislation could see these and other innovative methods permitted in the future.

Project Summary

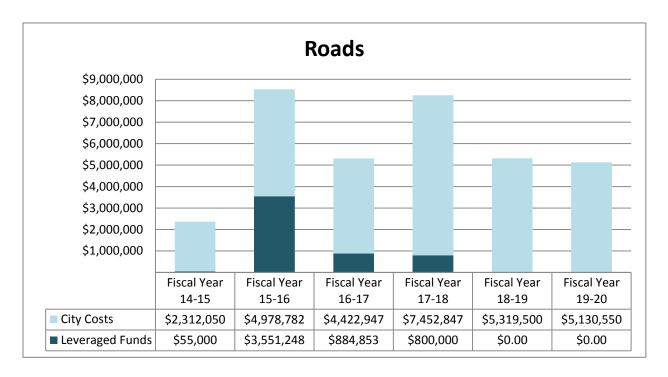
The following tables include project summaries with estimated costs over the six-year period. The first column identifies an item number and the tables are followed by a numeric Project Description. Following the Project Descriptions section is the estimated future operating and maintenance cost schedule.

Roads

Transportation-related issues are a high priority for the City of Novi. The Capital Improvement Program addresses traffic congestion by constructing new roadways, adding lanes to existing roadways, widening intersections, and enhancing traffic management systems. The maintenance and preservation of roadways is an important component of the program, which provides the necessary resources for scheduled pavement maintenance applications throughout the City.

The City of Novi contains both public and private roadways. Public roads (I-96, I-275 and M-5) are owned and operated by the Michigan Department of Transportation (MDOT), the Road Commission of Oakland County (RCOC), and the City of Novi. Private roads are owned and operated by private developments and homeowner groups. The City currently maintains approximately 180 miles of major roads and Neighborhood Streets. In order to define priorities and establish a course of action for the local street and major road rehabilitation programs, the City has a formal asset management program that categorizes roads based on their Pavement Surface Evaluation and Rating (PASER). Roads in poor condition would be candidates for reconstruction or rehabilitation. Those in fair condition would receive capital preventive maintenance, while roads in good condition would be candidates for routine maintenance work. The lowest rated roads in each of these categories would generally be addressed first.

A dedicated road millage that was increased by voters in 2012 to provide 1.5 mills in total, generating an estimated additional \$ 2.1 million, annually, assists in financing the various road projects, mainly neighborhood road rehabilitation and reconstruction that are shown in the City's six year plan. Other funding sources, such as Federal grants, are leveraged for rehabilitation and reconstruction of the major roads that the City is responsible for; including: 9 mile, 11 mile, 13 mile, Meadowbrook, Beck, Novi (north of 12 mile), West Park and Taft Roads.



Neighborhood Road Rehabilitation, Repaving and Reconstruction Program

Project Number: 1 CIP Number: 102-01

Description:

The selection of streets is determined using the PASER surveys conducted annually. A mix of fixes (rehabilitation, repair, and reconstruction) will be applied to optimize the funds used to improve the overall condition of local roads as reflected by an increase in the overall PASER rating for the City.

Justification:

The project is to be completed as part of an overall asset management philosophy for infrastructure to improve the overall PASER rating for the City. See budget narrative for additional background.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| Engineering | 203-000.00- | \$290,000 | \$290,000 | \$290,000 | \$370,000 | \$370,000 | \$370,000 | \$1,980,000 |
| Other/ROW | | | | | | | | |
| Construction | າ 203-000.00- | \$1,800,000 | \$1,800,000 | \$1,810,000 | \$2,600,000 | \$2,600,000 | \$2,600,000 | \$13,210,000 |
| | TOTAL BUDGET | \$2.090.000 | \$2.090.000 | \$2,100,000 | \$2,970,000 | \$2,970,000 | \$2,970,000 | \$15,190,000 |

Haggerty Road (9 Mile to 10 Mile) Widening

Project Number: 132-04

Description:

A portion of Haggerty Road between 9 Mile and 10 Mile was recently reconstructed as part of an economic development grant for a business in the City of Farmington Hills and removed one of the two remaining gaps in the far right lane of southbound Haggerty Road. The remaining gap in the southbound far right lane is approximately 700 feet long and is located between the southern Stonehenge Intersection and Shorebrooke.

Justification:

The addition of the right lane will increase capacity of the road to reduce congestion and improve safety in the area which had a fatality in 2008.

| Category Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|----------------------|-----------|---------|---------|---------|---------|---------|-----------|
| Engineering | \$20,000 | | | | | | \$20,000 |
| Other/ROW | | | | | | | |
| Construction | \$90,000 | | | | | | \$90,000 |
| TOTAL BUDGET | \$110,000 | | | | | | \$110,000 |

West Road Repaying, West Park Drive to City limits

Project Number: 3 CIP Number: 112-03

Description:

Rehabilitation/Repaving of 1300 feet of West Road between West Park Drive and city limits to increase the useful life of the road. Bike lanes will be added to the road as proposed in the non-motorized master plan to improve non-motorized connectivity.

Justification:

Currently rated a PASER 4 and requires rehabilitation.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|---------------|-----------|---------|---------|---------|---------|---------|-----------|
| Engineering | 202-000.00- | \$28,800 | | | | | | \$28,800 |
| Other/ROW | | | | | | | | |
| Construction | າ 202-000.00- | \$138,250 | | | | | | \$138,250 |
| | TOTAL BUDGET | \$167,050 | | | | | | \$167,050 |

Beck Road (8 Mile to 9 Mile) Rehabilitation (PASER 3-4) Asphalt

Project Number: 4 CIP Number: 132-01

Description:

Rehabilitation of Beck Road between 8 Mile Road and 9 Mile Road. The existing road surface is in poor condition in some locations and requires rehabilitation. An application for federal grant funding has been submitted. The eastern half of the southern half mile is under the jurisdiction of the City of Northville and will be asked to participate in the cost of the project. The project includes continuous bike lanes and other non-motorized improvements. This project has been awarded federal funding for construction in 2017.

Justification:

The road is rated a PASER 3 and 4 and requires rehabilitation to prevent future deterioration.

| Category Account No. Engineering | 2014-15 | 2015-16 \$92,500 | 2016-17 \$100,000 | 2017-18 | 2018-19 | 2019-20 | TOTAL \$192,500 |
|----------------------------------|---------|----------------------------|-----------------------------|---------|---------|---------|---------------------------|
| Other/ROW Construction | | | \$938,800 | | | | \$938,800 |
| TOTAL BUDGET | | \$92,500 | \$1,038,800 | | | | \$1 131 300 |

Novi Road from 12 Mile Road to 13 Mile Road Rehabilitation (PASER 4) Asphalt

Project Number: 5 CIP Number: 102-03

Description:

Rehabilitation of Novi Road from 12 Mile Road to 13 Mile Road (6,700 feet) to provide a smooth asphalt surface and extend the life of the road. Novi Rd. is the main thoroughfare linking the north and south ends of Novi. This project was awarded federal funding for construction in 2016.

Justification:

The road is currently rated a PASER 4 and should be rehabilitated to keep the road in serviceable condition.

| Category Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------------------|---------|-----------|---------|---------|---------|---------|-----------|
| Engineering 202-000.00- | | \$190,125 | | | | | \$190,125 |
| Other/ROW | | | | | | | |
| Construction 202-000.00- | | \$760,500 | | | | | \$760,500 |
| TOTAL BUDGET | | \$950,625 | | | | | \$950,625 |

9 Mile Road Meadowbrook to Novi Road Rehabilitation

Project Number: 6 CIP Number: 122-65

Description:

Rehabilitation and partial reconstruction of 1.0 miles of 9 Mile Road between Novi Road and Meadowbrook Road. The project has been awarded federal funds for construction in 2016.

Justification:

The road was rated a PASER 5 in 2012 and is in need of rehabilitation to extend the serviceable life of the pavement.

| Category Account | No. 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|------------------------|-------------|-----------|---------|---------|---------|---------|-----------|
| Engineering 202-000.0 | 00- | \$85,325 | | | | | \$85,325 |
| Other/ROW | | | | | | | |
| Construction 202-000.0 | 00- | \$341,300 | | | | | \$341,300 |
| TOTAL BU | DGET | \$426.625 | | | | | \$426,625 |

Crescent Blvd (New Roadway) Extension between Grand River Avenue and Novi Road - Phase II and III

Project Number: 7 CIP Number: 082-03

Description:

Construction of a 1,300 foot long, 4 lane boulevard connecting Novi Road and Grand River Avenue in the northwest quadrant of the intersection; and a 650 foot long industrial spur road. Project includes a bridge over the Rouge River, repaving of the existing portion of Crescent Blvd west of Novi Road (f/k/a Fonda Street) and a new signal at the intersection with Grand River. The final design was completed in FY10-11.

Justification:

As early as 1980, the City's Master Plan envisioned a "ring road" around the intersection to relieve traffic congestion and provide access to vacant land that does not have frontage on either Grand River Avenue or Novi Road. The Northeast quadrant of the ring road consisting of Crescent Boulevard and Town Center Drive, was completed in the 1990's. Completion of the Northwest Quadrant Ring Road will improve safety and reduce congestion at this busy intersection. An added benefit of the project is that it will provide a bypass for truck traffic, benefitting residents who use the Novi/Grand River intersection by diverting much of this heavy traffic.

| Category A | ccount No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-----------------|-------------|---------|-----------|---------|---------|---------|---------|-------------|
| Engineering 20 | 04-000.00- | | \$195,300 | | | | | \$195,300 |
| Other/ROW | | | | | | | | |
| Construction 20 | 04-000.00- | \$ | 3,222,280 | | | | | \$3,222,280 |
| TC | OTAL BUDGET | \$ | 3,417,580 | | | | | \$3,417,580 |

Karim Blvd., Rehabilitation (PASER 4) Asphalt

Project Number: 8 CIP Number: 082-18

Description:

Reconstruction of Karim Blvd between 10 Mile Road and Grand River Avenue (1,771 feet). The pavement is in poor condition (PASER 2 in 2012) and the road lacks sufficient drainage, requiring reconstruction of the road. The project will include the construction of all existing sidewalk gaps.

Justification:

This road had a PASER rating of 2 in 2012 and is no longer serviceable using normal maintenance. Fifteen (15) businesses are located on Karim Blvd. The companies are willing to disclose the number of employees housed on Karim Blvd, reported at the minimum 15 staff members.

| Category Account No. Engineering 202-000.00- | 2014-15 | 2015-16 \$114,200 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL \$114,200 |
|---|---------|-------------------------------|---------|---------|---------|---------|-------------------------------|
| Other/ROW Construction 202-000.00- TOTAL BUDGET | | \$548,300 \$662,500 | | | | | \$548,300 \$662,500 |

Crescent Blvd., Novi Road to Town Center Drive Rehabilitation (PASER 4)

Project Number: 9 CIP Number: 082-10

Description:

Rehabilitation and partial reconstruction of Crescent Blvd from Novi Road to Town Center Drive (1,800 feet) to provide a new smooth pavement surface in asphalt and to preserve the life of the road. The road is currently rated a PASER 2 between Novi Road and Ingersol Drive and PASER 4 between Ingersol and Town Center Drive.

Justification:

The road has a PASER rating of 2 to 4, which is among one of the worst rated concrete roads in the City.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|-----------|---------|---------|---------|---------|-----------|
| Engineering | 202-000.00- | | \$153,500 | | | | | \$153,500 |
| Other/ROW | | | | | | | | |
| Construction | 202-000.00- | | \$736,700 | | | | | \$736,700 |
| | TOTAL BUDGET | | \$890,200 | | | | | \$890,200 |

Meadowbrook Road Rehabilitation, I-96 to 12 Mile, (PASER 5)

Project Number: 10 CIP Number: 112-02

Description:

Rehabilitation of approximately 0.7 miles of Meadowbrook Road between the I-96 bridge and 12 Mile Road. The project will rehabilitate the existing pavement and provide paved shoulders for non-motorized connectivity.

Justification:

The road has a PASER rating of 5 and requires capital preventative maintenance.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|---------|-----------|---------|---------|---------|-----------|
| Engineering | 202-000.00- | | | \$81,475 | | | | \$81,475 |
| Other/ROW | | | | | | | | |
| Construction | 202-000.00- | | | \$325,900 | | | | \$325,900 |
| | TOTAL BUDGET | | | \$407,375 | | | | \$407,375 |

Taft Road, 10 mile Road to Grand River Avenue (PASER 4) Asphalt

Project Number: 11 CIP Number: 121-001

Description:

Rehabilitation of 7,500 feet of Taft Road from 10 Mile Road to Grand River Avenue to provide a smooth asphalt surface and extend the life of the road. The project would add bike lanes along Taft Road as recommended by the non-motorized master plan to improve non-motorized connectivity. This project was submitted in 2013 for potential grant funding in 2016.

Justification:

The road is currently rated a PASER 4 and should be rehabilitated to improve the road so it will remain serviceable.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|---------|-----------|---------|---------|---------|-----------|
| Engineering | 202-000.00- | | | \$121,700 | | | | \$121,700 |
| Other/ROW | | | | | | | | |
| Construction | 202-000.00- | | | \$486,800 | | | | \$486,800 |
| | TOTAL BUDGET | | | \$608,500 | | | | \$608,500 |

Taft Road, 9 Mile Road to 10 Mile Road Rehabilitation (PASER 4) Asphalt

Project Number: 12 CIP Number: 102-05

Description:

Rehabilitation of 5,280 feet of Taft Road from 9 Mile Road to 10 Mile Road to provide a smooth asphalt surface and extend the life of the road. The project would add bike lanes along Taft Road as recommended by the non-motorized master plan to improve non-motorized connectivity.

Justification:

The road is currently rated a PASER 4 and should be rehabilitated to improve the road so it will remain serviceable.

| Category Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------------------|---------|---------|-------------|---------|---------|---------|-------------|
| Engineering 202-000.00- | | | \$230,625 | | | | \$230,625 |
| Other/ROW | | | | | | | |
| Construction 202-000.00- | | | \$922,500 | | | | \$922,500 |
| TOTAL BUDGET | | | \$1,153,125 | | | | \$1,153,125 |

Trans-X Drive Rehabilitation (PASER 5/4) Concrete

Project Number: 13 CIP Number: 082-16

Description:

Partial reconstruction and rehabilitation of discrete areas of Trans-X Road along with preventative maintenance for the remainder of the segment. This project would complement the capital preventative maintenance completed in 2010 to preserve the life of the roadway.

Justification:

The road has a PASER rating of 4 to 5 and should be rehabilitated in order to keep the pavement in serviceable condition.

| Category Account N Engineering 202-000.00 | | 2015-16 | 2016-17 | 2017-18 \$65,000 | 2018-19 | 2019-20 | TOTAL \$65,000 |
|--|-----|---------|---------|-------------------------|---------|---------|--------------------------|
| Other/ROW | | | | | | | |
| Construction 202-000.00 | - | | | \$312,800 | | | \$312,800 |
| TOTAL BUD | GET | | | \$377.800 | | | \$377.800 |

Wixom Road, from 10 Mile Road to 11 Mile Road (PASER 5) Asphalt

Project Number: 14 CIP Number: 092-22

Description:

Repair, mill and overlay Wixom Road from 10 Mile Road to 11 Mile Road (5,200 feet) to extend the useful life of the road. The existing roadway is asphalt and the curb and gutter is in relatively good condition. The road had a PASER rating of 5 in 2012 and minor rehabilitation would help to increase the serviceable life of the roadway.

Justification:

The road has a PASER rating of 5 and should be rehabilitated in order to keep the pavement in serviceable condition.

| Category A Engineering 2 | occount No. 02-000.00- | 2014-15 | 2015-16 | 2016-17 | 2017-18 \$123,700 | 2018-19 | 2019-20 | TOTAL \$123,700 |
|-----------------------------|---------------------------|---------|---------|---------|--------------------------|---------|---------|---------------------------|
| Other/ROW | | | | | | | | |
| Construction 2 | 02-000.00- | | | | \$593,700 | | | \$593,700 |
| To | OTAL BUDGET | | | | \$717.400 | | | \$717.400 |

13 Mile Road Rehabilitation, Novi Road to Meadowbrook Road (PASER 6) Asphalt

Project Number: 15 CIP Number: 10-2023

Description:

Repair and repave 13 Mile Road from Novi Road to Meadowbrook Road (2,600 feet) to extend the useful life of the roadway. The project includes reconstruction of a failed section of 13 Mile near Meadowbrook adjacent to a wetland and the repair of a failed section of Meadowbrook Road near Burroughs Ave. The project would also add bike lanes and other non-motorized improvements as recommended by the master plan to improve non-motorized connectivity.

Justification:

The road has a PASER rating of 6 and will require capital preventative maintenance.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|---------------|---------|---------|---------|-----------|---------|---------|-----------|
| Engineering | 202-000.00- | | | | \$95,610 | | | \$95,610 |
| Other/ROW | | | | | | | | |
| Construction | 1 202-000.00- | | | | \$458,940 | | | \$458,940 |
| | TOTAL BUDGET | | | | \$554,550 | | | \$554,550 |

Southwest Quadrant Ring Road Flint Street, Novi Road and Grand River - New

Project Number: 16 CIP Number: 092-50

Description:

A study is currently underway to evaluate the existing alignment of Flint Street and potential alternatives to provide a connection to the ring road at the northwest quadrant of Grand River Avenue and Novi Road. A preliminary design and report will be completed at the end of FY12-13.

Justification:

Study recommended by the Northwest Quadrant Ring Road Scoping Study to complete the ring road around the Grand River and Novi Road intersection to improve traffic flow in the area.

| Category Account No. Engineering Other/ROW | 2014-15 | 2015-16 | 2016-17 | 2017-18 \$363,612 | 2018-19 | 2019-20 | TOTAL \$363,612 | |
|--|---------|---------|---------|--------------------------|---------|---------|---------------------------|--|
| Construction 204-000.00- | | | | \$1,455,000 | | | \$1,455,000 | |
| TOTAL BUDGET | | | | \$1 818 612 | | | \$1.818.612 | |

Sixth Gate Reconstruction

Project Number: 17 CIP Number: 112-01

Description:

Sixth Gate was originally a gravel road that was treated with chip seal in the mid to late 2000s. The road has deteriorated significantly and is in very poor condition with drainage problems evident. The road is not a good candidate for another chip seal and complete reconstruction is recommended as a 24-foot wide asphalt road with drainage improvements.

Justification:

The project was recommended by the 2013 Chip Seal Road Evaluation Report.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|---------------|---------|---------|---------|----------|---------|---------|----------|
| Engineering | 203-000.00- | | | | \$19,285 | | | \$19,285 |
| Other/ROW | | | | | | | | |
| Construction | n 203-000.00- | | | | \$79,300 | | | \$79,300 |
| | TOTAL BUDGET | | | | \$98,585 | | | \$98,585 |

Beck Road Widening (8 Mile to 10 Mile) Preliminary Engineering ONLY

Project Number: 18 CIP Number: 132-25

Description:

The widening of Beck Road between 8 Mile Road and Grand River Avenue as a 5-lane road or a 4-lane boulevard was recommended in the Beck Road Scoping Study dated December 2006. The Oakland County Federal Aid Committee has issued a call for projects for potential grant funding of widening projects for the first time in several years. The City plans to submit an application for funding the preliminary engineering phase of the project for 2018. The construction of the project is not listed in the Regional Transportation Plan until after 2020.

Justification:

Recommended by 2006 Beck Road Scoping Study.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 \$1,000,000 | 2018-19 | 2019-20 | TOTAL \$1,000,000 |
|-------------------------|--------------|---------|---------|---------|----------------------------|---------|---------|-----------------------------|
| Other/ROW | | | | | Ψ.,σσσ,σσσ | | | ψ./σσσ/σσσ |
| Construction | n | | | | | | | |
| | TOTAL BUDGET | | | | \$1,000,000 | | | \$1,000,000 |

Meadowbrook Road (Southbound at 11 Mile)--Add Right turn lane

Project Number: 19 CIP Number: 132-05

Description:

The southbound lane of Meadowbrook Road at 11 Mile Road is 18-foot wide (wider than a normal 12-foot wide lane) but is not quite wide enough to safely act as a dedicated right turn lane. The project would relocate an existing telephone pole and widen the roadway 5 feet to provide a dedicated right turn lane for southbound Meadowbrook Road to 11 Mile Road.

Justification:

Recommended by Town Center Area traffic study in 2012.

| 7 | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|---------|---------|-----------|---------|---------|-----------|
| Engineering | 202-000.00- | | | | \$22,200 | | | \$22,200 |
| Other/ROW | | | | | | | | |
| Construction | 202-000.00- | | | | \$108,900 | | | \$108,900 |
| | TOTAL BUDGET | | | | \$131,100 | | | \$131,100 |

Meadowbrook Road (North of 12 Mile Road) Major Repair

Project Number: 20 CIP Number: 132-03

Description:

There is a portion of Meadowbrook Road between 12 Mile and 13 Mile Road (just south of Burroughs) that has noticeable pavement deflection due to a structural issue with the underlying soils. This project would implement the recommendations of the geotechnical report, which includes the removal of the pavement and poor soils and replacement with engineered backfill and lighter weight expanded polystyrene blocks to prevent future settling. The pathway in this area is also exhibiting similar structural issues and will be addressed as part of the project.

Justification:

Without reconstruction of this area the road and pathway will continue to settle requiring additional maintenance and more costly repairs over time.

| Category Engineering | Account No. 202-000.00- | 2014-15 | 2015-16 | 2016-17 | 2017-18 \$99,100 | 2018-19 | 2019-20 | TOTAL \$99,100 |
|-------------------------|-------------------------|---------|---------|---------|-------------------------|---------|---------|--------------------------|
| Other/ROW | | | | | | | | |
| Construction | 1 202-000.00- | | | | \$485,700 | | | \$485,700 |
| | TOTAL BUDGET | | | | \$584,800 | | | \$584,800 |

11 Mile Road Rehabilitation and Repaving, Taft Road to Beck Road (PASER 6) Asphalt

Project Number: 21 CIP Number: 082-30

Description:

Repair and repaving of 11 Mile Road between Taft Road and Beck Road (5,280 feet). Includes the addition of a dedicated right turn lane for westbound 11 Mile Road at Beck Road as recommended in Beck Road Scoping Study short term capacity improvements. The project would also look for opportunities for non-motorized improvements, however the existing curb and gutter is in relatively good condition.

Justification:

The road has a PASER rating of 6 and should be rehabilitated in order to keep the road in serviceable condition.

| Category Engineering | Account No. 202-000.00- | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 \$135,000 | 2019-20 | TOTAL \$135,000 |
|-------------------------|-------------------------|---------|---------|---------|---------|--------------------------|---------|---------------------------|
| Other/ROW | | | | | | | | |
| Construction | 1 202-000.00- | | | | | \$647,700 | | \$647,700 |
| | TOTAL BUDGET | | | | | \$782,700 | | \$782,700 |

Old Novi Road Rehabilitation (PASER 7) Asphalt

Project Number: 22 CIP Number: 102-04

Description:

Rehabilitation of Old Novi Road from Novi Road to 13 Mile Road (1,630 feet) to provide a smooth asphalt surface and extend the life of the road.

Justification:

The road is currently rated a PASER 7 and will be due for capital preventative maintenance.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL | |
|--------------|----------------------|---------|---------|---------|---------|-----------|---------|-----------|--|
| Engineering | 202-000.00- | | | | | \$114,800 | | \$114,800 | |
| Other/ROW | | | | | | | | | |
| Construction | n 202-000.00- | | | | | \$551,000 | | \$551,000 | |
| | TOTAL BUDGET | | | | | \$665,800 | | \$665,800 | |

Donelson to Sheraton and West Oaks - New Road Construction (as recommended in Master Plan)

Project Number: 23 CIP Number: 082-32

Description:

Proposed new road (2,920 feet) south of existing West Oaks development connecting West Oaks Drive to Donelson and providing access to the businesses that currently have access from Sheraton Drive. The project would include changes to existing Sheraton Drive and West Oaks Drive. Requires property owner cooperation or acquisition of right-of-way. This project was proposed in the 2007 Master Plan for Land Use update. A determination has not yet been made to use asphalt or concrete.

Justification:

Recommended by the 2007 Master Plan for Land Use update.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|---------|---------|---------|-----------|---------|-----------|
| Engineering | 204-000.00- | | | | | \$143,000 | | \$143,000 |
| Other/ROW | 204-000.00- | | | | | \$100,000 | | \$100,000 |
| Construction | 204-000.00- | | | | | \$658,000 | | \$658,000 |
| _ | TOTAL BUDGET | | | | | \$901,000 | | \$901,000 |

Jo Drive Rehabilitation and Extension (PASER 4) Concrete

Project Number: 24 CIP Number: 132-02

Description:

Jo Drive is currently a dead end concrete street with a PASER rating of 4 and requires rehabilitation. The project presents an opportunity to extend Jo Drive to make a connection through existing city-owned property to Seeley Road to provide better access to the businesses along Vincenti and Jo. The project would include the extension of Jo Drive from its current terminus to Seeley Road and would include the construction of sidewalks along both sides of existing and proposed Jo Drive to improve non-motorized access in the area.

Justification:

This road is currently rated a PASER 4 and requires rehabilitation to prevent further deterioration requiring higher cost construction.

| Category Engineering Other/ROW | • | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 \$65,000 | TOTAL \$65,000 | |
|--------------------------------------|--------------|---------|---------|---------|---------|---------|----------------------------|--------------------------|--|
| Construction | | | | | | | \$409,000 | \$409,000 | |
| | TOTAL BUDGET | | | | | | \$474,000 | \$474,000 | |

11 Mile Rehabilitation (Taft to Clark) PASER 5

Project Number: 25 CIP Number: 132-27

Description:

Rehabilitation of 3,000 feet of 11 Mile Road from Taft Road to Clark Street to provide a smooth asphalt surface and extend the life of the road.

Justification:

The road has a PASER rating of 6 and should be rehabilitated in order to keep the road in serviceable condition.

| Category A Engineering 2 | Account No. 202-000.00- | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 \$55,490 | TOTAL \$55,490 |
|--------------------------|----------------------------|---------|---------|---------|---------|---------|-------------------------|--------------------------|
| Other/ROW | | | | | | | • | , , |
| Construction 2 | 202-000.00- | | | | | | \$266,350 | \$266,350 |
| 1 | TOTAL BUDGET | | | | | | \$321.840 | \$321.840 |

11 Mile Rehabilitation (Beck to Wixom) PASER 6

Project Number: 26 CIP Number: 132-26

Description:

Rehabilitation of 5,280 feet of 11 Mile Road from Beck Road to Wixom Road to provide a smooth asphalt surface and extend the life of the road. Includes the addition of a dedicated right turn lane for westbound 11 Mile Road at Beck Road as recommended in Beck Road Scoping Study short term capacity improvements. The project would also look for opportunities for non-motorized improvements, however the existing curb and gutter is in relatively good condition.

Justification:

The road has a PASER rating of 6 and should be rehabilitated in order to keep the road in serviceable condition.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|---------------|---------|---------|---------|---------|---------|-----------|-----------|
| Engineering | 202-000.00- | | | | | | \$129,080 | \$129,080 |
| Other/ROW | | | | | | | | |
| Construction | n 202-000.00- | | | | | | \$619,600 | \$619,600 |
| • | TOTAL BUDGET | | | | | | \$748,680 | \$748,680 |

West Park Rehabilitation (West Road to Pontiac Trail) PASER 5-8

Project Number: 27 CIP Number: 132-28

Description:

Rehabilitation of 1.5 miles of West Park Drive from West Road to Pontiac Trail to provide a smooth asphalt surface and extend the life of the road. The project would also look for opportunities for non-motorized improvements, however the existing curb and gutter is in relatively good condition.

Justification:

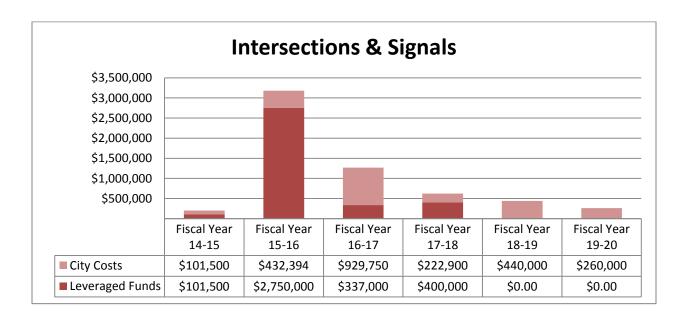
The road has a PASER rating of 5-8 and should be rehabilitated in order to keep the road in serviceable condition.

| Category A Engineering 2 | Account No. 202-000.00- | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 \$106,210 | TOTAL \$106,210 |
|-----------------------------|----------------------------|---------|---------|---------|---------|---------|-----------------------------|---------------------------|
| Other/ROW | | | | | | | | |
| Construction 2 | 202-000.00- | | | | | | \$509,820 | \$509,820 |
| T | OTAL BUDGET | | | | | | \$616,030 | \$616,030 |

Intersection and Signals

The City of Novi is 32 square miles with 180 miles of major and neighborhood roads. To facilitate safe motorized and non-motorized transportation throughout the City safe road and street intersections and traffic signals need to be designed and maintained year in and year out. Sample projects found in this category are new traffic signals at City intersections, pedestrian crossing signals, turn lanes on major roads and roundabouts at key intersections to calm traffic.

Funding for proposed projects come from a variety of sources Major, Local and Municipal Street funds, and various grant programs that fund traffic related projects.



13 Mile and Cabot-New Signal

Project Number: 28 CIP Number: 086-06

Description:

Construct a new traffic signal for 13 Mile and Cabot Drive based on traffic engineering study completed in 2012. The design engineering was funded in FY13-14 and completed in early 2014. The project is ready for construction. A property owner paid for 50% of the design cost and may contribute to the construction cost in order to expedite construction. This project was listed for FY 16-17 in the previous CIP.

Justification:

The traffic engineering study recommends installation of a traffic signal at this intersection to improve safety.

| Category Account | No. 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|------------------------|----------------|---------|---------|---------|---------|---------|-----------|
| Engineering 204-000.0 | 00- \$29,000 | | | | | | \$29,000 |
| Other/ROW | | | | | | | |
| Construction 204-000.0 | \$174,000 | | | | | | \$174,000 |
| TOTAL BU | DGET \$203.000 | | | | | | \$203,000 |

Napier Road and 10 Mile Road Intersection Improvements to Include Paving Napier Road.

Project Number: 29 CIP Number: 116-04

Description:

The project would improve the intersection by widening Napier and 10 Mile at the intersection to add left-turn lanes and could include signalization of the intersection, if warranted, or a roundabout. The intersection was determined to have a casualty ratio from crashes at a much higher rate than other intersections in SE Michigan which can be mitigated by the improvements. The project would be a potential candidate for safety grant funding. RCOC is dedicating \$1.5 million dollars in FY 2015-16 and again in FY 2016-17.

Justification:

Improve safety at the intersection of 10 Mile and Napier that currently has a higher than average casualty ratio.

| Category Account No. Engineering 204-000.00- | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--|---------|-------------|---------|---------|---------|---------|-------------|
| Other/ROW Construction 204-000.00- | | \$3,100,000 | | | | | \$3,100,000 |
| TOTAL BUDGET | | \$3,100,000 | | | | | \$3,100,000 |

Taft and 9 Mile Road - New Roundabout

Project Number: 30 CIP Number: 086-08

Description:

Construct a modern roundabout at the intersection of Taft Road and 9 Mile Road. The roundabout would eliminate the existing four-way stop control and act as a traffic calming measure. Roundabouts not only act as a traffic calming measure (slowing traffic down) but are also safer by eliminating the head-on and angle crashes which tend to cause injury. A grant application will be submitted for potential federal funding for 100% of the construction cost (awards to be announced in early 2013 for funding year 2016).

Justification:

Traffic safety improvement, congestion reduction, air quality improvement and aesthetic improvement.

| | Account No. 202-000.00- | 2014-15 | 2015-16 \$82,394 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL \$82,394 | |
|---------------------------|----------------------------|---------|----------------------------|-----------|---------|---------|---------|--------------------------|--|
| Other/ROW Construction | n 202-000.00- | | | \$337,000 | | | | \$337,000 | |
| | TOTAL BUDGET | | \$82 394 | \$337,000 | | | | \$419 394 | |

New Roundabout at 11 Mile Road and Wixom Road

Project Number: 31 CIP Number: 102-10

Description:

The intersection of Wixom and 11 Mile Road has been studied twice and has not met the warrant for a traffic signal. The increase in traffic along Wixom Road during peak hours has decreased the number of gaps to allow vehicles to turn onto Wixom Road. A roundabout would regulate traffic at the intersection and work to calm traffic on Wixom Road consistent with the non-motorized character recommended in the non-motorized master plan.

Justification:

Recommended by traffic engineering study completed in 2012 and 2011 Non-Motorized Master Plan.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------------|--------------|---------|---------|-----------|---------|---------|---------|-----------|
| Engineering | 202-000.00- | | | \$175,150 | | | | \$175,150 |
| Other/ROW | | | | | | | | |
| Construction | 202-000.00- | | | \$700,600 | | | | \$700,600 |
| | TOTAL BUDGET | | | \$875,750 | | | | \$875.750 |

Add Dual Left Turn Lane - East Bound Grand River at Beck Road

Project Number: 32 CIP Number: 116-06

Description:

This project would widen eastbound (EB) Grand River at Beck to add a second left turn lane to add capacity at the intersection. The operation of the intersection is impacted by the long queue for the EB left turn from Grand River to Beck and would be mitigated by the second left turn lane. This project was recommended by the I-96 Novi Transportation Study. A Federal safety grant application was submitted in 2013 for funding year 2015, however grant awards have not yet been announced. It is anticipated that the grant awards will be announced in April 2014.

Justification:

Improve the operation of the Grand River and Beck intersection and decrease traffic crashes.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|---------------|---------|---------|----------|-----------|---------|---------|-----------|
| Engineering | 204-000.00- | | | \$54,000 | \$81,300 | | | \$135,300 |
| Other/ROW | | | | | | | | |
| Construction | 1 204-000.00- | | | | \$541,600 | | | \$541,600 |
| | TOTAL BUDGET | | | \$54,000 | \$622,900 | | | \$676,900 |

Beck Road at 9 Mile Road Signal Modernization

Project Number: 33 CIP Number: 136-02

Description:

The existing traffic signal at the intersection of Beck Road and 9 Mile Road was installed in 1998 and is reaching the end of its useful life. The signal would be reconstructed with new equipment reflecting the updated standards and improved technology that has changed since the original installation to improve traffic operation and safety. Additionally, the sidewalk ramps and pedestrian signals would be improved and street lighting added to the intersection.

Justification:

The equipment is approaching the end of its serviceable life.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL | |
|--------------|--------------|---------|---------|---------|---------|-----------|---------|-----------|--|
| Engineering | | | | | | \$40,000 | | \$40,000 | |
| Other/ROW | | | | | | | | | |
| Construction | n | | | | | \$175,000 | | \$175,000 | |
| | TOTAL BUDGET | | | | | \$215,000 | | \$215,000 | |

Lewis and Haggerty Road - New Signal

Project Number: 34 CIP Number: 086-07

Description:

Construct a new traffic signal for the intersection of Lewis Drive and Haggerty Road based on anticipated future need.

Justification:

Traffic safety improvement and congestion reduction.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL | |
|--------------|--------------|---------|---------|---------|---------|-----------|---------|-----------|--|
| Engineering | 204-000.00- | | | | | \$50,000 | | \$50,000 | |
| Other/ROW | | | | | | | | | |
| Construction | 204-000.00- | | | | | \$175,000 | | \$175,000 | |
| | TOTAL BUDGET | | | | | \$225,000 | | \$225,000 | |

Novi Road and 13 Mile Road Signal Modernization

Project Number: 35 CIP Number: 136-01

Description:

The existing traffic signal at the intersection of Novi Road and 13 Mile Road was last improved in 1999 and is reaching the end of its useful life. The signal would be reconstructed with new equipment reflecting the updated standards and improved technology that has changed since the original installation to improve traffic operation and safety. This intersection is located along one of the three mast arm corridors in the City, therefore, the signal would be reconstructed with the Novi standard decorative mast arms. Additionally, the sidewalk ramps and pedestrian signals would be improved and street lighting added to the intersection.

Justification:

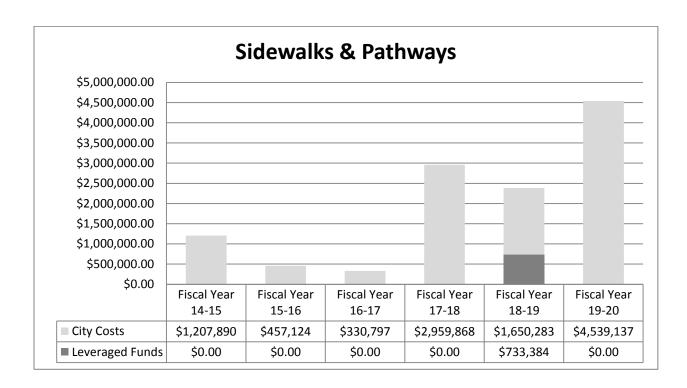
The equipment is approaching the end of its serviceable life

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 \$50,000 | TOTAL \$50,000 |
|-------------------------|--------------|---------|---------|---------|---------|---------|----------------------------|--------------------------|
| Other/ROW | | | | | | | | |
| Constructio | n | | | | | | \$210,000 | \$210,000 |
| | TOTAL BUDGET | | | | | | \$260,000 | \$260,000 |

Sidewalk and Pathways

The City of Novi is committed to providing non-motorized sidewalks and pathways in an effort to provide alternative modes of transportation for citizens and stakeholders alike. In this effort the City Council adopted a Non-Motorized Master Plan in 2011. It recommends the installation of bike routes and wayfinding signage along residential streets to enhance the existing neighborhood connections. The City of Novi has had a long standing interest in providing pathways and sidewalks to connect neighborhoods with destinations throughout the City and Region. Currently the City has over 200 miles of pathways and sidewalks. The Capital Improvement Plan incorporates plans and efforts and preferences of the Non-Motorized Plan.

Walkable Novi Committee along with the analysis from the City's Engineering and Planning Division recommends fills to the non-motorized gaps throughout the City. A portion of the City's road millage will go toward financing sidewalk and pathway projects in the City of Novi.



Americans with Disabilities Act (ADA) Compliance Plan Annual Implementation

Project Number: 36 CIP Number: 10-5002

Description:

Annual program to retrofit existing sidewalk and pathway facilities in public rights-of-way with slope and ramp improvements to meet Americans with Disability Act (ADA) requirements for accessibility, based on the findings and recommendations of the February 2011 ADA Compliance Plan. This project is in addition to existing allocations in other road and sidewalk projects that are used for ADA compliance.

Justification:

An annual budget for ADA compliance is recommended by the 2011 ADA Compliance Transition Plan to establish a plan for ADA conformance in the City. As discussed in the ADA Compliance Plan, a provision of federal regulation 28 CFR 35 is that all state and local governments prepare a transition plan to guide efforts to bring facilities into compliance with ADA, which must include a schedule and methodology for compliance. An annual budget was initiated in 2011 of \$50,000 to facilitate compliance. See attached Council resolution and report for project justification details.

| Category Account No. Engineering | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|------------------------------------|----------|----------|----------|----------|----------|----------|------------------------|
| Other/ROW Construction 204-000.00- | \$50,000 | \$50,000 | \$50,000 | \$50,000 | \$50,000 | \$50,000 | \$200,000 |
| TOTAL BUDGET | \$50,000 | \$50,000 | \$50,000 | \$50,000 | \$50,000 | \$50,000 | \$300,000 \$300,000 |

11 Mile Road Pathways (Town Center to Meadowbrook)

Project Number: 37 CIP Number: 082-30A

Description:

The construction of a 6-foot wide sidewalk along the south side of 11 Mile and a 10-foot wide shared use pathway along the north side of 11 Mile between Town Center and Meadowbrook is the second phase of the road reconstruction project that is proposed for 2014. Construction of the pathways would occur in 2015.

Justification:

Pathways are recommended with road reconstruction projects per the Non-Motorized Master Plan

| Category Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|----------------------|-----------|---------|---------|---------|---------|---------|-----------|
| Engineering | \$67,000 | | | | | | \$67,000 |
| Other/ROW | \$24,700 | | | | | | \$24,700 |
| Construction | \$314,400 | | | | | | \$314,400 |
| TOTAL BUDGET | \$406,100 | | | | | | \$406,100 |

Segment 89--Novi Road, East Side 10 Mile Road - Lidstrom (8' foot Pathway) Concrete

Project Number: 38 CIP Number: 085-89

Description:

Construction of 440 feet of 8-foot wide bike path to fill one gap along the east side of Novi Road from Lidstrom to 10 Mile Road. This project was identified as a top 20 priority segment by the Greenway/Pathway Study.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 2nd by the 2013 update of the Annual Non-Motorized Prioritization.

| Category Account No. Engineering 204-000.00- | 2014-15 \$21,700 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL \$21,700 |
|--|----------------------------|---------|---------|---------|---------|---------|--------------------------|
| Other/ROW Construction 204-000.00- | \$104,250 | | | | | | \$104,250 |
| TOTAL BUDGET | \$125,950 | | | | | | \$125,950 |

Segment 76--Grand River, North Side, East of Seeley, (8' foot Pathway Short Segment) Concrete

Project Number: 39 CIP Number: 095-76

Description:

Construct 400 feet of 8' pathway in concrete along the north side of Grand River just east and west of Seeley Road from the end of the existing pathway to the east to the crosswalk on Grand River constructed with the Grand River Avenue rehabilitation project in 2012.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 83rd by the 2013 update of the Annual Non-Motorized Prioritization.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|---------------|----------|---------|---------|---------|---------|---------|----------|
| Engineering | 204-000.00- | \$5,100 | | | | | | \$5,100 |
| Other/ROW | 204-000.00- | \$1,000 | | | | | | \$1,000 |
| Construction | า 204-000.00- | \$24,460 | | | | | | \$24,460 |
| | TOTAL BUDGET | \$30.560 | | | | | | \$30.560 |

Segment 145--10 Mile Road (6', north side)--CSX to Catherine Industrial (gap)

Project Number: 40 CIP Number: 135-145

Description:

Completion of a 220 foot gap of 6' wide sidewalk on the north side of 10 Mile Road between Catherine Industrial Drive and CSX Railroad on two parcels with a single owner. Design is complete and easement acquisition is underway. This segment was identified as a top 20 priority segment by Walkable Novi Committee.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 8th by the 2013 update of the Annual Non-Motorized Prioritization.

| Category Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|----------------------|----------|---------|---------|---------|---------|---------|----------|
| Engineering | \$5,320 | | | | | | \$5,320 |
| Other/ROW | | | | | | | |
| Construction | \$46,040 | | | | | | \$46,040 |
| TOTAL BUDGET | \$51,360 | | | | | | \$51.360 |

Pontiac Trail at Geisler Middle School--Improve Pedestrian Crossing

Project Number: 41 CIP Number: 135-01

Description:

Construction of a new sidewalk north and south of Pontiac Trail at the existing traffic signal for Geisler Middle School along with improvements to the pedestrian signals at the intersection.

Justification:

This project will provide a non-motorized connection between the north and south sides of Pontiac Trail and provide better non-motorized access to the school from the multi-family housing to the south. Recommended by Non-Motorized Master Plan.

| Category Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|----------------------|----------|---------|---------|---------|---------|---------|----------|
| Engineering | \$15,500 | | | | | | \$15,500 |
| Other/ROW | \$10,000 | | | | | | \$10,000 |
| Construction | \$73,750 | | | | | | \$73,750 |
| TOTAL BUDGET | \$99,250 | | | | | | \$99.250 |

Segment 109--8 Mile Road (north side, 8' pathway) between Garfield and Beck

Project Number: 42 CIP Number: 125-109

Description:

Construction of 2,900 feet of 8' wide pathway to fill two gaps along the north side of 8 Mile Road from Garfield Road to Beck Road to provide an off-road non-motorized connection to Maybury State Park, ITC Community Sports Park, the City of Northville, and Northville Township.

Justification:

Provides connections between communities and parks

| Category Account No. Engineering 204-204.00- | 2014-15 \$76,670 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL \$76,670 |
|--|----------------------------|---------|---------|---------|---------|---------|--------------------------|
| Other/ROW | | | | | | | |
| Construction 204-204.00- | \$368,000 | | | | | | \$368,000 |
| TOTAL BUDGET | \$444 670 | | | | | | \$444 670 |

Segment 129-14 Mile Road (5', south side)--Haverhill Farms to Maples Place

Project Number: 43 CIP Number: 135-129

Description:

Construction of 600 feet of 5-foot wide pathway along the south side of 14 Mile Road between Haverhill Farms and Maples Place to complete a gap in the pathway network. This segment was identified as a top 20 priority segment by Walkable Novi Committee.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 20th by the 2013 update of the Annual Non-Motorized Prioritization.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|----------|---------|---------|---------|---------|----------|
| Engineering | | | \$11,000 | | | | | \$11,000 |
| Other/ROW | | | \$36,000 | | | | | \$36,000 |
| Construction | | | \$48,464 | | | | | \$48,464 |
| • | TOTAL BUDGET | | \$95,464 | | | | | \$95,464 |

Segment NC4--Neighborhood Connection Between Main Street and Meadowbrook Glens

Project Number: 44 CIP Number: 10-5007

Description:

Construct 650 feet of 6 foot wide concrete sidewalk and acquire easement rights over existing sidewalks to develop a neighborhood connection between Meadowbrook Glens and Main Street.

Justification:

Recommended by Non-motorized master plan.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|----------|---------|---------|---------|---------|----------|
| Engineering | 204-000.00- | | \$11,000 | | | | | \$11,000 |
| Other/ROW | 204-000.00- | | \$32,000 | | | | | \$32,000 |
| Construction | 204-000.00- | | \$51,400 | | | | | \$51,400 |
| _ | TOTAL BUDGET | | \$94,400 | | | | | \$94,400 |

Taft Road at Jacob Drive - Non-Motorized Crossing

Project Number: 45 CIP Number: 115-999

Description:

Provides a mid-block crossing on Taft Road at Jacob Drive to provide access from the east side of Taft Road to the schools located on the west side of Taft Road.

Justification:

Recommended by the Non-Motorized Master Plan.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|---------------|---------|----------|---------|---------|---------|---------|----------|
| Engineering | | | | | | | | |
| Other/ROW | | | | | | | | |
| Construction | n 204-000.00- | | \$25,000 | | | | | \$25,000 |
| • | TOTAL BUDGET | | \$25,000 | | | | | \$25,000 |

Segment 62--10 Mile Road, Eaton Center to Churchill (6' Sidewalk and Boardwalk) for North Side

Project Number: 46 CIP Number: 085-62

Description:

Construction of 400 feet of boardwalk to fill a gap along the north side of 10 Mile Road from Eaton Center to Churchill Crossing. This project was identified as a top 20 priority segment by the 2012 Update to the Pathway and Sidewalk Prioritization Analysis.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 13th by the 2013 update of the Annual Non-Motorized Prioritization.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|-----------|---------|---------|---------|---------|-----------|
| Engineering | 204-000.00- | | \$24,700 | | | | | \$24,700 |
| Other/ROW | 204-000.00- | | \$18,100 | | | | | \$18,100 |
| Construction | 204-000.00- | | \$118,530 | | | | | \$118,530 |
| | TOTAL BUDGET | | \$161,330 | | | | | \$161,330 |

Segment 10--Beck Road, East Side, South of Pontiac Trail, (5' foot Sidewalk Short Segment) Concrete

Project Number: 47 CIP Number: 095-10

Description:

Construct 200 feet of 5' sidewalk along the east side of Beck Road across the frontage of K & S Plaza, South of Pontiac Trail to fill an existing gap in the sidewalk system.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 47th by the 2013 update of the Annual Non-Motorized Prioritization.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|----------|---------|---------|---------|---------|----------|
| Engineering | 204-000.00- | | \$5,300 | | | | | \$5,300 |
| Other/ROW | 204-000.00- | | | | | | | |
| Construction | 204-000.00- | | \$25,630 | | | | | \$25,630 |
| | TOTAL BUDGET | | \$30,930 | | | | | \$30,930 |

Segment 9--Pontiac Trail, South Side (6' foot Sidewalk) Beck Road to West Park Drive

Project Number: 48 CIP Number: 115-009

Description:

Construction of 5,000 feet of 6' wide sidewalk along the south side of Pontiac Trail between Beck Road and West Park Drive. The project is ranked among the top 20 in the 2011 update to the Sidewalk Prioritization Plan.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 3rd in the 2013 update of the Annual Non-Motorized Prioritization.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|---------|----------|-----------|---------|---------|-----------|
| Engineering | 204-000.00- | | | \$35,000 | \$41,565 | | | \$76,565 |
| Other/ROW | 204-000.00- | | | \$11,410 | | | | \$11,410 |
| Construction | 204-000.00- | | | | \$367,520 | | | \$367,520 |
| | TOTAL BUDGET | | | \$46,410 | \$409,085 | | | \$455,495 |

Segment 127A--Novi Way, East Side (6' foot Sidewalk) Concrete

Project Number: 49 CIP Number: 101-127

Description:

Construction of 350 feet of 6-foot wide sidewalk along the east side of Novi Way from 10 Mile Road south. The project would connect to the proposed sidewalk along the Power Park access road and provide connectivity to the Civic Center.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|---------------|---------|---------|----------|---------|---------|---------|----------|
| Engineering | 204-000.00- | | | \$4,720 | | | | \$4,720 |
| Other/ROW | | | | | | | | |
| Construction | 1 204-000.00- | | | \$22,667 | | | | \$22,667 |
| | TOTAL BUDGET | | | \$27,387 | | | | \$27,387 |

Segment 53--Beck Road, West Side, (8' foot Pathway) 11 Mile Road to Kirkway Place

Project Number: 50 CIP Number: 125-053

Description:

Construction of 700 feet of 8-foot wide pathway along the west side of Beck Road from 11 Mile Road to Kirkway.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 24th in the 2013 update of the Annual Non-Motorized Prioritization.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|---------|----------|---------|---------|---------|----------|
| Engineering | 204-000.00- | | | \$12,000 | | | | \$12,000 |
| Other/ROW | 204-000.00- | | | \$13,000 | | | | \$13,000 |
| Construction | 204-000.00- | | | \$56,000 | | | | \$56,000 |
| | TOTAL BUDGET | | | \$81,000 | | | | \$81,000 |

Segment 105 - 8 Mile Road (north side, 8' pathway) between Garfield and Napier

Project Number: 51 CIP Number: 125-105

Description:

Construction of 5,280 feet of 8' wide pathway to fill one gap along the north side of 8 Mile Road from Garfield Road to Napier Road to provide an off-road non-motorized connection to Maybury State Park, ITC Community Sports Park, the City of Northville, and Northville Township.

Justification:

Provides connections between communities and parks

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------------|--------------|---------|---------|-----------|-----------|---------|---------|-----------|
| Engineering | 204-204.00- | | | \$126,000 | | | | \$126,000 |
| Other/ROW | | | | | | | | |
| Construction | 204-204.00- | | | | \$609,260 | | | \$609,260 |
| | TOTAL BUDGET | | | \$126,000 | \$609.260 | | | \$735,260 |

Segment 51-10 Mile Road (5' wide, north side)-Dinser to Woodham

Project Number: 52 CIP Number: 135-51

Description:

Construction of 1,780 feet of 5' wide pathway along the north side of 10 Mile Road between Dinser Drive and Woodham Drive to complete a gap in the pathway network. This segment was discussed at Walkable Novi as a segment of interest because of recent developments in the area that have added to the pathway network. This segment provides a connection between Wixom and Beck on the north side of 10 Mile Road.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 72 by the 2013 update of the Annual Non-Motorized Prioritization.

| Category Acc | count No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|-----------|---------|---------|---------|-----------|---------|---------|-----------|
| Engineering | | | | | \$23,900 | | | \$23,900 |
| Other/ROW | | | | | \$43,000 | | | \$43,000 |
| Construction | | | | | \$114,700 | | | \$114,700 |
| TOT | AL BUDGET | | | | \$181,600 | | | \$181,600 |

Segment 81--10 Mile Road, South Side, (8' foot Pathway) Meadowbrook Road to Haggerty Road

Project Number: 53 CIP Number: 125-081

Description:

Construction of 5,280 feet of 8' wide pathway along the south side of 10 Mile Road from Meadowbrook Road to Haggerty Road. This segment was identified as a top 20 priority segment by Walkable Novi Committee.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 2nd by the 2013 update of the Annual Non-Motorized Prioritization.

| Category Accor | unt No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|---------------------|---------|---------|---------|---------|-----------|-----------|-----------|-----------|
| Engineering | | | | | \$100,800 | | | \$100,800 |
| Other/ROW | | | | | | \$25,000 | \$10,000 | \$35,000 |
| Construction 204-00 | -00.00 | | | | | \$254,067 | \$229,900 | \$483,967 |
| TOTAL | BUDGET | | | | \$100,800 | \$279,067 | \$239,900 | \$619,767 |

Segment 133--Wixom Road Crossing, North of 11 Mile Road (8' foot Pathway Short Segment) Concrete

Project Number: 54 CIP Number: 095-133

Description:

Construction of approximately 75 feet of 8' pathway and associated ramps to cross Wixom Road north of 11 Mile and at Wixom Road and Glenwood to improve the pedestrian routes to Novi Middle School and Deerfield Elementary.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 69 (but within the top 10 amongst pedestrian safety crossings) by the 2013 update of the Annual Non-Motorized Prioritization.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|---------------|---------|---------|---------|----------|---------|---------|----------|
| Engineering | 204-000.00- | | | | \$6,390 | | | \$6,390 |
| Other/ROW | | | | | | | | |
| Construction | 1 204-000.00- | | | | \$30,660 | | | \$30,660 |
| | TOTAL BUDGET | | | | \$37,050 | | | \$37,050 |

Segment 39--Beck Road, West Side, from 11 Mile Road to Providence

Project Number: 55 CIP Number: 125-039

Description:

Construction of 1,350 feet of 8' wide pathway along the west side of Beck Road to complete the gap between 11 Mile Road and Providence Park Hospital.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 8th in the 2013 update of the Annual Non-Motorized Prioritization.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|---------|---------|-----------|---------|---------|-----------|
| Engineering | 204-000.00- | | | | \$22,000 | | | \$22,000 |
| Other/ROW | 204-000.00- | | | | \$57,000 | | | \$57,000 |
| Construction | 204-000.00- | | | | \$105,441 | | | \$105,441 |
| | TOTAL BUDGET | | | | \$184,441 | | | \$184,441 |

Segment 154--10 Mile Road (8' foot Pathway) South Side, Between Pheasant Run and Quince Drive, with Crosswalk to North

Project Number: 56 CIP Number: 115-154

Description:

Construction of 900 feet of 8' wide pathway along the south side of 10 Mile Road to complete the gap between Pheasant Run and Quince Drive. The project would also provide a mid-block crossing in the vicinity of Hampton Hill Drive to provide non-motorized connectivity between the neighborhoods and Orchard Hills Elementary.

Justification:

Promotes neighborhood connectivity as recommended in the non-motorized master plan. Ranked 13th in 2013 update of the Annual Non-Motorized Prioritization.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|---------|---------|-----------|---------|---------|-----------|
| Engineering | 204-000.00- | | | | \$49,770 | | | \$49,770 |
| Other/ROW | | | | | | | | |
| Construction | 204-000.00- | | | | \$239,000 | | | \$239,000 |
| | TOTAL BUDGET | | | | \$288,770 | | | \$288.770 |

M-5/I-275 Regional Trail Connection - Phase II - Meadowbrook Road and 13 Mile Road, between 12 Mile Road and M-5

Project Number: 57 CIP Number: 115-0003

Description:

Widening the existing pathways along the east side of Meadowbrook Road between 12 Mile and 13 Mile Road and the existing pathway along the north side of 13 Mile Road between Meadowbrook Road and M-5 to a 10-foot wide regional trail. This project is the second phase of a project to create a 10' wide connection between the I-275 regional pathway that ends at Meadowbrook Road and I-275 and the M-5 pathway that begins at M-5 and 13 Mile Road.

Justification:

Provides full connectivity to a larger non-motorized regional network through the City of Novi

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|---------|---------|----------|-------------|---------|-------------|
| Engineering | 204-000.00- | | | | \$85,000 | \$105,000 | | \$190,000 |
| Other/ROW | 204-000.00- | | | | \$12,000 | | | \$12,000 |
| Construction | 204-000.00- | | | | | \$916,730 | | \$916,730 |
| _ | TOTAL BUDGET | | | | \$97,000 | \$1,021,730 | | \$1,118,730 |

Segment 93--9 Mile Road, Novi Road to Taft, North Side (6' foot Sidewalk) Concrete

Project Number: 58 CIP Number: 095-93

Description:

Construction of 3,300 feet of 6' wide sidewalk along the north side of 9 Mile Road from Novi Road to Taft Road. This project was identified as a top 20 priority segment by the 2010 Update to the Pathway and Sidewalk Prioritization Analysis.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 11th by the 2013 update of the Annual Non-Motorized Prioritization.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|---------------|---------|---------|---------|----------|-----------|---------|-----------|
| Engineering | 204-000.00- | | | | \$46,950 | | | \$46,950 |
| Other/ROW | 204-000.00- | | | | \$16,600 | | | \$16,600 |
| Construction | 1 204-000.00- | | | | | \$225,370 | | \$225,370 |
| | TOTAL BUDGET | | | | \$63,550 | \$225,370 | | \$288,920 |

Segment 99--10 Mile Road, South Side, from Wixom Road to Beck Road (8' foot Pathway)

Project Number: 59 CIP Number: 095-99

Description:

Construction of 3,500 feet of 8' pathway along the south side of 10 Mile in two segments from Wixom to Beck

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 16th by the 2013 update of the Annual Non-Motorized Prioritization.

| Category Engineering | Account No. 204-000.00- | 2014-15 | 2015-16 | 2016-17 | 2017-18 \$64,310 | 2018-19 | 2019-20 | TOTAL \$64,310 |
|-------------------------|----------------------------|---------|---------|---------|-------------------------|---------|---------|--------------------------|
| Other/ROW | | | | | \$89,352 | | | \$89,352 |
| Construction | า 204-000.00- | | | | \$308,650 | | | \$308,650 |
| | TOTAL BUDGET | | | | \$462,312 | | | \$462,312 |

Installation of Crosswalks on 12 Mile Road, at Donelson Drive and Cabaret Drive

Project Number: 60 CIP Number: 10-5008

Description:

The south side of these intersections (the eastbound 12 Mile Road lanes) have traffic signals and can be retrofitted with pedestrian signals, however the north side of the intersection (westbound 12 Mile Road lanes) does not have traffic signals. Crosswalks with hybrid pedestrian signals would be added to facilitate pedestrian crossings of 12 Mile Road at Donelson and 12 Mile Road and Cabaret.

Justification:

Recommended in Non-motorized Master Plan and I-96 Transportation Improvement Plan

| Category Account No. Engineering 204-000.00- | 2014-15 | 2015-16 | 2016-17 | 2017-18 \$82,000 | 2018-19 | 2019-20 | TOTAL \$82,000 |
|--|---------|---------|---------|----------------------------|---------|---------|--------------------------|
| Other/ROW | | | | | | | |
| Construction 204-000.00- | | | | \$394,000 | | | \$394,000 |
| TOTAL BUDGET | | | | \$476,000 | | | \$476,000 |

Segment 119--Meadowbrook Road, East Side, (6' foot Sidewalk) 8 Mile Road to 9 Mile Road

Project Number: 61 CIP Number: 125-119

Description:

Construction of 3,800 feet of 6' wide pathway along the east side of Meadowbrook Road from 8 Mile Road to 9 Mile Road.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 12th by the 2013 update of the Annual Non-Motorized Prioritization.

| Category Engineering | Account No. 204-000.00- | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 \$65,000 | 2019-20 | TOTAL \$65,000 |
|-------------------------|----------------------------|---------|---------|---------|---------|----------------------------|---------|--------------------------|
| Other/ROW | 20 . 000.00 | | | | | 400,000 | | φου,σου |
| Construction | 204-000.00- | | | | | \$312,000 | | \$312,000 |
| | TOTAL BUDGET | | | | | \$377,000 | | \$377,000 |

Segment 90-10 Mile Road, (8' foot Pathway) South Side, Novi Road to Chipmunk Trail - Concrete

Project Number: 62 CIP Number: 105-90

Description:

Construction of 2,400 feet of 8' wide pathway along the south side of 10 Mile Road from Novi Road to Chipmunk Trail. This segment was identified as a top 20 priority segment by Walkable Novi Committee.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 7th by the 2013 update of the Annual Non-Motorized Prioritization.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|---------|---------|---------|-----------|---------|-----------|
| Engineering | 204-000.00- | | | | | \$48,000 | | \$48,000 |
| Other/ROW | 204-000.00- | | | | | \$11,800 | | \$11,800 |
| Construction | 204-000.00- | | | | | \$228,000 | | \$228,000 |
| | TOTAL BUDGET | | | | | \$287 800 | | \$287 800 |

Non-motorized Crossing of I-96 at Novi Road

Project Number: 115-0002

Description:

Construction of a non-motorized crossing of I-96 at Novi Road by constructing a sidewalk along the west side of Novi Road from Crescent Blvd to West Oaks, realigning the existing lanes on the bridge and constructing a barrier wall between vehicular and non-motorized traffic. The project may also require the upgrade of the two existing signals at Novi Road and I-96, which would be replaced with mast arms as was the rest of Novi Road.

Justification:

This project will provide a non-motorized connection between the north and south sides of Novi Road and provide access to shopping area. Recommended by Non-Motorized Master Plan and Novi Transportation Improvement Plan.

| Category Engineering Other/ROW | Account No. 204-000.00- | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 \$142,700 | 2019-20 | TOTAL \$142,700 |
|--------------------------------------|-------------------------|---------|---------|---------|---------|-----------------------------|-----------|------------------------|
| - · · | n 204-000.00- | | | | | | \$620,400 | \$620,400 |
| | TOTAL BUDGET | | | | | \$142,700 | \$620,400 | \$763,100 |

Segment 88--9 Mile Road, North Side, Novi Road - Railroad (6' Sidewalk) Concrete

Project Number: 64 CIP Number: 095-88

Description:

Construction of 1,750 feet of 6' wide sidewalk along the north side of 9 Mile Road from Novi Road to CSX Railroad.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 30th by the 2013 update of the Annual Non-Motorized Prioritization.

| Category Engineering Other/ROW | Account No. 204-000.00- | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 \$30,742 | TOTAL \$30,742 | |
|--------------------------------------|-------------------------|---------|---------|---------|---------|---------|----------------------------|-----------------------|--|
| · | า 204-000.00- | | | | | | \$147,560 | \$147,560 | |
| | TOTAL BUDGET | | | | | | \$178,302 | \$178,302 | |

Segment 29--12 Mile Road, South Side, Between Meadowbrook Road and Novi Road

Project Number: 65 CIP Number: 125-029

Description:

Construction of 400 feet of boardwalk to fill a gap along the south side of 12 Mile Road west of Meadowbrook Road. This project was identified as a priority short segment by the 2013 Update to the Pathway and Sidewalk Prioritization Analysis--short segment.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 68 by the 2013 update of the Annual Non-Motorized Prioritization.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|----------------------|---------|---------|---------|---------|---------|----------|----------|
| Engineering | 204-000.00- | | | | | | \$11,900 | \$11,900 |
| Other/ROW | | | | | | | | |
| Construction | n 204-000.00- | | | | | | \$57,300 | \$57,300 |
| | TOTAL BUDGET | | | | | | \$69,200 | \$69,200 |

Segment 70--Meadowbrook Road (8' wide, west side)--Gateway Village to 11 Mile

Project Number: 66 CIP Number: 135-70

Description:

Construction of 900 feet of 8' wide pathway along the west side of Meadowbrook Road between Gateway Village and 11 Mile Road to complete a gap in the pathway network. Due to the proximity of Bishop Creek along a major portion of the route, a significant amount of boardwalk will be required to complete the segment, leading to a high construction cost. This segment was identified as a top 20 priority segment by Walkable Novi Committee.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 18th by the 2013 update of the Annual Non-Motorized Prioritization.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|---------|---------|---------|---------|-----------|-----------|
| Engineering | | | | | | | \$75,700 | \$75,700 |
| Other/ROW | | | | | | | \$43,000 | \$43,000 |
| Construction | 1 | | | | | | \$333,150 | \$333,150 |
| | TOTAL BUDGET | | | | | | \$451,850 | \$451,850 |

Segment 5--14 Mile Road, South Side, Beach walk to East Lake Drive

Project Number: 67 CIP Number: 125-005

Description:

Construction of 600 linear feet of sidewalk along the south side of 14 Mile Road to complete a connection from East Lake Drive to Novi Road.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 21st by the 2013 update of the Annual Non-Motorized Prioritization.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|---------------|---------|---------|---------|---------|---------|----------|----------|
| Engineering | 204-000.00- | | | | | | \$9,200 | \$9,200 |
| Other/ROW | 204-000.00- | | | | | | \$11,000 | \$11,000 |
| Construction | า 204-000.00- | | | | | | \$44,100 | \$44,100 |
| | TOTAL BUDGET | | | | | | \$64.300 | \$64.300 |

Segment 84--Meadowbrook Road, 9 Mile Road to 10 Mile Road (6' Sidewalk) for East Side

Project Number: 68 CIP Number: 085-84

Description:

Construction of 4,400 feet of 6' wide sidewalk to fill two gaps along the east side of Meadowbrook Road from 9 Mile Road to 10 Mile Road. This project was identified as a top 20 priority segment by the Greenway/Pathway Study.

Justification:

The project will complete missing segments of the pathway system throughout the City and work to improve the connectivity of the non-motorized transportation system. Ranked 17th by the 2013 update of the Annual Non-Motorized Prioritization.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|---------|---------|---------|---------|-----------|-----------|
| Engineering | 204-000.00- | | | | | | \$137,069 | \$137,069 |
| Other/ROW | | | | | | | | |
| Construction | 204-000.00- | | | | | | \$657,944 | \$657,944 |
| | TOTAL BUDGET | | | | | | \$795.013 | \$795.013 |

Non-Motorized Crossing of I-96 at Taft Road

Project Number: 69 CIP Number: 115-0005

Description:

Construction of a non-motorized bridge over I-96 at Taft Road along with construction of pathways along Taft Road to connect the bridge to the rest of the non-motorized network. The bridge would be part of the larger regional trail network proposed in the Non-Motorized Master Plan.

Justification:

The bridge would provide a north-south connection for the City over I-96 and provide a link to the proposed regional trail network. Recommended by Non-Motorized Master Plan and the Novi Transportation Improvement Plan.

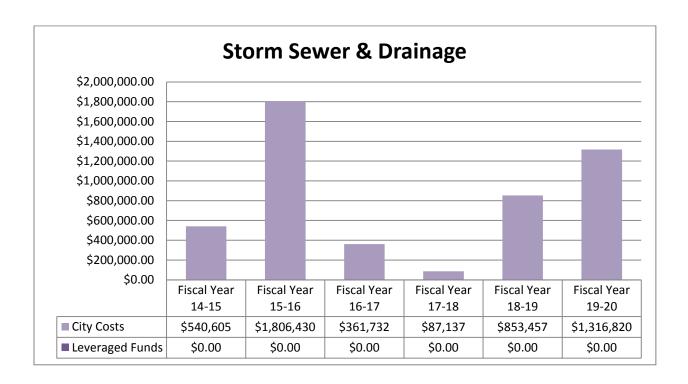
| Category A Engineering 2 | Account No. 204-000.00- | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 \$387,172 | TOTAL \$387,172 |
|-----------------------------|----------------------------|---------|---------|---------|---------|---------|-----------------------------|---------------------------|
| Other/ROW | | | | | | | | |
| Construction 2 | 204-000.00- | | | | | | \$1,683,000 | \$1,683,000 |
| T | OTAL BUDGET | | | | | | \$2 070 172 | \$2 070 172 |

Storm Sewer & Drainage

The City of Novi is located within two major watersheds in southeast Michigan (the Rouge River Watershed and the Huron River Watershed). Novi is committed to protecting the water courses within and downstream of the community.

As development occurs, the additional impervious surface area impacts the effective drainage of these flows, driving the need for drainage infrastructure. The City partners with the development community to ensure that onsite drainage issues are addressed during the development process.

The City's Capital Improvement Program addresses regional drainage issues through the drainage projects contained herein. Drainage projects are funded by a dedicated millage for acquiring, constructing, improving, and maintaining drain, stormwater, and flood control systems in the City of Novi; one tenth of one percent (1 mill).



Streambank Stabilization-Bishop Creek and Ingersol (10 Mile to Meadowbrook)

Project Number: 70 CIP Number: 133-04

Description:

The 2013 Storm Water Study identified several areas along Bishop Creek south of 10 Mile Road and Ingersol Creek between Bishop Creek and Meadowbrook Road where severe bank erosion was present. This project would include the acquisition of several easements to complete the work behind the houses along the stream. This project will repair and protect the streambank from future erosion.

Justification:

Recommended by the 2013 Storm Sewer Study.

| Category Acc | ount No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|-----------|-----------|-----------|---------|---------|---------|---------|-----------|
| Engineering | | \$156,390 | | | | | | \$156,390 |
| Other/ROW | | \$20,000 | | | | | | \$20,000 |
| Construction | | | \$750,660 | | | | | \$750,660 |
| TOT | AL BUDGET | \$176,390 | \$750,660 | | | | | \$927,050 |

Orchard Hill Place Regional Detention Basin Improvement

Project Number: 71 CIP Number: 133-01

Description:

The recently completed Storm Water study identified several recommendations to improve the city-owned and privately owned detention basin that has historically been maintained by the City near Orchard Hill Place near 8 Mile Road and Haggerty Road. The work on the city-owned basin includes reconstruction of the outlet control, while the work on the city maintained basin includes dredging and rehabilitation of the outlet control. The project will also resolve any ownership and maintenance responsibility issues.

Justification:

Recommended by the 2013 Storm Water Study.

| Category Accou | unt No. 2014-15 \$26,375 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL \$26,375 |
|----------------|---------------------------------|-----------|---------|---------|---------|---------|--------------------------|
| Other/ROW | | | | | | | |
| Construction | | \$126,600 | | | | | \$126,600 |
| TOTAL | BUDGET \$26.375 | \$126,600 | | | | | \$152,975 |

Middle Rouge at Flint Street, Streambank Stabilization

Project Number: 72 CIP Number: 103-03

Description:

Stabilization of Middle Rouge River streambanks, to prevent future erosion, upstream of Flint Street and Novi Road. Primary purposes and results of stabilizing stream banks are:

- Prevent the loss of land or damage to utilities, roads, buildings or other facilities adjacent to a
 watercourse, and prevent the loss of stream bank vegetation,
- Reduce sediment loads to streams,
- Maintain the capacity of the stream channel,
- Improve the stream for recreational use or as habitat for fish and wildlife, and
- Control unwanted meander of a river or stream.

Justification:

Recommended by 2010 Storm Water Modeling Report.

| Category Account N | No. 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|----------------|---------|---------|---------|---------|---------|-----------|
| Engineering 210-211.00 | D- \$54,800 | | | | | | \$54,800 |
| Other/ROW | \$20,000 | | | | | | \$20,000 |
| Construction 210-211.00 | 0- \$263,040 | | | | | | \$263,040 |
| TOTAL BUD | OGET \$337,840 | | | | | | \$337,840 |

Village Wood Lake/Village Oaks Lake Inlet and Outlet Improvements

Project Number: 73 CIP Number: 133-02

Description:

The 2013 Storm Water Study recommended improvements to several of the inlets and outlets to Village Oaks Lake and Village Wood Lake. A resolution passed by the City Council in the 1980s requires that the City maintain these facilities. The work will include replacement of end sections, repair of damaged storm sewer and rehabilitation of outlet control structures.

Justification:

Recommended by the 2013 Storm Water Study

| Category Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|----------------------|---------|-----------|---------|---------|---------|---------|-----------|
| Engineering | | \$135,400 | | | | | \$135,400 |
| Other/ROW | | \$144,000 | | | | | \$144,000 |
| Construction | | \$649,770 | | | | | \$649,770 |
| TOTAL BUDGET | | \$929,170 | | | | | \$929,170 |

Bishop District New Sedimentation Dredging Near 11 Mile Road

Project Number: 74 CIP Number: 093-11

Description:

Project to address the sedimentation within the wetland south of 11 Mile and west of Meadowbrook. Potential dredging to remove accumulated sediment. Includes streambank stabilization upstream and downstream of 11 Mile Road. The project was recommended by the Phase 1 Storm Water Master Plan.

Justification:

Recommended by the Phase 1 Storm Water Master Plan and 2009 Storm Water Modeling Study.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|---------|-----------|---------|---------|---------|-----------|
| Engineering | 210-211.00- | | | \$34,600 | | | | \$34,600 |
| Other/ROW | | | | | | | | |
| Construction | 1210-210.00- | | | \$166,232 | | | | \$166,232 |
| | TOTAL BUDGET | | | \$200,832 | | | | \$200,832 |

Rotary Park Streambank Stabilization

Project Number: 75 CIP Number: 093-10

Description:

Stabilization of Middle Rouge River streambanks within Rotary Park. The project was recommended by Phase I Storm Water Master Plan.

Justification:

Recommended by 2005 Storm Water Master Plan Phase I.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|----------------------|---------|---------|-----------|---------|---------|---------|-----------|
| Engineering | 210-211.00- | | | \$27,700 | | | | \$27,700 |
| Other/ROW | | | | | | | | |
| Construction | 1 210-211.00- | | | \$133,200 | | | | \$133,200 |
| | TOTAL BUDGET | | | \$160,900 | | | | \$160,900 |

Streambank Stabilization Ingersol Creek (10 Mile Road to Willowbrook Drive)

Project Number: 76 CIP Number: 133-05

Description:

The 2013 Storm Water Study identified several areas along Ingersol Creek between 10 Mile Road and Willowbrook Drive where severe bank erosion was present. This project would include the acquisition of several easements to complete the work behind the houses along the stream. This project will repair and protect the streambank from future erosion.

Justification:

Recommended by the 2013 Storm Sewer Study.

| Category Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|----------------------|---------|---------|---------|----------|-----------|---------|-----------|
| Engineering | | | | \$67,137 | | | \$67,137 |
| Other/ROW | | | | \$20,000 | | | \$20,000 |
| Construction | | | | | \$322,260 | | \$322,260 |
| TOTAL BUDGET | | | | \$87.137 | \$322 260 | | \$409 397 |

Streambank Stabilization Bishop Creek (along Meadowbrook, north of Grand River)

Project Number: 77 CIP Number: 133-07

Description:

The 2013 Storm Water Study identified several areas along Bishop Creek along Meadowbrook Road where severe bank erosion was present. This project will repair and protect the streambank from future erosion.

Justification:

Recommended by the 2013 Storm Sewer Study.

| Category Engineering Other/ROW | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 \$88,137 \$20,000 | 2019-20 | TOTAL \$88,137 \$20,000 |
|--------------------------------------|--------------|---------|---------|---------|---------|--|---------|--------------------------------------|
| Construction | 1 | | | | | \$423,060 | | \$423,060 |
| | TOTAL BUDGET | | | | | \$531,197 | | \$531,197 |

Streambank Stabilization on Rouge River near 9 Mile Road

Project Number: 78 CIP Number: 133-08

Description:

The 2013 Storm Water Study identified an area along the Rouge River downstream of Meadowbrook Lake where severe bank erosion was present. This project will repair and protect the streambank from future erosion.

Justification:

Recommended by the 2013 Storm Sewer Study.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|---------|---------|---------|---------|-------------|-------------|
| Engineering | | | | | | | \$223,600 | \$223,600 |
| Other/ROW | | | | | | | \$20,000 | \$20,000 |
| Construction | า | | | | | | \$1,073,220 | \$1,073,220 |
| | TOTAL BUDGET | | | | | | \$1,316,820 | \$1,316,820 |

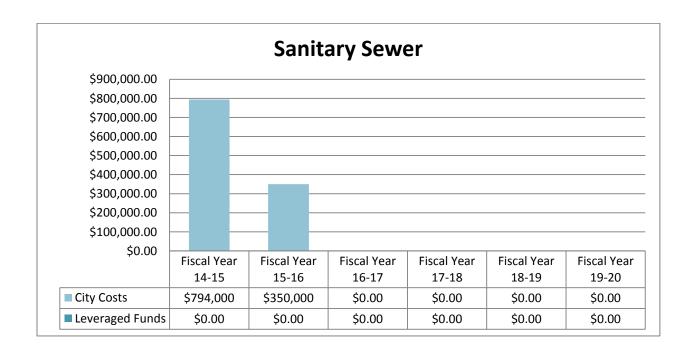
Sanitary Sewer

The City of Novi purchases sewage disposal services from Oakland County Water Resources Commissioner (OCWRC). The City currently has 243 miles of sanitary sewer mains. These sewer mains are part of three separate districts: the Wayne County North Huron Valley/Rouge Valley (NHV/RV) System, South Commerce Township Treatment Plant, and the Walled Lake-Novi Treatment Plant. The majority of the City is served by the NHV/RV system. The City of Novi Water & Sewer Fund, the Oakland County Water Resource Commission (OCWRC) and the Detroit Water & Sewerage Department (DWSD) are all not-for profit entities and therefore rates are intended and required to only cover costs.

The development of the proposed sanitary sewer projects were based upon system deficiencies and needs obtained from area residents, business owners, and City staff. These projects are coordinated with storm water management, roadway, and pathway improvements to maximize cost savings through economies of scale, resulting in a more effective and efficient process to implement the construction projects.

The proposed water and sanitary sewer projects are flexible, allowing for the addition of new improvements to address specific needs without deferring other projects along the way. Studies and analysis of the existing system is an on-going program that, coupled with new technologies, provides for improved system capabilities and reliability.

Water and sanitary sewer projects identified as urgent are not subject to the rating/weighting scale required of capital improvement. Projects included in this category are funded by the City's Water and Sewer Fund which is financed through user rates and connection fees.



Sanitary Sewer Upgrade to Increase Pipe Capacity - 9 Mile Road East of Meadowbrook Road.

Project Number: 79 CIP Number: 091-71

Description:

Development and construction of a solution to the current capacity limitations in the sanitary sewer along 9 Mile Road east of Meadowbrook Road as identified in the 2006 Sewer Capacity Report. Sewer modeling indicates that approx. 7,000 ft. of existing 18" sanitary sewer on the south side of 9 Mile near Meadowbrook is at or near capacity. The project will remove this bottleneck to increase flow capacity.

Justification:

Recommended by the 2005 Capacity Management Operations and Maintenance (CMOM) program Phase I report.

| Category Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------------------|-----------|---------|---------|---------|---------|---------|-----------|
| Engineering 592-000.00- | \$30,000 | | | | | | \$30,000 |
| Other/ROW | | | | | | | |
| Construction 592-000.00- | \$484,000 | | | | | | \$484,000 |
| TOTAL BUDGET | \$514,000 | | | | | | \$514.000 |

Park Place Pump Station Upgrades

Project Number: 80 CIP Number: WATER

Description:

The flows to the Park Place Pump Station currently exceed the station's capacity. For this reason, pump, motor, and generator upgrades are needed to accommodate existing and future flows to the station.

Justification:

The project is needed to accommodate peak wet weather flows as mandated by the Michigan Department of Environmental Quality (MDEQ).

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|-----------|---------|---------|---------|---------|---------|-----------|
| Engineering | 592-592.00- | \$20,000 | | | | | | \$20,000 |
| Other/ROW | 592-592.00- | \$20,000 | | | | | | \$20,000 |
| Construction | 592-592.00- | \$200,000 | | | | | | \$200,000 |
| | TOTAL BUDGET | \$240,000 | | | | | | \$240,000 |

8 New Sewer Flow Meters

Project Number: 81 CIP Number: WATER

Description:

New sewer flow meters are needed for continuous flow monitoring of the sanitary sewer system. The old meters were purchased in 2005 and the meters have a typical life span of 8 - 10 years.

Justification:

The meters will allow the Water and Sewer division to monitor growth and inflow infiltration levels in the sewer system to make sure the existing sewers have adequate capacity to handle flows.

| Category / | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|-----------|---------|---------|---------|---------|---------|----------|
| Other/ROW | | \$ 40,000 | | | | | | \$40,000 |
| Construction | | | | | | | | |
| 1 | TOTAL BUDGET | \$ 40,000 | | | | | | \$40,000 |

Sanitary Sewer Upgrade to Increase Pipe Capacity - 9 Mile Road, West of Novi Road

Project Number: 82 CIP Number: 091-70

Description:

Development and construction of a solution to the current capacity limitations in the sanitary sewer along 9 Mile Road west of Novi Road as identified in the 2006 Sewer Capacity Report. Sanitary sewer modeling indicates that approx. 2,000 ft. of existing 15" sanitary sewer is at or near capacity. The project will remove the bottleneck to increase flow capacity.

Justification:

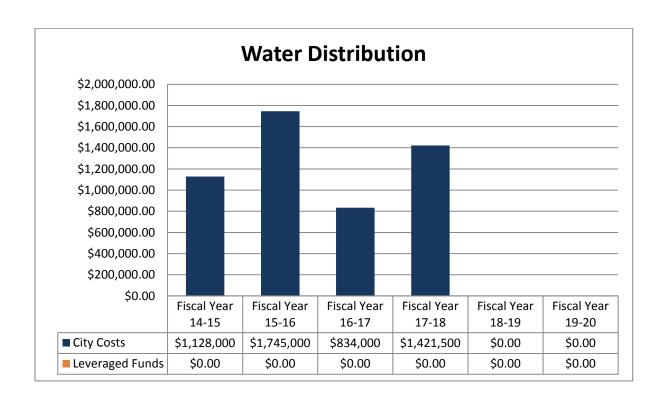
Recommended by the 2006 Sewer Capacity Report. Included in CMOM Phase 1.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL | |
|--------------|---------------|---------|-----------|---------|---------|---------|---------|-----------|--|
| Engineering | 592-000.00- | | \$87,500 | | | | | \$87,500 | |
| Other/ROW | | | | | | | | | |
| Construction | n 592-000.00- | | \$262,500 | | | | | \$262,500 | |
| TC | OTAL BUDGET | | \$350,000 | | | | | \$350,000 | |

Water Distribution

The City of Novi purchases treated water from Detroit Water and Sewerage Department (DWSD). DWSD operates the largest water system in the State of Michigan and supplies water to roughly four million people. Water production is costly. Aging water and wastewater treatment systems must be maintained and replaced to ensure reliable service. Rate increases are primarily due to new and rehabilitative projects that are completed under the DWSD Capital Improvement Programs. DWSD rates reflect energy costs to maintain water pumps, water mains, and storage tanks necessary to transport water to our community.

The City is responsible 306 miles of water main pipe, 4,003 fire hydrants and 13,530 water service connections. Projects included in this category are funded by the City's Water and Sewer Fund which is financed through user rates and connection fees.



12" inch Water Main Along 14 Mile Road, Haverhill to Maples-New

Project Number: 83 CIP Number: 091-16

Description:

Extend a 12-inch water main approximately 900 feet from the existing 12-inch water main west of Kingswood and 14 Mile Road to the existing 12-inch water main off of the northeast loop of Columbia Drive in Maples. This connection will increase the available flow and pressure in the area. Recommended in 2008 Water System Master Plan.

Justification:

Improves service to existing customers by providing an additional water main loop and redundant service as well as increase the fire flows.

| Category Account No. Engineering 592-000.00- Other/ROW | 2014-15 \$35,000 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL \$35,000 |
|--|----------------------------|---------|---------|---------|---------|---------|--------------------------|
| Construction 592-000.00- | \$105,000 | | | | | | \$105,000 |
| TOTAL BUDGET | \$140,000 | | | | | | \$140,000 |

16" inch Water Main Along Meadowbrook Road Under I-96

Project Number: 84 CIP Number: 091-01

Description:

Installation of approximately 2,000 feet of 16-inch water main along Meadowbrook Road underneath I-96 and a pressure reducing valve (PRV) on the north side of I-96. This improvement will allow for a third connection across I-96. Approximately 95% of the water supply for the City is delivered from the DWSD feeds on Pontiac Trail/Fourteen Mile Road. This project was recommended for system reliability and redundancy in 2008 Water System Master Plan. Easements and permits from MDOT will be a prerequisite for this project.

Justification:

Improves service to existing customers by providing an additional water main loop and redundant service.

| Category Engineering Other/ROW | • | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------------------------------|----------------|-----------|---------|---------|---------|---------|---------|-----------|
| | on 592-000.00- | \$489,000 | | | | | | \$489,000 |
| | TOTAL BUDGET | \$489,000 | | | | | | \$489,000 |

16" inch Water Main Along 9 Mile Road, Center to Novi Road

Project Number: 85 CIP Number: 091-25

Description:

Extend a 16-inch water main approximately 2,400 feet from the existing 16-inch water main on 9 Mile Road east of Center St. to the east, to the existing water main at Novi Road and 9 Mile Road. Recommended in 2008 Water System Master Plan.

Justification:

Provides a needed loop in the water distribution system to increase pressure and to provide redundancy. The project would be completed with the planned road reconstruction project of 9 Mile in the same area.

| Category Account No. Engineering Other/ROW | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--|-----------|---------|---------|---------|---------|---------|-----------|
| Construction 592-000.00- | \$499,000 | | | | | | \$499,000 |
| TOTAL BUDGET | \$499,000 | • | • | • | • | • | \$499,000 |

Cabot Road Meter Installation and 24" inch Connection with Detroit Water and Sewerage Department (DWSD)

Project Number: 86 CIP Number: 091-11

Description:

Install a new master meter connection to DWSD along with a pressure reducing valve (PRV). If this additional connection to DWSD is constructed after the CIP project to construct an 8 million gallon water storage tank, a flow control valve will also be required at this location. Estimated cost for this is an additional \$350,000, potentially increasing this project to \$1,182,000. Recommended in 2008 Water System Master Plan.

Justification:

Provides additional connection to DWSD to provide service to the eastern portion of the City including the Office, Service, and Technology corridor.

| Other/ROW Construction 592-000.00- | | \$624,000 | | | \$624,000 | |
|---------------------------------------|-------|-----------|--|--|-----------|---|
| TOTAL BUDGE | Т | \$832,000 | | | \$832,000 | _ |

Cabot 24" inch Water Main, MacKenzie to 14 Mile Road

Project Number: 87 CIP Number: 091-10

Description:

Construction of a 24-inch water main from the existing water main at Cabot and MacKenzie, north approximately 2,600 feet to the existing DWSD stub at Haggerty Booster Station. Recommended in 2008 Water System Master Plan.

Justification:

Would provide the means for an additional connection to DWSD and provide water service to the Office, Service, and Technology corridor.

| | Account No. 592-000.00- | 2014-15 | 2015-16 \$1 <i>77</i> ,500 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL \$177,500 |
|---------------------------|-------------------------|---------|--------------------------------------|---------|---------|---------|---------|---------------------------|
| Other/ROW Construction | 1 592-000.00- | | \$532,500 | | | | | \$532,500 |
| | TOTAL BUDGET | | \$710,000 | | | | | \$710,000 |

12" inch Water Main Along 8 Mile Road, Club Lane to Turnberry

Project Number: 88 CIP Number: 091-26

Description:

Extend a 12-inch water main approximately 1,300 feet from the existing 12-inch water main at 8 Mile Road and Club Lane to the east to the existing 12-inch water main on 8 Mile Road east of Cambridge. Recommended in 2008 Water System Master Plan.

Justification:

Improves service to existing customers by providing an additional water main loop and redundant service.

| Category Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|---------------------------------|---------|-----------|---------|---------|---------|---------|-----------|
| Engineering 592-000.00- | | \$50,750 | | | | | \$50,750 |
| Other/ROW | | | | | | | |
| Construction 592-000.00- | | \$152,250 | | | | | \$152,250 |
| TOTAL BUDGET | | \$203,000 | | | | | \$203,000 |

12" inch Water Main Along 10 Mile from Wixom to Terra Del Mar

Project Number: 89 CIP Number: 091-22

Description:

Connect the existing water main at Wixom Road and 10 Mile Road, to the existing 12-inch water main east of Terra Del Mar on 10 Mile Road, with approximately 2,700 feet of 12-inch water main. Recommended in 2008 Water System Master Plan.

Justification:

Increase the service area to provide redundancy from Wixom well system for hospital.

| Category Engineering Other/ROW | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------------------------------|---------------|---------|---------|-----------|---------|---------|---------|-----------|
| - · · | า 592-000.00- | | | \$421,000 | | | | \$421,000 |
| | TOTAL BUDGET | | • | \$421,000 | • | | • | \$421,000 |

12" inch Water Main Along 11 Mile Road, Lee BeGole Drive to the West

Project Number: 90 CIP Number: 091-17

Description:

Construction of approximately 400 feet from the existing 12-inch water main, east of Town Center Drive along 11 Mile Road to the east to the existing water main east of Lee BeGole. The installation will include a pressure reducing valve as it crosses a pressure district boundary. Recommended in 2008 Water System Master Plan.

Justification:

This will provide better service for businesses on Meadowbrook between Grand River and I-96. Will also provide redundancies for emergency purposes.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|---------------|---------|---------|------------------|---------|---------|---------|-----------|
| Engineering | | | | | | | | |
| Other/ROW | | | | # 410 000 | | | | £ 410 000 |
| Construction | n 592-000.00- | | | \$413,000 | | | | \$413,000 |
| | TOTAL BUDGET | | | \$413,000 | | | | \$413,000 |

12" inch Water Main on 11 Mile Road, Seeley to Meadowbrook Road

Project Number: 91 CIP Number: 091-18

Description:

Construct a 12-inch water main approximately 1,500 feet from the existing 12-inch water main at Seeley Road and 11 Mile, to the west along 11 Mile Road to the existing water main east of Meadowbrook. Recommended in 2008 Water System Master Plan.

Justification:

Redundancy for looped systems and services.

| | TOTAL BUDGET | | | | \$819,000 | | | \$819,000 |
|-------------------------|---------------|---------|---------|---------|-----------|---------|---------|-----------|
| Construction | า 592-000.00- | | | | \$819,000 | | | \$819,000 |
| Other/ROW | | | | | | | | |
| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |

12" inch Water Main Along Haggerty Road North of 12 Mile Road

Project Number: 92 CIP Number: 091-31

Description:

Construction of approximately 1,500 ft. of 12-inch water main cross-country, and along Haggerty Road to provide looping in Section 12. Recommended in 2008 Water System Master Plan.

Justification:

Provide redundancy in preparation of the new DWSD connection at Cabot and Haggerty.

| Category Account No. Engineering Other/ROW | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--|---------|---------|---------|-----------|---------|---------|-----------|
| Construction 592-000.00- | | | | \$128,000 | | | \$128,000 |
| TOTAL BUDGET | | | | \$128,000 | | | \$128,000 |

11 Mile Road Water Main Gaps, Taft to Beck Road

Project Number: 93 CIP Number: 091-19

Description:

Complete the 12-inch water main on 11 Mile from Beck to Taft. The project includes a total of 4,000 feet of 12-inch water main . Recommended in 2008 Water System Master Plan.

Justification:

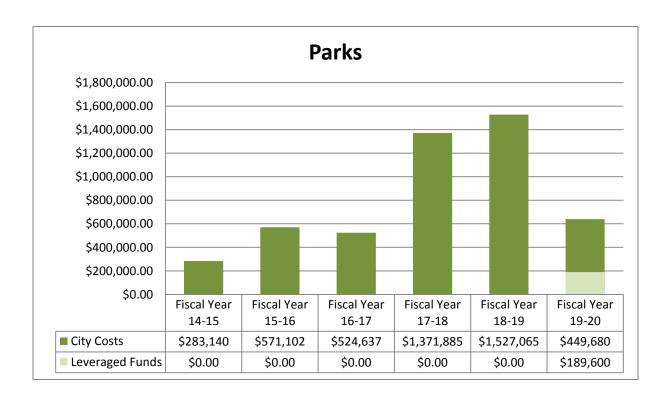
Improves service to existing customers by providing an additional water main loop and redundant service.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|---------------|---------|---------|---------|-----------|---------|---------|-----------|
| Engineering | 592-000.00- | | | | \$118,500 | | | \$118,500 |
| Other/ROW | | | | | | | | |
| Construction | า 592-000.00- | | | | \$356,000 | | | \$356,000 |
| | TOTAL BUDGET | | | | \$474,500 | | | \$474,500 |

Parks, Recreation and Cultural Services

Quality of life initiatives, such as those represented by parks, open space, and trail projects, are an important component of the Capital Improvement Program. The City of Novi Department of Parks, Recreation and Cultural Services offers lighted ball fields, extensive picnic grounds, shaded playgrounds, beaches, an urban lake, and much, much more. Neighborhood parks provide recreational amenities close to home, while the city's ever-growing network of trails accommodates walkers, joggers, strollers, bicyclists, roller bladers, and equestrians.

Funding for parks, open space, and cultural events is primarily from the Parks and Recreation dedicated millage that was established for maintaining parks and recreation purposes. A one-half tenth of one percent (1/2 mill), and impact fees make up the main funding source for Parks, Recreation and Cultural Services. The six year program emphasizes trail connectivity and access and provides for the continued development of parks across the City.



Ella Mae Power Park Access Road, Parking Lot and Pathway Resurfacing - Phase III

Project Number: 94 CIP Number: 109-04

Description:

The pathway system in the park is vital to mobility between athletic fields and other park amenities. This project would resurface the asphalt of nearly 1,500 feet of pathway at Ella Mae Power Park.

Justification:

The park pathway system is showing signs of degradation. The system will need to have various spots replaced and others capped (mill and overlay) in an effort to maintain the structural integrity of the walkways.

| Category Account No. Engineering Other/ROW | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--|----------|---------|---------|---------|---------|---------|----------|
| Construction 208-691.00- | \$33,140 | | | | | | \$33,140 |
| TOTAL BUDGET | \$33,140 | | | | | | \$33,140 |

Tim Pope Play Structure Replacement

Project Number: 95 CIP Number: 109-03

Description:

This project would remove the Tim Pope Play Structure (built in 1997 to memorialize former City Council member Tim Pope) located at ITC Community Sports Park, off the 8 Mile entrance. The structure would be replaced with a new Americans with Disabilities Act (ADA) accessible structure and accessible safety surfacing. The intent would be to keep the name of the playground the same after replacement of the structure.

Justification:

The current structure was built 17 years ago primarily of Chromated Copper Arsenate (CCA) treated southern pine, a material which has been linked to several health concerns with excessive exposure and requires annual sealing and rigorous maintenance. Following a study an independent Audit of the structure in 2008, the City took necessary steps to prevent the spreading of chemicals found on the structure by removing wood chips which were possibly contaminated due to rain runoff and performed necessary sealant treatment. In addition to these concerns and exceeding its useful life, the structure does not meet the ADA and Architectural Barriers Act (ABA) standards.

| Category Account No. Engineering Other/ROW | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--|-----------|---------|---------|---------|---------|---------|-----------|
| Construction 208-691.00- | \$250,000 | | | | | | \$250,000 |
| TOTAL BUDGET | \$250,000 | | | | | | \$250,000 |

Greenway Development Phase IA (ITC Community Sports Park to 9 Mile Rd.)

Project Number: 96 CIP Number: 109-06

Description:

To plan and build a paved 4.5 mile long north-south regional pathway for recreational use along the ITC Transmission Corridor, which would be 10' in width using a compacted limestone surface. The pathway would connect ITC Community Sports Park to the Providence Park Campus. Due to the length of the path being proposed, a phased approach to design and construction would be likely. Phase 1 of the pathway (2.25 miles long and 70% of the project) would begin at ITC Community Sports Park, continue along the ITC corridor and end at the parking lot of Fire Station No. 4, where a parking area could be located.

Justification:

2010 National Citizen Survey ranked ease of bicycle traveling and ease of walking in Novi at 46% and 57% respectively, (2008 Survey had the numbers at 39 and 50); (2006 Survey had the numbers at 35 and 43) on a 100 point scale, showing a need to provide linear open space for use and connectivity in the community. In addition, the 2006 City of Novi Pathway and Sidewalk Prioritization Analysis and Process document places an importance on increasing connectivity to regional or neighboring trail and sidewalk systems. From an economic standpoint, the greenway has the potential to increase real property values, in turn increasing municipal

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|---------------|---------|-----------|---------|---------|---------|---------|-----------|
| Engineering | 208-691.00- | | | | | | | |
| Other/ROW | | | | | | | | |
| Construction | 1 208-691.00- | | \$445,552 | | | | | \$445,552 |
| | TOTAL BUDGET | | \$445 552 | | | | | |

Brookfarm Park Parking, Tables and Grills

Project Number: 97 CIP Number: PRCS

Description:

Brookfarm Park is a neighborhood park located in a subdivision and is mainly accessed by area residents. No parking is available for city residents who wish to visit the park and are driving a vehicle. A small parking area is being proposed at the end of Ripple Creek (\$37,880), along with an area for a few picnic tables and grills (\$2,000).

Justification:

All residents in Novi could access Brookfarm Park and make use of the amenities for a small outdoor gathering or picnic.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|---------------------------------------|---------------|---------|----------|---------|---------|---------|---------|----------|
| • | 208-691.00- | | \$2,000 | | | | | \$2,000 |
| Construction | n 208-691.00- | | \$37,880 | | | | | \$37,880 |
| · · · · · · · · · · · · · · · · · · · | TOTAL BUDGET | • | \$39,880 | | • | | • | \$39,880 |

ITC Community Sports Park Pathway Resurfacing

Project Number: 98 CIP Number: 100-05

Description:

This project will revitalize the park pathway system and support the active, healthy lifestyle we provide our citizens, by asphalt resurfacing one mile of pathway, to include mill and overlay.

Justification:

The one mile park pathway system is 20 years old and is showing signs of degradation. The system will need to have various spots replaced and others capped in an effort to maintain the structural integrity of the walkways. The pathway system in the parks is vital to mobility between athletic surfaces, facilities, and to the health and welfare of park patrons. As the park ages, the infrastructure begins to degrade and maintenance is necessary to keep the infrastructure functional.

| Category Account No. Engineering Other/ROW | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--|---------|----------|---------|---------|---------|---------|----------|
| Construction 208-691.00- | | \$85,670 | | | | | \$85,670 |
| TOTAL BUDGET | | \$85,670 | | • | • | • | \$85,670 |

Ella Mae Power Park Play Structure Replacement

Project Number: 98 CIP Number: 109-10

Description:

This park currently has two play structures. This project would remove one of two existing play structures in the first quarter and replace it with a new (Americans with Disabilities Act) ADA accessible play structure developed for children ages 2-12 by the end of the third quarter. With the number of organized sports teams playing at Ella Mae Power Park, there is a tremendous amount of kids passing through the park not to mention bringing their younger siblings. Therefore having the play structure specifically designed for ages 5 to 12+ year-olds and 2 to 5-year-olds giving age-appropriate challenges to flex kids' muscles and stretch their imaginations.

The last 20 years in the playground industry have seen the introduction of numerous playground safety and accessibility regulations. With the advent of the Americans with Disabilities Act in 1990, the Access Board's playground accessibility rules of 2000, and the latest Department of Justice Standards published in 2010, accessibility has been at the forefront of recreation facility and playground development. Designers have consistently advocated the value of highly accessible facilities.

Justification:

The current structure does not provide ADA accessibility for community youth and is in need of frequent repairs. An enhanced structure would meet current ADA standards, improve safety and provide updated play equipment.

| Category Engineering Other/ROW | <i>*</i> | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------------------------------|----------------------|---------|---------|----------|---------|---------|---------|----------|
| Constructio | n 208-691.00- | | | \$85,000 | | | | \$85,000 |
| | TOTAL BUDGET | | | \$85,000 | | | | \$85,000 |

ITC Community Sports Park Trail

Project Number: 100 CIP Number: PRCS

Description:

Develop a 3,709 linear foot non-motorized trailhead and trail through ITC Community Sports Park. The trailhead and trail will tie into the proposed ITC corridor regional trail to the north, and the Maybury State Park regional trail system to the south. The trailhead items will include bike racks, park benches, signage and an information kiosk. Restrooms and shade are provided on site.

Justification:

In February 2011, the City established a Non-Motorized Master Plan generated through the efforts of the Walkable Novi Committee, which calls for a pathway through ITC Community Sports Park.

| Category Engineering Other/ROW | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------------------------------|---------------|---------|---------|-----------|---------|---------|---------|-----------|
| Construction | n 208-000.00- | | | \$439,637 | | | | \$439,637 |
| | TOTAL BUDGET | | | \$439,637 | | | | \$439.637 |

ITC Sports Park Asphalt Paved Parking lots

Project Number: 101 CIP Number: PRCS

Description:

This project will reduce maintenance costs for ITC Sports Park's parking lot and drives by replacing gravel surfaces with asphalt.

Justification:

Gravel and chloride maintenance costs could be virtually eliminated by paving these surfaces. In addition, catch basin clean-out costs would be greatly reduced. National Citizen Survey results reported a majority of citizens view park facilities good to fair. The parking areas associated with ITC Sports Park is routinely rutted, dusty, and has poor drainage after a significant rainfall. These lots are utilized annually by numerous patrons who participate in various sports, both through park activities and user groups; field rentals play at the Tim Pope play structure and rent the shelter. The combined parking areas are utilized seasonally.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|---------------|---------|---------|---------|-----------|---------|---------|-----------|
| Engineering | 208-691.00- | | | | \$64,642 | | | \$64,642 |
| Other/ROW | 208-691.00- | | | | \$51,714 | | | \$51,714 |
| Construction | 1 208-691.00- | | | | \$258,568 | | | \$258,568 |
| | TOTAL BUDGET | | | | \$374,924 | | | \$374,924 |

Pavilion Shore Park - Phase V (Water Feature and Restroom Facility)

Project Number: 102 CIP Number: PRCS

Description:

Pavilion Shore Park project would include a water feature and a restroom facility.

Justification:

Phase V of the project calls for the addition of a restroom facility that will serve park users as well as a water feature that will improve the park aesthetics and provide additional park amenities.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|---------|---------|-----------|---------|---------|-----------|
| Engineering | | | | | | | | |
| Other/ROW | | | | | | | | |
| Construction | 208-000.00- | | | | \$420,000 | | | \$420,000 |
| · | TOTAL BUDGET | | | • | \$420,000 | | • | \$420,000 |

ITC Community Sports Park Play Structure Replacement

Project Number: 103 CIP Number: 100-003

Description:

This project would remove one of two existing play structures in the first quarter and replace it with a new (Americans with Disabilities Act) ADA accessible play structure developed for children ages 2-12 by the end of the third quarter.

Justification:

The current structure provides limited accessibility for the physically challenged community. An enhanced structure would meet current ADA standards and provide updated play equipment.

| Category Acco | ount No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------------|----------|---------|---------|---------|----------|---------|---------|----------|
| Other/ROW | | | | | | | | |
| Construction 208-6 | 591.00- | | | | \$75,000 | | | \$75,000 |
| TOTA | L BUDGET | | | | \$75,000 | | | \$75,000 |

Lakeshore Park Asphalt Paved Parking Lot and Drive - New

Project Number: 104 CIP Number: PRCS

Description:

This project would replace gravel drives and lots at Lakeshore Park with asphalt.

Justification:

Gravel and chloride maintenance costs could be virtually eliminated by paving these surfaces. In addition, catch basin clean-out costs would be greatly reduced. Project to be implemented during second quarter of fiscal period. The 8,355 sq. yd. drive and stone parking area associated with Lakeshore Park is routinely rutted, dusty, and has poor drainage after a significant rainfall. This lot is utilized annually by approximately 12,000 patrons who have rented shelters, and approximately 27,000 other patrons who visit the park, enrolled their children in camp, or are coming to visit the beach. The combined parking area accommodates approximately 150 spaces and is utilized seasonally.

| Category Engineering Other/ROW | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------------------------------|---------------|---------|---------|---------|-----------|---------|---------|-----------|
| , - | n 208-691.00- | | | | \$228,276 | | | \$228,276 |
| | TOTAL BUDGET | | | | \$228,276 | | | \$228,276 |

Pavilion Shore Park Play Structure - New

Project Number: 105 CIP Number: PRCS

Description:

This project would add an Americans with Disabilities Act (ADA) accessible play structure in the park. Due to the age breakdown of the community living in and around the park the play structure will accommodate 2-5 year olds and 5-12 year olds. The newest structure will be designed to meet American Society for Testing and Materials (ASTM) standards.

Justification:

As part of the Community Phase project it called for a playground enhancement on that site plan. The number one requested amenity received from the Parks Department for this park is a playscape for the children.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|----------------------|---------|---------|---------|-----------|---------|-----------|-----------|
| Engineering | | | | | | | | |
| Other/ROW | | | | | | | | |
| Construction | 1 208-691.00- | | | | \$104,955 | | | \$104,955 |
| | TOTAL BUDGET | | | | \$104,955 | | \$104,955 | |

Disc Golf Course at Power Park

Project Number: 106 CIP Number: PRCS

Description:

As a fast growing sport, it is proposed to install a Champion Level 18-Hole Disc Golf Course located at Ella Mae Power Park. Currently, the park is used mainly for softball games; however, with the introduction of disc golf utilizing the southwest corner of the park behind the softball fields, additional recreational activity would be enjoyed by the citizens without interference to current fields. The local community character of the park and landscape would guide the desirable features in the design of this course.

Justification:

In order to stay on the cutting edge of recreation demands, the Parks Department would like to take the initiative and install disc golf. This would be the first city owned golf disc championship course and would provide disc golf equipment directly on sight to citizens through a 24-hour machine operated retail center.

| Category Engineering Other/ROW | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------------------------------|---------------|---------|---------|---------|----------|---------|---------|----------|
| Construction | n 208-000.00- | | | | \$73,100 | | | \$73,100 |
| | TOTAL BUDGET | | | | \$73,100 | | | \$73,100 |

Wildlife Woods Trail

Project Number: 107 CIP Number: PRCS

Description:

The project will construct a sidewalk and paved 10' non-motorized trail 0.3 miles through an existing woodlot, providing connections to Wildlife Woods, Deerfield Elementary School, existing sidewalk networks, adjacent neighborhoods and regional trail systems.

Justification:

The proposed trail would enable over 1400 students to use a non-motorized multi-use path to access an existing city park as well as a city-wide connection for other residents.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|----------------------|---------|---------|---------|----------|---------|---------|----------|
| Engineering | | | | | | | | |
| Other/ROW | | | | | | | | |
| Construction | n 208-000.00- | | | | \$95,630 | | | \$95,630 |
| | TOTAL BUDGET | | | | \$95,630 | | | \$95,630 |

Development Phase IB (9 Mile Rd. to Fire Station 4 Parking Lot)

Project Number: 108 CIP Number: 125-997

Description:

To plan and build a paved 4.5 mile long north-south regional pathway for recreational use along the ITC Transmission Corridor, which would be 10' in width using a compacted limestone surface. The pathway would connect ITC Community Sports Park to the Providence Park Campus. Due to the length of the path being proposed, a phased approach to design and construction would be likely. Phase 1 of the pathway (2.25 miles long and 70% of the project) would begin at ITC Community Sports Park, continue along the ITC corridor and end at the parking lot of Fire Station No. 4, where a parking area could be located.

Justification:

2010 National Citizen Survey ranked ease of bicycle travel and ease of walking in Novi at 46% and 57% respectively, (2008 Survey had the numbers at 39 and 50); (2006 Survey had the numbers at 35 and 43) on a 100 point scale, showing a need to provide linear open space for use and connectivity in the community. In addition, the 2006 City of Novi Pathway and Sidewalk Prioritization Analysis and Process document places an importance on increasing connectivity to regional or neighboring trail and sidewalk systems. From an economic standpoint the greenway has the potential to increase real property values, in turn increasing municipal

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|----------------------|---------|---------|---------|---------|------------|---------|-------------|
| Engineering | 208-691.00- | | | | | | | |
| Other/ROW | 208-691.00- | | | | | | | |
| Construction | 1 208-691.00- | | | | 9 | 31,345,065 | | \$1,345,065 |
| | TOTAL BUDGET | | | | \$ | 1,345,065 | | \$1,345,065 |

Field/Parking Development with Novi Community School District for School's 11 Mile/Beck Road Property

Project Number: 109 CIP Number: PRCS

Description:

The property is owned by Novi Community Schools. This project would entail working out an agreement with the schools to develop a portion of the property for recreational use. The development would consist of multi-use fields that could be used as practice space for popular sports such as soccer or used by some of our growing sports such as Lacrosse and Cricket. The current scope of the project would include making minor improvements for developing seven acres for parking purposes.

Justification:

The project would be used as a community gathering space, utilized for sports, and recreational use.

| Category Engineering Other/ROW | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------------------------------|----------------------|---------|---------|---------|---------|-----------|---------|-----------|
| Construction | n 208-691.00- | | | | | \$182,000 | | \$182,000 |
| | TOTAL BUDGET | | | | | \$182,000 | | \$182,000 |

Ella Mae Power Park Irrigation and Fencing Fields 5 & 6 Replacement

Project Number: 110 CIP Number: PRCS

Description:

The current fencing located at Ella Mae Power Park Fields 5 & 6 (ball diamonds) is in need of repair. The fences can be moved allowing more adult and youth games and tournaments to be played. By repairing the fencing that is currently outdated and in need of repair at these fields, all fencing in the Ella Mae Power Park would match.

Justification:

The current ball diamonds located at the back of Ella Mae Power Park are called fields 5 & 6. Those fields are in need of major overhaul due to the complex and the need of more teams & tournaments wanting to play in Novi leagues. Currently the fences are very short and for playability and safety reasons, in need of repair. In order to bring those fields in line with the entire look of the rest of the Civic Center field complex and to be able to offer more adult softball games, the renovations would allow not only more leagues and tournaments to play, but also offer more business opportunity for possible naming rights opportunities.

| Category Engineering | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL | |
|-------------------------|----------------------|---------|---------|---------|---------|---------|-----------|-----------|--|
| Other/ROW | | | | | | | | | |
| Construction | n 208-691.00- | | | | | | \$113,380 | \$113,380 | |
| | TOTAL BUDGET | | | | | | \$113,380 | \$113.380 | |

Ella Mae Power Park Lighting - Ball fields 5 & 6 - New

Project Number: 111 CIP Number: PRCS

Description:

Ella Mae Power Park fields 5 & 6 are located directly south of ball fields 1-4 and are in need of field lighting.

Justification:

Current field availability for user groups and parks & recreation programs is limited to daylight hours. Allowing lighting will increase field usage and recreational opportunities by allowing activities to be played in the evening. Each field has four hours of use each weeknight and seven to ten hours of use each weekend. Users are Novi Parks and Recreation youth softball, Madness softball, Detroit Cricket League, fast-pitch girls softball tournaments and random rental groups for softball practice.

| Category Engineering Other/ROW | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL | |
|--------------------------------------|---------------|---------|---------|---------|---------|---------|-----------|-----------|--|
| | n 208-691.00- | | | | | | \$255,000 | \$255,000 | |
| | TOTAL BUDGET | | | | | | \$255,000 | \$255,000 | |

Pavilion Shore Park Phase III (Pavilion and Waterfront Picnic Plaza, Site Lighting)-Grant Match

Project Number: 112 CIP Number: PRCS

Description:

This project is a Michigan Natural Resources Trust Fund (MNRTF) grant match. The project would construct improvements for Pavilion Shore Park to include a park pavilion, accessible picnic tables, accessible benches, concrete bench pads, site lighting, trees, and interpretive signage. The MNRTF development grant amount requested is \$189,600 with a match of \$81,300 for a total of \$270,900.

Justification:

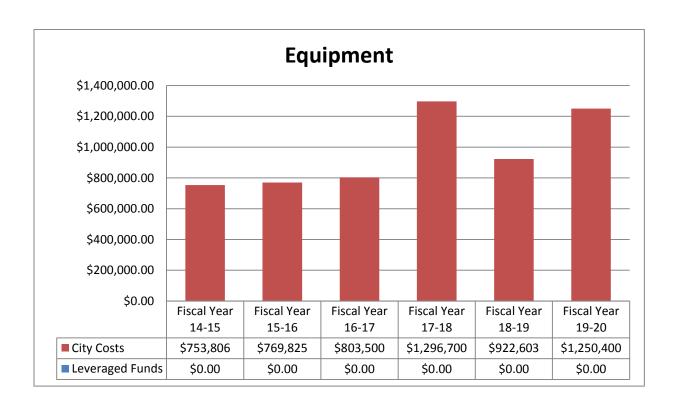
This development of accessible waterfront park and trailhead with 835 linear feet of naturalized shoreline will continue improvements of a MNRTF development grant.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL | |
|-------------|----------------------|---------|---------|---------|---------|---------|-----------|-----------|--|
| Engineering | 1 | | | | | | | | |
| Other/ROW | | | | | | | | | |
| Constructio | n 208-691.00- | | | | | | \$270,900 | \$270,900 | |
| | TOTAL BUDGET | | | | | | \$270,900 | \$270,900 | |

Equipment

Novi employees depend on dependable equipment to allow and assist them do their job day in and day out. The equipment comes in many forms, plow trucks, police cars, generators, fire apparatus, etc., the equipment that literally keeps the City of Novi moving. All the vehicles found in this category are the cars and trucks that appear at the front doors of Novi residents and business owners such as public safety (police, fire, water, sewer and street maintenance). Generators that keep municipal buildings and a 911 call center operational during power outages along with ice resurfaces for the City's ice arena fall under this category. Novi City Council has established the precedent over the years in providing Novi employees with the tools necessary to do their job and provide the best level of service to the community. A number of varied funding sources can be used to finance the equipment necessary to efficiently deliver service: General, Major Street, Local Street, Public Safety, and Drug Forfeiture Funds.

In fiscal year 13-14 the City was able to leverage capital improvement funds to include equipment like a new Basic Life Support vehicle and upgrades for our winter maintenance vehicles.



Lieutenant (Vehicle #336 - 2009 Ford Expedition) - Replacement

Project Number: 113 CIP Number: FIRE

Description:

This project is for the replacement of the Lieutenant Vehicle (Vehicle #336) a 2009 Ford Expedition 4x4. The current mileage (10/7/2013) for this vehicle is 103,302 miles. This vehicle was repurposed from the Police Department and was transitioned to the Fire Department with over 80,000 miles on it. The vehicle is classified as a light duty Non Transport capable Basic Life Support (BLS) unit. It is in good shape. The current vehicle responds to fire and medical emergencies on a daily basis with all of the equipment needed and required by the state to be licensed as a BLS Vehicle. The recommendation is to replace these SUV type Rescue vehicles with Crew Cab (4 door) Heavy Duty Diesel 4x4 Chassis trucks with 8-9 foot utility bodies. The proposed vehicle will be able to carry the same items the SUV-type rescues carry plus, 2 additional firefighters and their gear, additional equipment, extinguishers, and even have room for additional rescue equipment. The SUV-type rescues are limited by space, seating, and compartments. The proposed replacement vehicle would allow longer useful life, better personnel carrying capacity, larger capacity for tools, and the ability to adapt the truck to the seasonal needs of the department based on its location i.e.: ice rescue or water rescue, brush fire season, PR details, training.

Justification:

The newly proposed Heavy Duty Crew Cab Diesel 4x4 Utility truck will be able to carry the same items listed as the SUV-type rescues carries plus, 2 additional firefighters and their gear, additional equipment, extinguishers, and even have room for the ice rescue equipment or water rescue equipment. The proposed vehicle will allow for increased payload, personnel carrying capacity, and flexibility to change the payload based on the situation. We would be able to outfit the trucks with the proper equipment, and maximize the space. It will improve services by offering a wider range of services, due to increased payloads, cargo space, and diversified equipment.

| | TOTAL BUDGET | \$57,000 | | | | | | \$57,000 |
|-------------------------|--------------|----------|---------|---------|---------|---------|---------|----------|
| Construction | 1 | | | | | | | |
| Other/ROW | 101-337.00- | \$57,000 | | | | | | \$57,000 |
| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
| C | A I MI . | 0014 15 | 0015 17 | 001/ 17 | 0017.10 | 0010 10 | 0010 00 | TOTAL |

One - 1-Ton Dump Truck w/Plow, and Swap Loader - New

Project Number: 114 CIP Number: FIELD

Description:

A one-ton medium-duty dump truck, which is used to tow trailers up to 24,000 lbs. Transport materials, salt roads and parking lots, plow snow and perform general field operation duties, such as patching roads. One of the most heavily used pieces of equipment used by field crews are small one-ton dump trucks. These trucks come outfitted with a dump box, front plow and salting box so that they can be used all season for hauling materials to job sites, transporting heavy equipment, and de-icing roadways. In an effort to increase functionality, save time, and reduce expenditures, a truck can be outfitted with a hook system that is capable of pulling up multiple components onto its chassis. DPS is requesting the purchase of a new one-ton truck with the following components: dump body, v-box salt spreader, liquid tank, and stake rack bed.

Justification:

By funding this purchase, DPS can further maximize the use of its vehicles and increases its ability to become more efficient. As an example, if crews are rebuilding a storm catch basin, a stake rack bed with all the materials can be dropped at the site, while the operator heads back to the garage, picks up the dump body, and hauls sand to a separate job site. By not taking advantage of this technology, additional trucks would be needed to enhance efficiency.

| Category A | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|-------------|-----------|---------|---------|---------|---------|---------|-----------|
| Engineering | | | | | | | | |
| Other/ROW 1 | 01-442.20- | \$110,000 | | | | | | \$110,000 |
| Construction | | | | | | | | |
| Т | OTAL BUDGET | \$110,000 | | | | | | \$110,000 |

Roadside Mower - Replacement

Project Number: 115 CIP Number: FIELD

Description:

This request is for a new utility tractor equipped with a boom mower. The attached estimate includes an 80 horse power, four wheel drive tractor required to operate the 60 inch grass brush flail mower and cab controls. The tractor and mower replace a 1977 Ford Tractor and flail mowing deck. Roadside mowing equipment is used to cut roadside vegetation back along ditches, and detention ponds that are not easily maintained. This type of equipment is specialized and not able to be efficiently contracted to an outside vendor.

Justification:

The current equipment is 36 years old and regularly requires repair, by purchasing this piece of equipment, operator safety is improved, service needs are met, and required drain flow is maintained. A boom arm for this mower can extend up to 30 feet from the tractor compared to six feet on the existing unit.

| Category Account No. Engineering | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|----------------------------------|-----------|---------|---------|---------|---------|---------|-----------|
| Other/ROW | \$113,335 | | | | | | \$113,335 |
| Construction | | | | | | | |
| TOTAL BUDGET | \$113.335 | • | | | | | \$113,335 |

Civic Center HVAC Air Handling Units #1 and #2 Replacement

Project Number: 116 CIP Number: FACILITY

Description:

An air handler, or air handling unit (often abbreviated to AHU), is a device used to condition and circulate air as part of a heating, ventilating, and air-conditioning (HVAC) system. An air handler is usually a large metal box containing a blower, heating or cooling elements, filter racks or chambers, sound attenuators, and dampers. Air handlers usually connect to a ductwork ventilation system that distributes the conditioned air through the building and returns it to the AHU. The Civic Center houses four air handling units, two of the units are located in the west penthouse of the Civic Center (units 1 and 2) and are responsible for providing airflow to over 40% of the building. These units are over 25 years old and currently well past their normal life expectancy. This has led to an increase in maintenance costs, a trend that will increase substantially. The replacement of these units is a preventative action to prevent a total failure event.

Justification:

The Civic Center has an estimated 204,000 visitors each year and serves as a focal point for our Citizens. Failure of the units will result in the inability to circulate airflow through the building. By replacing both units at the same time we will be able to reduce the overall cost associated with the install given the physical location of the units. Also the replacement of both units will allow optimum HVAC building performance considering the past replacement of the chiller (2009), boilers (2013), and east air handlers (Projected spring 2014).

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|-----------|---------|---------|---------|---------|---------|-----------|
| Engineering | | | | | | | | |
| Other/ROW | 101-265.00- | \$130,000 | | | | | | \$130,000 |
| Construction | n | | | | | | | |
| | TOTAL BUDGET | \$130,000 | | | | | | \$130,000 |

Phone System Upgrade to Voice Over Internet Protocol (VOIP)

Project Number: 117 CIP Number: IT

Description:

This request would upgrade the City of Novi telephone communication system. This system serves as our basic mode of communication with citizens. The current Nortel system, centrally located within City Hall, has become increasingly expensive to maintain. The support cost structure has and will continue to feel the pressures of Avaya's purchase of Nortel from bankruptcy. This project would address the following:

- Upgrade City of Novi main system to Avaya IP office 500 system.
- Upgrade all City of Novi Option 11 R25 telephone systems (DPS, Fire Stations 1, 2 and 4 from their current system with software release dates of 2000 to Avaya IP office 500 systems.
- Provide a feature rich unified communication solution for the City's telecommunication needs.

Justification:

The Avaya IP Office 500 systems will bring a new integrated communication technology that will provide a unified communication tool to better serve our citizens. The new platform offers advanced mobility, call detail reporting, enhanced administration management, reduced annual maintenance and support costs of \$8,997 per year, Visual call management dashboard, and a reduction in environmental costs of 30%. This solution will eliminate hardware that is between 13-15 years old. Critical performance issues do exists within the CS1000 telephone system. Replacement of the Nortel Option 11 R25 systems will ensure that DPS and the Fire Stations will also have up to date communication system in place.

| | TOTAL BUDGET | \$146,671 | | | | | | \$146,671 |
|--------------|--------------|-----------|---------|---------|---------|---------|---------|-----------|
| Construction | 1 | | | | | | | |
| Other/ROW | 101-205.00- | \$146,671 | | | | | | \$146,671 |
| Engineering | | | | | | | | |
| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |

Police Department Air Handlers - Replacement

Project Number: 118 CIP Number: POLICE

Description:

An air handler, or air handling unit (often abbreviated to AHU), is a device used to condition and circulate air as part of a heating, ventilating, and air-conditioning (HVAC) system. An air handler is usually a large metal box containing a blower, heating or cooling elements, filter racks or chambers, sound attenuators, and dampers. Air handlers usually connect to a ductwork ventilation system that distributes the conditioned air through the building and returns it to the AHU. The Police Headquarters houses two air handling units, the units are located in the basement mechanical room and are responsible for providing airflow to over 90% of the building.

These units are over 25 years old and currently well past their normal life expectancy. This has led to an increase in maintenance costs, a trend that will increase substantially. The replacement of these units is a preventative action to prevent a total failure event.

Justification:

Currently, the headquarters has 63 sworn officers, 21 civilians and 22 staff members from other agencies including the Novi Fire Department, the Michigan State Police and the United States Secret Service. Failure of the units will result in the inability to circulate airflow through the building. With repair costs over the past four year equaling \$20,370, now is the time to take action. By replacing both units at the same time we will be able to reduce the overall cost associated with the install given the physical location of the units. Also the replacement of both units will allow optimum HVAC building performance.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL | |
|-------------------------|--------------|-----------|---------|---------|---------|---------|---------|-----------|---|
| Other/ROW | 101-301.00- | \$151,800 | | | | | | \$151,800 | |
| Construction | n | | | | | | | | |
| | TOTAL BUDGET | \$151,800 | | | | | | \$151,800 | _ |

Three New Wing Plows

Project Number: 119 CIP Number: FIELD

Description:

This request is for three (3) wing plow units to be added to the DPS winter maintenance fleet. The plows and their required hydraulics would be added to trucks 619 (2008 single axle dump truck), 601 (2009 single axle dump truck), and 602 (2010 single axle dump truck). The cost to add this equipment to each truck is approximately \$15,000. Wing plows are used to clear snow more efficiently from the roadway and improve service times for residents.

Justification:

By adding seven feet of clearing width to plow trucks, major and local roadways can be cleared more efficiently. Most trucks in the DPS fleet currently use a plow located under the chassis that is approximately 12 feet wide, by adding an additional seven feet with a wing plow, the trucks maximum clearing width becomes 19 feet. Most residential streets require an operator to make three or four passes before a roadway is clear. With the addition of a wing plow, the number of passes can be reduced. DPS currently has four trucks outfitted with these plows. On average, subdivisions cleared with trucks outfitted with wing plows are done one-third faster than with traditional equipment.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|----------|---------|---------|---------|---------|---------|----------|
| • | 101-442.20- | \$45,000 | | | | | | \$45,000 |
| Construction | 1 | | | | | | | |
| | TOTAL BUDGET | \$45,000 | | | | | | \$45,000 |

Firearms Training Simulator (FATS) Replacement

Project Number: 120 CIP Number: POLICE

Description:

This request is to replace the Firearms Training Simulators (FATS) System. In 2002 the Novi Police Department purchased a Firearms Training Simulator to serve as an aid in "shoot, don't shoot" use of force situations. FATS was comprised of various lethal and non-lethal weapons utilized by the department at the time; Glock handgun, Remington Shotgun, pepper spray and a flashlight all of which were tethered to a control unit and compressed gas tank. The system projected a pre-recorded use of force scenario on the screen and the officers were directed to react accordingly based on their training, laws, policies and procedures. What was once a cutting edge training system is now outdated and unreliable. In addition, the manufacturer will no longer service the system or repair its weapons and new training scenarios are unavailable. The Glock handguns and shotguns are no longer utilized by NPD. New systems are wireless affording more mobility for the officers. Also, we can tailor the weapons to our current Sig Sauer pistols and rifles. The new systems provide interactive high-definition video training scenarios and computer-generated graphics content to allow trainees to interact through the use of simulated and live weapons.

Justification:

The existing system is outdated and unreliable. The manufacturer will no longer repair the systems. New systems are wireless and afford the department better training, as the system can be tailored for our existing weapons. The system is also used during the Citizens Police Academy training sessions and for Fall for Novi.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|----------|---------|---------|---------|---------|----------|
| | 101-301.00- | | \$74,650 | | | | | \$74,650 |
| | TOTAL BUDGET | | \$74,650 | | | | | \$74,650 |

Zamboni Ice Resurfacer - Replacement

Project Number: 121 CIP Number: ICE

Description:

Replace the existing Model 500 (1998, 7600 hours, in fair condition) resurfacing machine with a new machine. The current machine will be approaching the end of its useful life. The maintenance costs with old machines are higher than with new. New machines also create a better ice surface for the customers to use.

Justification:

The current Zamboni ice resurfacing machine is approaching the end of its useful life. The operating costs of older machines are higher than that of newer machines. Newer machines also create a better ice surface, which is better for skating.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|----------|---------|---------|---------|---------|----------|
| | 590-000.00- | | \$92,500 | | | | | \$92,500 |
| Construction | 1 | | | | | | | |
| | TOTAL BUDGET | | \$92,500 | | | | | \$92,500 |

Compressed Air Foam System - Engine #2 & #3 (Vehicles #322, 313) - New

Project Number: 122 CIP Number: FIRE

Description:

This project is to retrofit a Compressed Air Foam System on Engines #2 and #3 (Vehicles #322 & #313). Engine #2 is a 2008 Pierce Fire Pumper with 25,589 (10/7/13) miles and Engine #3 is a 2007 Pierce Fire Pumper with 45,853 (10/7/13) miles. By providing this state of the art technology to both these vehicles it will provide firefighters with the tools they need to quickly and effectively extinguish fires. This in turn will help in containing the fire and thereby reducing the damage to save more belongings and personal property. Per the Long-Term Fire Apparatus Schedule, Engine #2 is scheduled to be replaced in 2023-24 and Engine #3 is scheduled to be replaced in 2022-23. In August 2013 the Fire Department took delivery of a new Engine which is equipped with a compressed air foam system. The use of this new engine over the next year will provide the Department the time to train staff and evaluate the use of compressed air foam as the appropriate solution for our existing apparatus.

Justification:

After extensive research, the Fire Department has found that Compressed Air Foam Systems are a proven technology that will greatly enhance our ability to effectively and efficiently put out a fire. The system introduces foam into the fire pump and an air compressor expands the foam and water mixture. As the firefighters are discharging this mixture out the nozzle, it blankets the fire and smothers it. This helps firefighters use less water and causes less damage to belongings.

| Category Account N Engineering | o. 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------------------------|------------|----------|---------|---------|---------|---------|----------|
| Other/ROW 101-337.00- | - | \$98,175 | | | | | \$98,175 |
| Construction | | | | | | | |
| TOTAL BUD | GET | \$98,175 | | | | | \$98,175 |
| Planning Commission Ve | rsion | Page 83 | | | | 3/5/14 | |

Civic Center Parking Lot Video Project

Project Number: 123 CIP Number: □

Description:

The Civic Center Parking Lot Video Project would provide video surveillance of the South Civic Center Parking lot. The solution will provide a valuable resource in the areas of theft prevention and liability issues. Additionally, the remote monitoring feature will enable winter maintenance staff to monitor the parking lot for snow removal.

Justification:

The Civic Center Parking Lot Video Project would provide Public Safety with a key tool in their efforts to eliminate vandalism and theft.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|----------|---------|---------|---------|---------|----------|
| Other/ROW | | | \$55,000 | | | | | \$55,000 |
| Construction | n | | | | | | | |
| | TOTAL BUDGET | | \$55,000 | | | | | \$55,000 |

Tanker #1 (Vehicle #311 - 1997 Chevrolet) - Replacement

Project Number: 124 CIP Number: FIRE

Description:

This project is for the replacement of Tanker #1 (Vehicle #311). Tanker #1 is a KME Water Tanker, built on a 1997 Chevrolet C 8500 chassis. The Tanker carries 1500 gallons of water and is equipped with a 500 gallon per minute power take-off pump. This apparatus has 12,357 miles (10/7/13) on it. It has 48 feet of ground ladders, 2 self-contained breathing apparatus, a 2000 gallon portable water tank and is licensed by the State of Michigan as a Medical First Responder vehicle. Mileage is not the sole determination for replacement of an apparatus. Time the vehicle has been in service also must be taken into consideration. It is estimated that fire apparatus have a fifteen year life span. In 2013 Tanker #1 will have been in service for sixteen years. Advances in technology make new apparatus easier to operate making the fire fighters job easier. Advances in vehicle handling and occupant safety should be important factors in deciding when a vehicle is replaced.

Justification:

Many areas in our city are not serviced by the municipal water system. Because of the absence of fire hydrants we rely on the water carried on the fire apparatus to extinguish fires. Our first due engines carry between 500 and 1,000 gallons of water which many times is not enough to extinguish the fire. To increase the amount of water dispatched to the scene we rely on water tankers to supplement the supply. Tanker #1 not only holds 1500 gallons of water it also is equipped with a portable water tank that can be deployed to allow an additional 2000 gallons of capacity. Currently Tanker 1 is also serving in the role of reserve engine. If one of our current first due line apparatus is taken out of service for repair tanker 1 is put in its place.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|-----------|---------|---------|---------|---------|-----------|
| Other/ROW | 101-337.00- | | \$284,500 | | | | | \$284,500 |
| Construction | n | | | | | | | |
| | TOTAL BUDGET | | \$284,500 | | | | | \$284,500 |

Two Single-Axle 5 Cubic Yard Dump Trucks w/Front Plows & Underbody Scrapers - (Replaces #686 & #687, 1994 Fords)

Project Number: 125 CIP Number: FIELD

Description:

The replacement dump trucks will be used to transport materials and equipment, aid in road maintenance, drainage work, and snow removal operations. The trucks will come equipped with front plows and underbody scrapers.

- 686 1994 Ford, Single-Axle Dump Truck, fair condition, 75,781 miles, \$43,873 in repairs and maintenance.
- 687 1994 Ford, Single-Axle Dump Truck, fair condition, 83,187 miles, \$52,372 in repairs and maintenance

Justification:

Trucks #686 and #687 have exceeded their useful lives. Investing more funds into maintenance and repair for these two trucks does not make good financial sense.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|-----------|-----------|---------|---------|---------|-----------|
| | 101-442.20- | | \$165,000 | \$165,000 | | | | \$330,000 |
| | TOTAL BUDGET | | \$165,000 | \$165,000 | | | | \$330,000 |

Salt Dome Loading Conveyor

Project Number: 126 CIP Number: FIELD

Description:

Installation of a rock salt conveyor system capable of loading up to 200 tons of salt per hour into the Field Services Complex salt dome. The conveyor is a self-lubricating system and includes a salt loading pit. Price includes engineering, design and construction fees. Currently, the Department loads to the salt dome using a bucket load--an operation that is very inefficient, plus it only allows for two-thirds (at most) of the dome to be loaded. A conveyor would load the dome to its capacity, which would optimize efficiency.

Justification:

A conveyor system will allow for full storage capacity. Salt is unloaded onto a grate covering a below ground concrete pit. The salt is carried up the conveyor, into the dome, resulting in a cone-shaped pile. Currently DPS uses a front-end loader to restock the salt dome, limiting capacity to less than the 2,500 tons it was designed to contain. This method requires significant labor and equipment hours. The conveyor system would maximize our salt-storing ability and is much more efficient (200 tons/hour). Annual operating expense to continue as is without a Salt Dome Loading Conveyor \$19,072 in labor and equipment. Payback is expected in 8.91 years.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------------------|--------------|---------|---------|-----------|---------|---------|---------|-----------|
| Engineering Other/ROW | 101-442.20- | | | \$170,000 | | | | \$170,000 |
| Construction | n | | | | | | | |
| | TOTAL BUDGET | | | \$170,000 | | | | \$170,000 |

Munters Dehumidification Unit Replacement

Project Number: 127 CIP Number: ICE

Description:

Replace the current dehumidifier (1998 Munters # AM30), which will be approaching the end of its useful life, with a new unit. This unit keeps the relative humidity in the rinks at a point where the glass does not have condensation and fog. Also, with lights and electrical systems in the rink, it is very important to keep the moisture levels at a minimum. The ice condition is also dependent on the proper relative humidity. Too much humidity and the ice quality is too soft and does not set up properly. If the air is too dry the ice will also be too dry and will have tendency to crack and chip.

Justification:

The current unit is approaching the end of its useful life and is operating less efficiently. New models have more energy efficient capabilities that would save the City on utility costs. Cost to repair and maintain are increasing.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|---------|-----------|---------|---------|---------|-----------|
| | 590-000.00- | | | \$184,500 | | | | \$184,500 |
| Construction | n | | | | | | | |
| | TOTAL BUDGET | | | \$184 500 | | | | \$184 500 |

Two - Tandem-Axle Swap Loader Dump Trucks w/Front Plows, Underbody Scrapers (Replaces #699, 2000, #620, 2001 Sterling)

Project Number: 128 CIP Number: FIELD

Description:

One of the most heavily used pieces of equipment used by field crews in the winter months is our tandem axle dump trucks. These trucks are normally dispatched to high ADT roadways like Grand River Ave, 12 Mile Rd, Novi Rd, and Ten Mile Rd and historically been outfitted with a fixed dump body, v-box, plows and computer controls for winter maintenance. The trucks are also used extensively for water main breaks and hauling equipment/material trailers when not clearing roadways. The proposed replacement vehicle is called a hook, or swap loader. The chassis are outfitted with all of the traditional winter maintenance equipment, but are equipped with hydraulic arms with a hooks that allow the trucks to unload and pull up different implements (dump box, liquid tank, v-box, closed material containment boxes etc.). This ability allows the truck to be used all year, by multiple divisions of the DPS. *699 - 2000 Sterling Tandem-Axle Dump Truck, fair condition, 73,625 miles with \$63,431 in repairs and maintenance. *620 - 2001 Sterling Tandem-Axle Dump Truck, fair condition, 60,443 miles with \$57,960 in repairs and maintenance.

Justification:

These trucks have reached there useful lives and may no longer be cost effective to repair. In the winter months, trucks require specialized de-icing equipment to maintain roadways. In many cases the Water and Sewer Division requires use of the trucks during water main breaks. In order to do this, salting equipment is removed and then reinstalled before a winter event. With a hook loader, the truck can be used for multiple purposes. By investing in these trucks, it increases the versatility of the equipment. The body purchased for the trucks can be picked up on any other hook lift of the same size.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|---------------|---------|---------|-----------|-----------|---------|---------|-----------|
| Engineering | | | | | | | | |
| Other/ROW | 101-442.20- | | | \$228,000 | \$228,000 | | | \$456,000 |
| Construction | า 592-000.00- | | | \$56,000 | \$56,000 | | | \$112,000 |
| | TOTAL BUDGET | | | \$284,000 | \$284,000 | | | \$568,000 |

Public Address and Stereo System - Replacement

Project Number: 129 CIP Number: ICE

Description:

Replace the current tower of stereo equipment, tuners, relays, and speakers throughout the facility with new. The existing equipment is approaching the end of its useful life and there is much better equipment available to provide an atmosphere appreciated by the customers. Current equipment is outdated and the costs to repair and maintain are increasing. The equipment is used to provide music during open skating and new equipment would provide better service to the customer. This has been scheduled on the Capital Needs Assessment that was created in August 2009.

Justification:

The current equipment is approaching the end of its useful life and the costs to maintain and repairs are increasing. New equipment can provide a better service to the customers and create a better atmosphere within the facility.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|---------|---------|----------|---------|---------|----------|
| Engineering | | | | | | | | |
| Other/ROW | 590-000.00- | | | | \$26,100 | | | \$26,100 |
| Construction | 1 | | | | | | | |
| | TOTAL BUDGET | | | | \$26,100 | | | \$26,100 |

Bobcat All-Wheel Loader - New

Project Number: 130 CIP Number: FIELD

Description:

An all-wheel loader is used to transport materials for confined space projects in rear yards, storm drain easements, snow removal on bridge decks, and heavily landscaped locations.

Justification:

A versatile piece of equipment that would be used year round by the DPS and Water & Sewer Departments. A Bobcat would alleviate the need to use several pieces of equipment currently needed to perform work in confined space locations.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|---------|---------|----------|---------|---------|----------|
| Other/ROW | 101-442.20- | | | | \$50,000 | | | \$50,000 |
| Construction | n | | | | | | | |
| | TOTAL BUDGET | | | | \$50,000 | | | \$50,000 |

One - Single-Axle 5 Cubic Yard Dump Truck w/Front Plow and Underbody Scraper - New

Project Number: 131 CIP Number: FIELD

Description:

Dump trucks are used daily to transport materials and equipment for road maintenance and drainage activities, and for snow removal operations.

Justification:

Request is for a new truck due to an aging fleet with excessive use, rust, and frequent maintenance that take trucks out of service and undermine City services.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|---------|---------|-----------|---------|---------|-----------|
| • | 101-442.20- | | | | \$165,000 | | | \$165,000 |
| Construction | 1 | | | | | | | |
| | TOTAL BUDGET | • | • | • | \$165,000 | | • | \$165,000 |

One - Single-Axle 5 Cubic Yard Dump Truck w/Front Plow and Underbody Scraper (Replaces #621, 2001 Sterling)

Project Number: 132 CIP Number: FIELD

Description:

A dump truck to replace existing truck (#621). The dump truck is used to transport materials and equipment, road maintenance and drainage work, and snow removal operations. The replacement truck will come equipped with a new V-Box insert which has the ability to reduce annual salt consumption by 30% compared to conventional methods.

*621 - 2001 Sterling Single-Axle Dump, good condition, 55,560 miles, \$40,000 in repairs and maintenance.

Justification:

This request is to replace #621 due to excessive use, rust, and frequent maintenance that take it out of service. #621 has over \$39,000 in maintenance and repair.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|---------|---------|-----------|---------|---------|-----------|
| | 101-442.20- | | | | \$165,000 | | | \$165,000 |
| Construction | n | | | | | | | |
| | TOTAL BUDGET | | | | \$165.000 | | | \$165,000 |

Four- Combination V-Box Salt Spreader Inserts

Project Number: 133 CIP Number: FIELD

Description:

The next step in the City's snow and ice removal program is to enhance winter maintenance functions on four tandem axle dump trucks. Combination truck box inserts are designed to carry granular rock salt and liquid anti icing solutions that can assist with winter snow and ice control and summer dust suppression on gravel roads. The combination unit is a "V-Box" that slides into the existing dump body from a self-supporting leg kit. It is equipped with liquid tanks carrying up to 720 gallons of liquid, a reversible continuous belt cross conveyor, salt slurry generator, spinner, and anti-ice boom system that can de-ice up to three lanes of traffic at one time.

Justification:

Crushing, pre-wetting, and conservatively applying anti-icing products has the ability to reduce annual salt consumption by 25% compared to conventional methods. From 2008-09 to 2009-10 contract salt prices have increased 45%. By implementing new technology with enhanced best management practices, these inserts can save up to \$60,000 annually, depending on number and type of snow event, above existing pre-wetting practices. This savings demonstrates a potential return on investment in 3 to 4 years.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|---------|---------|-----------|---------|---------|-----------|
| | 101-442.20- | | | | \$240,000 | | | \$240,000 |
| Construction | n | | | | | | | |
| | TOTAL BUDGET | | | | \$240,000 | | | \$240,000 |

Mini Excavator Replacement (Replaces #622, 2000 Bobcat)

Project Number: 134 CIP Number: FIELD

Description:

The Department of Public Services currently performs such tasks as catch basin repair, water main repair, ditching, and various roadway improvement projects. Often times multiple crews require the use of the same equipment to perform excavation or heavy lifting functions. The replacement of a mini track excavator would enhance efficiency and provide a higher/expedited level of service to residents.

*622 - 2000 Bobcat Excavator, in fair condition, with over 9,881 miles, \$12,036 in repairs and maintenance.

Justification:

Currently the Department of Public Services utilizes a Bobcat 330 with 11 feet of boom for Field Operations excavation projects. A replacement machine allows crews to enhance the level of service to our residents. #622 is in need of a new hydraulic drive motor, for which we received an estimate of \$7,400 to replace.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL | |
|-------------------------|--------------|---------|---------|---------|----------|---------|---------|----------|--|
| • | 101-442.20- | | | | \$85,000 | | | \$85,000 | |
| Construction | า | | | | | | | | |
| | TOTAL BUDGET | | | | \$85,000 | | | \$85,000 | |

One - Single-Axle 5 Cubic Yard Dump Truck w/Front Plow and Underbody Scraper (Replaces #605, 2001 Osh Kosh)

Project Number: 135 CIP Number: FIELD

Description:

Dump truck to replace existing truck (#605). The dump truck is used to transport materials and equipment, road maintenance and drainage work, and snow removal operations. The replacement truck will come equipped with a new V-Box insert which has the ability to reduce annual salt consumption by 30% compared to conventional methods.

*605 - 2001 Osh Kosh, Single-Axle Dump Truck, has more than 53,000 miles and is in good condition. \$27,331 has been spent on repairs and maintenance.

Justification:

#605 has approximately \$28,000. It is very difficult to procure parts for this particular truck; due to its age and limitation of parts distributors.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|---------|---------|-----------|---------|---------|-----------|
| Other/ROW | 101-442.20- | | | | \$165,000 | | | \$165,000 |
| Construction | 1 | | | | | | | |
| • | TOTAL BUDGET | | | | \$165,000 | | | \$165,000 |

One - 1-Ton Dump Truck w/Plow, and Swap Loader - New

Project Number: 136 CIP Number: FIELD

Description:

A one-ton dump truck is used daily to transport materials for road maintenance, drainage activities and snow maintenance operations and for patching roads. One of the most heavily used pieces of equipment used by field crews are small one-ton dump trucks. These trucks come outfitted with a dump box, front plow and salting box so that they can be used all season for hauling materials to job sites, transporting heavy equipment, and de-icing roadways. In an effort to increase functionality, save time, and reduce expenditures, a truck can be outfitted with a hook system that is capable of pulling up multiple components onto its chassis. DPS is requesting the purchase of a new one-ton truck with the following components: dump body, v-box salt spreader, liquid tank, and stake rack bed.

Justification:

By funding this purchase, DPS can further maximize the use of its vehicles and increases its ability to become more efficient. As an example, if crews are rebuilding a storm catch basin, a stake rack bed with all the materials can be dropped at the site, while the operator heads back to the garage, picks up the dump body, and hauls sand to a separate job site. By not taking advantage of this technology, additional trucks would be needed to enhance efficiency.

| Construction | TOTAL BUDGET | | | | \$116,600 | | | \$116,600 |
|--------------|--------------|---------|---------|---------|-----------|---------|---------|-----------|
| Other/ROW | 101-442.20- | | | | \$116,600 | | | \$116,600 |
| Engineering | | | | | | | | |
| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |

Meadowbrook Commons Activity Center HVAC Units Replacement

Project Number: SENIOR

Description:

Replace the suburban thru-wall electric units for apartments and common areas.

Justification:

Various HVAC units will need to be replaced due to life expectancy.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|---------|---------|---------|----------|---------|----------|
| Engineering | | | | | | | | |
| Other/ROW | 594-000.00- | | | | | \$36,403 | | \$36,403 |
| Construction | n | | | | | | | |
| | TOTAL BUDGET | | | | | \$36,403 | | \$36,403 |

Rescue #2 (Vehicle #344 - 2011 Ford Expeditions) - Replacement

Project Number: 138 CIP Number: FIRE

Description:

This project is for the replacement of Rescue #2 (Vehicle #344) which is a 2011 Ford Expedition 4x4 EL. The current mileage (10/7/2013) is 13,372. The vehicle is classified as a light duty Non-Transport capable of Basic Life Support (BLS) unit. It is currently in good shape. The expected life is 8 years. The current vehicle responds to fire and medical emergencies with all of the equipment needed and required by the state to be licensed as a BLS Vehicle. The recommendation is to replace the current SUV-type Rescue vehicles with Crew Cab (4 door) Heavy Duty Diesel 4x4 Chassis trucks with 8-9 foot utility bodies. The new vehicles would be more flexible in what they can carry, and how it is carried. The proposed replacement vehicle would allow for better personnel carrying capacity, larger capacity of tools, and the ability to adapt the truck to the seasonal needs of the department based on its location i.e.: ice rescue or water rescue, brush fire season, PR details, training.

Justification:

The heavy duty crew cab diesel 4x4 utility truck will be able to carry two additional firefighters and their gear, additional equipment, extinguishers, and have room for the ice rescue equipment or water rescue equipment. The SUV-type rescues are limited by space, seating, and compartments. The proposed vehicle will allow for increased payload, personnel carrying capacity, and flexibility to change the payload based on the situation.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------------------|--------------|---------|---------|---------|---------|----------|---------|----------|
| Engineering Other/ROW | 101-337.00- | | | | | \$69,200 | | \$69,200 |
| Construction | า | | | | | • | | |
| | TOTAL BUDGET | | | | | \$69,200 | | \$69,200 |

One Single-Axle 5 Cubic Yard Dump Truck w/Front Plow and Underbody Scraper (Replaces #698, 1998 Ford)

Project Number: 139 CIP Number: FIELD

Description:

One dump truck to replace existing truck #698. The dump truck is used to transport materials and equipment, road maintenance and drainage work, and snow removal operations. The replacement will come with new V-box inserts which have the ability to reduce annual salt consumptions by 30% compared to conventional methods.

*#698 - 1998 Ford Single-Axle Dump Truck, in good condition, with over 73,735 miles, \$55,356 in repairs and maintenance.

Justification:

Request is to replace the dump truck due to excessive use, rust and frequent maintenance that takes the trucks out of service. #698 has over \$55,000 in maintenance and repair.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|---------|---------|---------|-----------|---------|-----------|
| • | 101-442.20- | | | | | \$165,000 | | \$165,000 |
| | TOTAL BUDGET | | | | | \$165,000 | | \$165,000 |

Truck-Mounted Combination (Jet and Vacuum) Sewer Cleaner Replacement (Replaces #614, 2007 Sterling Vactor)

Project Number: 140 CIP Number: FIELD

Description:

This piece of equipment is vital to the Department of Public Services. The replacement of this unit will help to continue cleaning storm drains, perform hydro-excavations, jet culverts and clean up after flooding incidents. The DPS Field Operations Division unit is also used as a stand-by in cases where the Water & Sewer Division Vactor is down for repair.

*614 - 2007 Sterling Vactor, good condition, 27,974 miles, \$17,354 in repairs and maintenance.

Justification:

The existing unit will have reached its useful life in 2017 and will have enough value left to bring a decent trade-in return to the purchase of its replacement. The older this machine gets, the more costly and extensive are its repairs.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|---------|---------|---------|-----------|---------|-----------|
| Other/ROW | 101-442.20- | | | | | \$400,000 | | \$400,000 |
| Construction | Ì | | | | | | | |
| - | TOTAL BUDGET | | | | | \$400,000 | | \$400,000 |

Front-End Loader Replacement (Replaces #689,1995 Case)

Project Number: 141 CIP Number: FIELD

Description:

A Front-End Loader is used daily for loading dirt, debris, road salt and to unload gravel train deliveries. It is also used for snow removal on bridge decks and parking areas.

*689 - 1995 Case Loader 821B, fair condition, 7,825 hours, \$27,783 in repairs and maintenance.

Justification:

The existing Loader has exceeded its useful life and maintenance and repairs are excessive and expensive. #689 has over \$28,000, or 25% of original cost in maintenance and repair.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|---------|---------|---------|-----------|---------|-----------|
| Other/ROW | 101-442.20- | | | | | \$252,000 | | \$252,000 |
| Construction | 1 | | | | | | | |
| | TOTAL BUDGET | • | | • | | \$252,000 | | \$252,000 |

Squad #1 (Vehicle #314 - 2009 International MedTec Ambulance) - Replacement

Project Number: 142 CIP Number: FIRE

Description:

This project is for the replacement of Squad #1 (Vehicle #314) a 2009 International MedTec transporting ambulance. The current mileage is 52,034 (10/7/13) with 4740 hours. This apparatus is a transport-capable Basic Life Support (BLS) medium duty vehicle. It is currently in good condition. Squad #1 is one of the busiest vehicles in the fleet. It responds to fires, injury accidents, medicals, and can provide a sheltered rehab area on an emergency scene. The replacement would be a Horton Navistar 623 ambulance. The vehicle is scheduled to be replaced in the 2019-20 budget year per the Long Term Fire Apparatus Schedule.

Justification:

This vehicle will provide a variety of uses that are essential for the Fire Departments operations. This vehicle will be able to transport multiple fire staff/ equipment to the scene of an emergency. The transport capability can be used when our private ambulance service is not available, multiple patients, or mutual aid for surrounding departments for BLS transports. The rear patient compartment can provide rehab area for fire staff to dress out for an ice rescue emergency out of the weather. This is the only transport vehicle in the current Fire Department fleet.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL | |
|-------------------------|--------------|---------|---------|---------|---------|---------|-----------|-----------|--|
| • | 101-337.00- | | | | | | \$243,200 | \$243,200 | |
| Construction | n | | | | | | | | |
| | TOTAL BUDGET | | | | | | \$243,200 | \$243,200 | |

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Ditching Machine (Replaces #675, 1991 Gradall)

Project Number: 143 CIP Number: FIELD

Description:

A Ditching Machine/Excavator can be driven instead of being trailered to job sites. Projects include road maintenance, culvert replacements and drain repairs. This machine is designed for precision excavation and the lifting of large, heavy items on construction sites.

*675 - 1991 Gradall, good condition, with 15,336 miles, with \$14,620 in maintenance and repair costs.

Justification:

As this equipment further exceeds its useful life of 15 years, repairs become more frequent and the machine is less reliable and expenses will continue to increase. #675 has almost \$15,000 or 8% of original cost in maintenance and repair.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|---------|---------|---------|---------|-----------|-----------|
| • | 101-442.20- | | | | | | \$300,000 | \$300,000 |
| Construction |) | | | | | | | |
| | TOTAL BUDGET | | | | | | \$300,000 | \$300,000 |

Grader (Replaces #612, 2005 CAT)

Project Number: 144 CIP Number: FIELD

Description:

Grader is used for snow removal, maintaining road shoulders, cutting and leveling road surfaces for asphalt and concrete repairs. As the community grows traffic volume increases on the few remaining gravel roads Novi maintains. If not maintained there becomes an increased risk of vehicle damage and traffic accidents. #612 is a rear-wheel drive Grader, which is extremely difficult to drive on snow, sleet and ice.

*612 - 2005 CAT, with over 3,212 hours, in good condition, \$17,208 in repairs and maintenance.

Justification:

#612 has over \$17,000 or 8% of its original cost in maintenance and repairs. The replacement Grader will be an all-wheel drive piece of equipment that can drive in any weather condition.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|---------|---------|---------|---------|-----------|-----------|
| | 101-442.20- | | | | | | \$300,000 | \$300,000 |
| Construction | 1 | | | | | | | |
| | TOTAL BUDGET | | | | | | \$300,000 | \$300,000 |

One Tandem-Axle Swap Loader Dump Truck w/Front Plow, Underbody Scraper (Replaces #603, 2003 Sterling)

Project Number: 145 CIP Number: FIELD

Description:

One of the most heavily used pieces of equipment used by field crews in the winter months is our tandem axle dump trucks. These trucks are normally dispatched to high ADT roadways like Grand River Ave, 12 Mile Rd, Novi Rd, and Ten Mile Rd and historically been outfitted with a fixed dump body, v-box, plows and computer controls for winter maintenance. The trucks are also used extensively for water main breaks and hauling equipment/material trailers when not clearing roadways. The proposed replacement vehicle is called a hook, or swap loader. The chassis is outfitted with all of the traditional winter maintenance equipment, but is equipped with a hydraulic arm with a hook that allows that truck to unload and pull up different implements (dump box, liquid tank, v-box, closed material containment box's etc). This ability allows the truck to be used all year, by multiple divisions of the DPS. #603 - 2003 Sterling, Tandem-Axle Dump Truck, good condition, 46,044 miles, \$28,184 in repairs and maintenance.

Justification:

Truck #603 has approximately \$28,000 invested in maintenance and repair. When this truck reaches its useful life it may no longer be cost effective to repair it. In the winter months, trucks require specialized de-icing equipment to maintain our roadways. However, in many cases the Water and Sewer Division requires use of the truck during water main breaks. In order to do this, salting equipment must be removed to haul debris, and then installed again before a winter maintenance event. With a hook loader, the truck can be used for multiple purposes. By investing in this truck it increases the versatility of the equipment. The body purchased for this truck can be picked up on any other hook lift of the same size. This overall reduces future dedicated equipment purchases.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|----------------------|---------|---------|---------|---------|---------|-----------|-----------|
| Other/ROW | 101-442.30- | | | | | | \$228,000 | \$228,000 |
| Construction | n 592-000.00- | | | | | | \$56,000 | \$56,000 |
| | TOTAL BUDGET | | | | | | \$284,000 | \$284,000 |

One - 1-Ton Dump Truck w/Plow, and Swap Loader (Replaces #633, 1998 GMC)

Project Number: 146 CIP Number: FIELD

Description:

A medium duty dump truck used to tow trailers up to 24,000 lbs. Transport materials, salt roads & parking lots, plow snow and perform general field operation duties. Replaces dump truck *#633, 1998 GMC 3500 Series 1-Ton Dump Truck, with more than 46,643 miles in poor condition, \$29,795 in repairs and maintenance.

One of the most heavily used pieces of equipment used by field crews are small one-ton dump trucks. These trucks come outfitted with a dump box, front plow and salting box so that they can be used all season for hauling materials to job sites, transporting heavy equipment, and de-icing roadways. In an effort to increase functionality, save time, and reduce expenditures, a truck can be outfitted with a hook system that is capable of pulling up multiple components onto its chassis. DPS is requesting the purchase of a new one-ton truck with the following components: dump body, v-box salt spreader, liquid tank, and stake rack bed.

Justification:

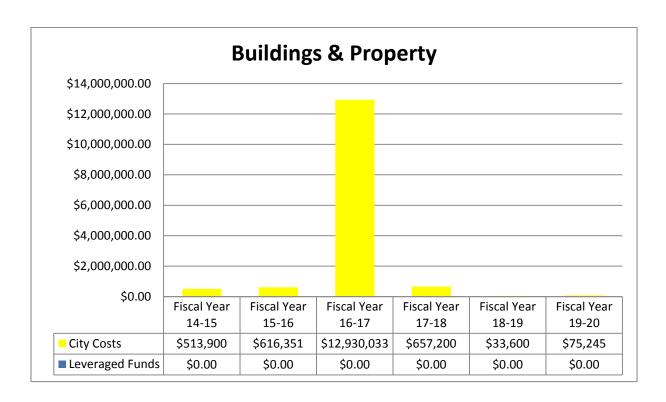
Truck #633 is not large enough to handle our daily operation and is incurring frequent maintenance costs. The dump body was replaced in 2010 at a cost of over \$9,500. By funding this purchase, DPS can further maximize the use of its vehicles and increases its ability to become more efficient. As an example, if crews are rebuilding a storm catch basin, a stake rack bed with all the materials can be dropped at the site, while the operator heads back to the garage, picks up the dump body, and hauls sand to a separate job site. By not taking advantage of this technology, additional trucks would be needed to enhance efficiency.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|---------|---------|---------|---------|-----------|-----------|
| | 101-442.20- | | | | | | \$123,200 | \$123,200 |
| | TOTAL BUDGET | | | | | | \$123,200 | \$123,200 |

Buildings and Property

Operational facilities are the "bricks and mortar" from which the City of Novi provides services to its residents and businesses. Increasingly, operational facilities also include the systems that facilitate service delivery in the information age. Projects include the construction of new facilities, as well as the maintenance, rehabilitation, renovation, and expansion of existing facilities.

Operational facilities projects are funded from a variety of different sources, depending on the use of the facility. Sources mainly are tied to the General Fund and leveraged funds. Projects in the six year program include extensive parking lot improvements, sewer extension at the Villa Barr property and several projects to improve the Public Services Complex.



Arcade Demo and Upper Lobby Build Out

Project Number: 147 CIP Number: ICE

Description:

The first phase of the project would be to remove the arcade from the middle of the upper lobby. The plan would be to remove the walls and level the arcade. Televisions and games that were located in and around the arcade would be moved to other parts of the lobby. This would open up the main lobby and give a more open and comfortable feel to the area. It will also enable the Blue Line Café to be seen from all parts of the lobby and have a more restaurant/café feel, which should help to increase sales. After the arcade is removed, a room would be built out from the back wall to create a new meeting/party room space to house birthday parties, team parties, or additional meeting space and revenue generating area.

Justification:

Removing the arcade will open up the main lobby and make it a more attractive and welcoming place for customers to gather. With our Blue Line Café in that area, the more people that gather in that space the more will visit and purchase. The televisions and games will be relocated to other areas within the main lobby to maintain any revenue streams after the project. The addition of another meeting/party/gathering space will allow for more parties or meetings to be booked and is an area for additional revenue.

| Category Acco | ount No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-----------------|----------|----------|---------|---------|---------|---------|---------|----------|
| Other/ROW 590-0 | 000.00- | \$50,000 | | | | | | \$50,000 |
| Construction | | | | | | | | |
| TOTA | I RUDGET | \$50,000 | | | | | | \$50,000 |

Fire Parking Lot Improvements (FS #2, #3, #4 & CEMS) - Replacement

Project Number: 148 CIP Number: FIRE

Description:

This project is for the rehabilitation of the parking lots at Fire Stations #2, #3, #4 and the CEMS Satellite Center. During 2012, the Engineering Department coordinated a review of all Police and Fire parking lots. Public Safety parking lots, along with other City parking lots, were evaluated to determine the number and types of defects and the type of repairs or rehabilitation that would be appropriate. Geotechnical engineering investigation was also completed. In July 2012 a construction contract was awarded for the construction phase of the repairs based on available funding. During FY 2012-13 the Fire Department had enough budget to only repair the parking lot at Fire Station #1. This request is for the continuation of the project with repairs being made to the parking lots at Fire Stations #2, #3, #4 and the CEMS Satellite Center. The design phase for the repairs is complete and ready to be rebid once the project is approved. the rehabilitation methods to be used range from complete pavement removal and replacement to minor patching and repairs. Drainage improvements will also be completed in some locations where appropriate. Engineering would bid the project and oversee the work. Improvements to Fire Station #2 & CEMS were recommended by the Parking Lot Inventory and Maintenance Plan, completed in January 2014. Rated PASER 3 at the time of completion. Particularly harsh winter conditions have resulted in additional deterioration. Improvements include patching. HMA crack repair, seal coat and concrete pavement replacement. Per City Council goal setting the parking lot of Station 3 would be reconstructed in 2014-15.

Justification:

Failure to fund the request will result in continued deterioration, increased repair costs, potential risk to employees and damage to vehicles. Engineering would bid the project and oversee the work.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|----------|---------|---------|-----------|---------|---------|-----------|
| | 101-337.00- | \$84,900 | | | \$148,200 | | | \$233,100 |
| Construction | n | | | | | | | |
| | TOTAL BUDGET | \$84.900 | | | \$148,200 | | | \$233,100 |

New Front Entranceway Doors and Foyer Remodel

Project Number: 149 CIP Number: ICE

Description:

This project entails removing both sets of main entranceway doors and door frames and replacing them with two automatically opening doors, one for each entranceway. The existing foyers would have to be widened slightly and the interior doorway expanded, trimmed and finished. New auto-opening doors will provide a wider opening for customers. Wider openings are needed in skating facilities due to the amount of equipment that most of the customers carry with them when they arrive. Having the doors automatically open will also provide an ease of use to the customer if their hands are full carrying equipment used in skating. Wider, automatically opening doors will also reduce the amount of wear as the hockey and skating equipment will be less likely to collide with the doors and door frames, thus reducing maintenance costs. New doors will also improve the curb appeal of the facility.

Justification:

Removing the manual opening, narrow entranceway doors will improve customer use as well as reduce maintenance costs. The new doorways will open automatically when a customer approaches and will provide a wider opening for the customer that is carrying hockey bags and sticks or the skater carrying a skating bag and case. New doors on the front of the building will improve the curb appeal and keep the Novi Ice Arena up to the standards, look, and functionality of the rest of the City of Novi buildings.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|----------|---------|---------|---------|---------|---------|----------|
| | 590-000.00- | \$35,000 | | | | | | \$35,000 |
| Construction | n | | | | | | | |
| | TOTAL BUDGET | \$35,000 | | | | | | \$35,000 |

Villa Barr Park Property Sewer Extension

Project Number: 150 CIP Number: PRCS

Description:

Villa Barr Art Park and Cultural Education Center was officially dedicated as park land in February 2013. In order to utilize the current structure on the property a public restroom facility will need to be added. A public sewer will need to be constructed in lieu of the current septic tank system. The sewer will extend from the east side of the Barr residence to the student building to Napier Road.

Justification:

Addition of the Villa Barr Art Park sewer will allow the opportunity to use the space for public programming.

| Category Account No. Engineering Other/ROW | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--|-----------|---------|---------|---------|---------|---------|-----------|
| Construction 208-000.00- | \$304,000 | | | | | | \$304,000 |
| TOTAL BUDGET | \$304 000 | | | | | | \$304,000 |

Civic Center Parking Lot & Novi Way Improvements

Project Number: 151 CIP Number: FACILITY

Description:

Improvements to Civic Center Parking Lot and Novi Way recommended by the Parking Lot Inventory and Maintenance Plan, completed in January 2014. Rated PASER 6 at the time of completion. Particularly harsh winter conditions have resulted in additional deterioration. Improvements include patching, HMA crack repair, & HMA crack overlay.

Justification:

Improves ease of access to the Civic Center Campus.

| Category Account No. Engineering Other/ROW | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--|----------|-----------|---------|---------|---------|---------|-----------|
| Construction | \$40,000 | \$391,000 | | | | | \$431,000 |
| TOTAL BUDGET | \$40,000 | \$391,000 | | | | | \$431,000 |

Community Development Furniture Replacement

Project Number: 152 CIP Number: COM DEV

Description:

This project would consist of the replacement of office furniture for the entire Community Development suite at the Civic Center. The furniture proposed is manufactured by Haworth from their Unigroup Too line and pricing is based on the State of Michigan (MIDeal) cooperative purchasing contract.

The budgeted amount includes the following: removal of existing furniture, estimated electrical/data installation, removal and replacement of carpet, complete re-painting of the suite, and the installation of new furniture.

Justification:

The Civic Center facility dates back to 1987 and so does most of the office furniture. Many of the workstations are past the point of repair and are in need of replacement, not only due to safety concerns but also for cosmetics allowing a better customer experience.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|-----------|---------|---------|---------|---------|-----------|
| Other/ROW | 101-371.00- | | \$189,351 | | | | | \$189,351 |
| Construction | n | | | | | | | |
| | TOTAL BUDGET | | \$189,351 | | | | | \$189,351 |

Police Parking Lot East Improvements

Project Number: 153 CIP Number: FACILITY

Description:

Improvements to Police Parking Lot East recommended by the Parking Lot Inventory and Maintenance Plan, completed in January 2014. Rated PASER 8 at the time of completion. Particularly harsh winter conditions have resulted in additional deterioration. Improvements include HMA crack overlay.

Justification:

Will improve ease of access to Police Station

| | TOTAL BUDGET | | \$36,000 | | | | | \$36,000 |
|--------------|--------------|---------|----------|---------|---------|---------|---------|----------|
| Construction | 1 | | \$36,000 | | | | | \$36,000 |
| Other/ROW | | | | | | | | |
| Engineering | | | | | | | | |
| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |

Police Access Driveway and Firearms Training Center Parking Lot - Replacement

Project Number: 154 CIP Number: POLICE

Description:

This project is for the rehabilitation of the parking lot at the Firearms Training Center and the Police Department east access driveway. During 2013, the Engineering Department coordinated a review of all Police and Fire parking lots. Public Safety parking lots, along with other City parking lots, were evaluated to determine the number and types of defects and the type of repairs or rehabilitation that would be appropriate. In the past two years, both the front and back parking lots at the Police Department were repaired. This request is for the continuation of repairs being made to the parking lot at the Range and the access drive at the police department building. The rehabilitation methods to be used range from complete pavement removal and replacement to minor patching and repairs. Drainage improvements will also be completed in some locations where appropriate. Engineering would bid the project and oversee the work

Justification:

Failure to fund the request will result in continued deterioration, increased repair costs, potential risks to employees and damage to vehicles. Engineering would bid the project and oversee the work.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|---------|----------|---------|---------|---------|----------|
| | 101-301.00- | | | \$48,400 | | | | \$48,400 |
| Construction | 1 | | | | | | | |
| | TOTAL BUDGET | | | \$48,400 | | | • | \$48,400 |

Evaporative Cooling Tower Replacement

Project Number: 155 CIP Number: ICE

Description:

Replace existing EVAPCO ATC-370 Evaporative cooling tower with new. The Existing unit was installed in 1998 and is currently working and in fair condition. The cooling tower cools and condenses the hot ammonia gas back into a liquid to be used in the refrigeration process. Compressors will not run without a properly working cooling tower. Ice cannot be made without all phases of the refrigeration system operating correctly.

Justification:

Current unit is approaching the end of its useful life and is operating less efficiently. Costs to repair and maintain are increasing. A new unit will operate more efficiently and will cost less to maintain in the first half of its life.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------------------|--------------|---------|---------|----------|---------|---------|---------|----------|
| Engineering Other/ROW | 590-000.00- | | | \$65,000 | | | | \$65,000 |
| Construction | n | | | | | | | |
| | TOTAL BUDGET | | | \$65,000 | • | | • | \$65,000 |

DPS Mezzanine Build-Out

Project Number: 156 CIP Number: DPS

Description:

The Department of Public Services' main building is nearly 29 years old, and as the City has grown, it has run out of usable space. Employees have to eat lunch and take breaks in one of four areas throughout the building, including an improvised break area inside the garage bay (see pictures attached). The facility also lacks a training room - currently training is conducted in the garage or the parks maintenance bay. Finally, the building lacks restroom facilities to handle high demand at breaks, lunch time, and at the beginning and end of each shift. To illustrate, DPS employs as many as 70 male workers in the summer. When they return to the DPS building for lunch, there are only 4 fixtures available for use (2 toilets; 2 urinals). The mezzanine has over 4,000 square feet of unused or underutilized space that could be used to address these needs. The built-out space would include a combined lunch/training room, restrooms, a locker room, exercise/weight room, and fleet maintenance storage space. Build-out and use of the mezzanine is now legally possible because of the FY 12/13 addition of the mezzanine elevator, which makes the space accessible to disabled individuals who may use the facility.

Justification:

This project is necessary because the current DPS facility does not meet the basic needs of DPS employees. The need for adequate lunch, break, meeting, training, and restroom areas would be met by the completion of this project.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|---------|-----------|---------|---------|---------|-----------|
| Engineering | 101-442.00- | | | \$52,500 | | | | \$52,500 |
| Other/ROW | 101-442.00- | | | \$54,000 | | | | \$54,000 |
| Construction | 101-442.00- | | | \$350,000 | | | | \$350,000 |
| | TOTAL BUDGET | • | • | \$456,500 | | • | • | \$456,500 |

CIP Number:

DPS Field Services Complex Improvements - Electrical

Project Number: 157 CIP Number: DPS

Description:

This project would address the critical electrical needs of the DPS main building identified in the 2006 Facility Needs Master Plan prepared by Wold Architects & Engineers and includes: upgrading the electrical service branch circuits to accommodate mechanical improvements, upgrading the generator system to separate life safety devices from non-life safety items, and replacing outdated and deteriorated main switchgear located in the garage area.

Justification:

The Field Services Complex is nearly 29 years old and requires significant electrical-related improvements to preserve its useful life, enhance worker safety, and help save energy.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------------|---------------|---------|---------|-----------|---------|---------|---------|-------|
| Engineering | 101-442.00- | | | \$81,096 | | | | |
| Other/ROW | | | | | | | | |
| Construction | า 101-442.00- | | | \$349,532 | | | | |
| | TOTAL BUDGET | | | \$430,628 | | | | |

DPS Field Services Complex - Building Expansion (Construction)

Description:

Project Number: 158

This project was recommended in the 2006 Facility Needs Master Plan to provide DPS with a facility that will meet the public services needs of the City at full build-out. The project would create a facility large enough to store all equipment and materials, and to accommodate the needs of administrative staff, field workers and seasonal workers assigned to DPS. The project includes: 1) a 56,606 square foot expansion of the main DPS building to provide enclosed storage space for all Field Operations Division vehicles and equipment, and additional fleet maintenance areas; 2) a 14,250 square foot standalone storage building for Water & Sewer Division vehicles and equipment; 3) two approximate 5,000 square foot buildings to store construction materials; 4) an additional visitor/staff parking lot; and 5) a larger replacement salt storage dome. An updated needs assessment, performed by the Sidock Group will be presented to City Council in April 2014

Justification:

At least one-third of the City's current fleet assets must be stored outdoors. Recent studies by fleet management industry experts reveal that the cost to store vehicles and equipment outside is approximately three times the cost to construct, operate and maintain a new storage garage. This is because of factors caused by ongoing exposure to the elements, such as increased maintenance costs, reduced vehicle/equipment life expectancy, reduced labor productivity during inclement weather, and reduced employee safety. Fleets in cold climates have special challenges: cold weather engine starts can be unreliable, and especially hard on batteries and diesel engines.

| Category Account No. Engineering Other/ROW | 2014-15 | 2015-16 | 2016-17 \$456,885 | 2017-18 | 2018-19 | 2019-20 | TOTAL \$456,885 |
|--|---------|---------|-----------------------------|---------|---------|---------|---------------------------|
| Construction | | | \$8,294,220 | | | | \$8,294,220 |
| TOTAL BUDGET | | | \$8,751,105 | | | | \$8,751,105 |

Library Parking Lot Improvements

Project Number: 159 CIP Number: FACILITY

Description:

Improvements to Library Parking Lot recommended by the Parking Lot Inventory and Maintenance Plan, completed in January 2014. Rated PASER 8 at the time of completion. Particularly harsh winter conditions have resulted in additional deterioration. Improvements include patching, and seal coat.

Justification:

Will improve ease of access to Library facility

| Category Engineering Other/ROW | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------------------------------|--------------|---------|---------|----------|---------|---------|---------|----------|
| Construction | 1 | | | \$53,400 | | | | \$53,400 |
| | TOTAL BUDGET | | | \$53,400 | | | | \$53,400 |

Construction of a new Fire Station 1

Project Number: 160 CIP Number: FIRE

Description:

With the continued re-development of Main Street which is located behind the City's current Fire Station 1. A needs assessment for a new Fire Station will be completed and presented to City Council in April 2014 that will determine the size and resources a new, possible, Fire Station requires. With the construction of Fire Station 4 and the relocation of Fire Administration to the Police Department Administrative building the needs and requirement of a new Fire Station will be different.

Justification:

City Council has made the study and investigation of relocating Fire Station 1 a high priority for the foreseeable future. Repurposing City owned property along Grand River Ave. could definitely assist in fostering economic development along one of the busiest thoroughfares of the City.

| Category Account Engineering Other/ROW | No. 2014-15 | 2015-16 | 2016-17 \$625,000 | 2017-18 | 2018-19 | 2019-20 | TOTAL \$625,000 |
|--|-------------|---------|-----------------------------|---------|---------|---------|---------------------------|
| Construction 208-000.0 | 00- | | \$2,500,000 | | | | \$2,500,000 |
| TOTAL BU | IDGET | • | \$2,500,000 | • | • | • | \$3,125,000 |

Villa Barr Park Property Studio

Project Number: 161 CIP Number: PRCS

Description:

Villa Barr Art Park and Cultural Education Center was officially dedicated as park land at the February 25, 2013 City Council meeting. The current structure on the property is in need of a public restroom facility and defined cultural arts programming space. With the remodel of the structure at Villa Barr Art Park property to include these amenities the park can be utilized by the public for intended usage.

Justification:

Addition of the new park enhancement will enable the space to be used by the public for cultural arts programming.

| Category Engineering Other/ROW | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL | |
|--------------------------------------|----------------------|---------|---------|---------|-----------|---------|---------|-----------|--|
| Construction | 1 208-000.00- | | | | \$135,000 | | | \$135,000 | |
| | TOTAL BUDGET | | | | \$135.000 | | | \$135,000 | |

Carpet (Training Center/2nd Floor) & Furniture Replacement (Records & Investigations)

Project Number: 162 CIP Number: POLICE

Description:

This project would consist of the replacement of carpet throughout the 2nd Floor of the Police Station and the Training Center and the replacement of cubical furniture in the Records and Investigations Section on the 2nd Floor. It makes sense to bundle these two projects together as it will be easier and more cost efficient to lay the new carpet while the old furniture is removed and before the installation of the new furniture. The specific carpet areas include the entire second floor and training center totaling an estimated 1,167 yards. The budgeted amount includes removal and disposal of existing carpet, removal and disposal of existing cove base, and the installation of new carpet. The installed carpet will include all industry standard warranties. This project would consist of the replacement of office furniture for both the Records and Investigations Sections at the Police Station. The furniture proposed is manufactured by Haworth from their Unigroup Too line and pricing is based on the State of Michigan (MIDeal) cooperative purchasing contract. The budgeted amount includes removal of existing furniture, estimated electrical/data installation, and the installation of new furniture.

Justification:

The Police Headquarters facility dates back to 1978 and so does most of the office furniture. Many of the workstations are past the point of repair and need replacement, not only due to safety concerns but also for cosmetics. Commercial-grade carpeting generally lasts anywhere from three to ten years. However, there are many factors that can impact a carpet's lifespan. These include: fiber, density, color selection and locations. The current carpet in the proposed replacement areas is well over 12 years old and greatly in need of replacement according to industry standards.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|---------|---------|-----------|---------|---------|-----------|
| | 101-301.00- | | | | \$173,000 | | | \$173,000 |
| Construction | n | | | | | | | |
| | TOTAL BUDGET | | | | \$173,000 | | | \$173,000 |

Furniture Replacement - Police Training Center/EOC

Project Number: 163 CIP Number: POLICE

Description:

The Police Training Center serves as the City's Emergency Operations Center and as a critical training facility for staff, citizens and local agencies. The facility houses state of the art technology and its usage continues to increase. This proposal seeks to replace the 12+ year furniture that is worn, stained and many of the chairs and tables are broken and no longer functioning. This request is for the replacement of 30 tables and 100 chairs. Both the tables and chairs would be on coasters which would eliminate the current process of employees carrying the furniture around when events require the facility to be set up a certain way. The Training Center can accommodate anywhere from 40-50 students comfortably. The same chairs are also used throughout the first floor of the building and pulled back into the Training Center when necessary. Twenty (20) of the chairs would be housed permanently in the patrol briefing room.

Justification:

The request is to replace the existing furniture in the Police Training Center which is tattered, worn and outdated, some of the chairs and tables no longer function properly. This furniture is over 12 years old and showing its age. Replacing the furniture will improve the appearance and function of this top-rate training facility and provide a pleasing and professional look to the staff and citizens that use this facility. Both the tables and chairs would be on coasters which would eliminate the current process of employees carrying the furniture around when events require the facility to be set up a certain way.

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------------------|--------------|---------|---------|---------|----------|---------|---------|----------|
| Engineering Other/ROW | 101-301.00- | | | | \$43,500 | | | \$43,500 |
| Construction | 1 | | | | | | | |
| | TOTAL BUDGET | | | | \$43,500 | | | \$43,500 |

ITC Community Sports Park Parking Lot Improvements

Project Number: 164 CIP Number: FACILITY

Description:

Improvements to ITC Community Sports Park Parking Lot recommended by the Parking Lot Inventory and Maintenance Plan, completed in January 2014. Rated PASER 6 at the time of completion. Improvements include patching, HMA crack repair, seal coat and re-grade gravel.

Justification:

Will improve ease of access to ITC Community Sports Park

| Category | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|--------------|--------------|---------|---------|---------|-----------|---------|---------|-----------|
| Engineering | | | | | | | | |
| Other/ROW | | | | | | | | |
| Construction | n | | | | \$157,500 | | | \$157,500 |
| | TOTAL BUDGET | | | | \$157 500 | | | \$157.500 |

Lakeshore Park Parking Lot Improvements

Project Number: 165 CIP Number: FACILITY

Description:

Improvements to Lakeshore Park Parking Lot recommended by the Parking Lot Inventory and Maintenance Plan, completed in January 2014. Rated PASER 6 at the time of completion. Improvements include patching, HMA crack repair, seal coat, partial over band crack seal and re-grade gravel.

Justification:

Will improve access to Lakeshore Park interior parking lots and asphalt access roads

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|---------|---------|---------|----------|---------|----------|
| Other/ROW | | | | | | | | |
| Construction | 1 | | | | | \$33,600 | | \$33,600 |
| | TOTAL BUDGET | | | • | | \$33,600 | • | \$33,600 |

Meadowbrook Commons Activity Center Partial Parking Lot Repair

Project Number: 166 CIP Number: SENIOR

Description:

Asphalt replacement for various areas of Meadowbrook Commons parking lot.

Justification:

Various areas of the parking lot is in need of repair due to deterioration from weather and normal wear and tear.

| Category Engineering | Account No. | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|-------------------------|--------------|---------|---------|---------|---------|---------|----------|----------|
| Other/ROW | 594-000.00- | | | | | | \$75,245 | \$75,245 |
| Construction | n | | | | | | | |
| | TOTAL BUDGET | | | | | | \$75,245 | \$75,245 |

CAPITAL IMPROVEMENT PROGRAM 2014-2020 Project Summary

| | | | | Bu | dget | • | | | | | | Fore | ecast | | |
|---|---|--------------------------|--------------------|---------------------|-------------|---------------------|-------------|---------------------|-------------|---------------------|-------------|---------------------|-------------|---------------------|-------------|
| | | | | FY 20 | 014-15 | FY 20 | 15-16 | FY 2 | 016-17 | FY 20 | 17-18 | FY 20 | 18-19 | FY 20 | 19-20 |
| PROJECT NUMBER AND NAME | POTENTIAL FUNDING SOURCE(S) | TOTAL PROJECT COST | TOTAL CITY COST | Outside Leverage | CITY COST |
| Roads | | | | | | | | | | | | | | | |
| Neighborhood Road Rehabilitation, Repaving and Reconstruction Program | Local Street Fund | \$15,190,000 | \$15,190,000 | | \$2,090,000 | | \$2,090,000 | | \$2,100,000 | | \$2,970,000 | | \$2,970,000 | | \$2,970,000 |
| Haggerty Road (9 Mile to 10 Mile) Widening | Municipal Street/Potential Cost Share | \$110,000 | \$55,000 | \$55,000 | \$55,000 | | | | | | | | | | |
| 3 West Road Repaving, West Park Drive to City limits | Major Road Funds | \$167,050 | \$167,050 | | \$167,050 | | | | | | | | | | |
| 4 Beck Road (8 Mile to 9 Mile) Rehabilitation (Paser 3-4) Asphalt | Major Road Fund/Federal Grant | \$1,131,300 | \$908,425 | | | | \$92,500 | \$222,875 | \$815,925 | | | | | | |
| Novi Road from 12 Mile Road to 13 Mile Road Rehabilitation (Paser 4) Asphalt | Major Street Fund/Federal Grant | \$950,625 | \$399,185 | | | \$551,440 | \$399,185 | | | | | | | | |
| 9 Mile Road Meadowbrook to Novi Road Rehabilitation | Major Street Fund/Federal Grant | \$426,625 | \$216,817 | | | \$209,808 | | | | | | | | | |
| Crescent Blvd (New Roadway) Extension Between Grand River Avenue and Novi Road - Phase II and III | Municipal Street Fund, Private Funding | \$3,417,580 | \$627,580 | | | \$2,790,000 | \$627,580 | | | | | | | | |
| 8 Karim Blvd., Rehabilitation (Paser 4) Asphalt | Major Street Fund | \$662,500 | \$662,500 | | | 7 // | \$662,500 | | | | | | | | |
| Crescent Blvd., Novi Road to Town Center Drive 9 Rehabilitation (Paser 4) | Major Street Fund | \$890,200 | \$890,200 | | | | \$890,200 | | | | | | | | |
| Meadowbrook Road Rehabilitation, I-96 to 12 Mile, (Paser 5) | Major Street Fund | \$407,375 | \$407,375 | | | | | | \$407,375 | | | | | | |
| Taft Road, 10 mile Road to Grand River Avenue (Paser 4) Asphalt | Major Road Fund, Potential Grant Funding | \$608,500 | \$271,611 | | | | | \$336,889 | \$271,611 | | | | | | |
| Taft Road, 9 Mile Road to 10 Mile Road Rehabilitation (Paser 4) Asphalt | Major Street Fund/Potential Federal Grant opportunity | \$1,153,125 | \$828,036 | | | | | \$325,089 | \$828,036 | | | | | | |
| 13 Trans-X Drive Rehabilitation (Paser 5/4) Concrete | Major Street Fund | \$377,800 | \$377,800 | | | | | | | | \$377,800 | | | | |
| Wixom Road, from 10 Mile Road to 11 Mile Road (Paser 5) Asphalt | Major Street fund, Federal Grant application submitted 2011 | \$71 <i>7,</i> 400 | \$717,400 | | | | | | | | \$717,400 | | | | |
| 13 Mile Road Rehabilitation, Novi Road to Meadowbrook Road (Paser 6) Asphalt | Major Street Fund and potential Federal Grant | \$554,550 | \$554,550 | | | | | | | | \$554,550 | | | | |
| Southwest Quadrant Ring Road Flint Street, Novi Road and Grand River - New | Municipal Street Fund | \$1,818,612 | \$1,818,612 | | | | | | | | \$1,818,612 | | | | |
| 17 Sixth Gate Reconstruction | Local Street Fund | \$98,585 | \$98,585 | | | | | | | | \$98,585 | | | | |
| Beck Road Widening (8 Mile to 10 Mile) Preliminary Engineering ONLY | Potential STP-U Federal Grant funds, Major Roads | \$1,000,000 | \$200,000 | | | | | | | \$800,000 | \$200,000 | | | | |
| Meadowbrook Road (Southbound at 11 Mile)Add Right turn lane | Major Street Fund | \$131,100 | \$131,100 | | | | | | | | \$131,100 | | | | |
| 20 Meadowbrook Road (North of 12 Mile Road) Major Repair | Major Street Fund | \$584,800 | \$584,800 | | | | | | | | \$584,800 | | | | |
| 11 Mile Road Rehabilitation and Repaving, Taft Road to Beck Road (Paser 6) Asphalt | Major Street Fund | \$782,700 | \$782,700 | | | | | | | | | | \$782,700 | | |
| 22 Old Novi Road Rehabilitation (Paser 7) Asphalt | Major Street Fund | \$665,800 | \$665,800 | | | | | | | | | | \$665,800 | | |

| | | | | Bud | dget | | Proj | ected | | | | Fore | ecast | | |
|---|---|--------------------------|--------------------|---------------------|-------------|---------------------|-------------|---------------------|-------------|---------------------|---------------|---------------------|-------------|---------------------|-------------|
| | | | | FY 20 | 14-15 | FY 20 | 15-16 | FY 20 | 016-17 | FY 20 | 17-18 | FY 20 |)18-19 | FY 20 | 19-20 |
| PROJECT NUMBER AND NAME | POTENTIAL FUNDING SOURCE(S) | TOTAL PROJECT COST | TOTAL CITY COST | Outside Leverage | CITY COST | Outside Leverage | CITY COST | Outside Leverage | CITY COST |
| Donelson to Sheraton and West Oaks - New Road Construction (as recommended in Master Plan) | Municipal Street Fund | \$901,000 | \$901,000 | | | | | | | | | | \$901,000 | | |
| Jo Drive Rehabilitation and Extension (Paser 4) Concrete | Municipal Street Fund | \$474,000 | \$474,000 | | | | | | | | | | | | \$474,000 |
| 25 11 Mile Rehabilitation (Taft to Clark) PASER 5 | Major Street Fund | \$321,840 | \$321,840 | | | | | | | | | | | | \$321,840 |
| 26 11 Mile Rehabilitation (Beck to Wixom) PASER 6 | Major Street Fund | \$748,680 | \$748,680 | | | | | | | | | | | | \$748,680 |
| West Park Rehabilitation (West Road to Pontiac Trail) PASER 5- 27 | Major Street Fund | \$616,030 | \$616,030 | | | | | | | | | | | | \$616,030 |
| L L | Roads Total | \$34,907,777 | \$29,616,676 | \$55,000 | \$2,312,050 | \$3,551,248 | \$4,978,782 | \$884,853 | \$4,422,947 | \$800,000 | \$7,452,847 | | \$5,319,500 | | \$5,130,550 |
| Intersections & Signals | | , | , ,,, | , , | , ,,, ,,,,, | 12,22 | 1 7 | , , | 1 7 7 | , , | 1111111111111 | | 10,000 | | 1.,, |
| 28 13 Mile and Cabot-New Signal | Municipal Street Fund/Potential Private Funds | \$203,000 | \$101,500 | \$101,500 | \$101,500 | | | | | | | | | | |
| Napier Road and 10 Mile Road Intersection Improvements to Include Paving Napier Road. | Municipal Street Fund, Tri-Party | \$3,100,000 | \$350,000 | | | \$2,750,000 | \$350,000 | | | | | | | | |
| | Potential Grand, Major Road | | | | | | | | | | | | | | |
| 30 Taft and 9 Mile Road - New Roundabout | Funds | \$419,394 | \$82,394 | | | | \$82,394 | \$337,000 | | | | | | | |
| 31 New Roundabout at 11 Mile Road and Wixom Road | Major Road Fund | \$875,750 | \$875,750 | | | | | | \$875,750 | | | | | | |
| Add Dual Left Turn Lane - East Bound Grand River at Beck Road | Possible Grant, Possible Tri- Party, Municipal Street Fund | \$676,900 | \$276,900 | | | | | | \$54,000 | \$400,000 | \$222,900 | | | | |
| 33 Beck Road at 9 Mile Road Signal Modernization | Major Street Fund | \$215,000 | \$215,000 | | | | | | | | | | \$215,000 | | |
| 34 Lewis and Haggerty Road - New Signal | Municipal Street Fund | \$225,000 | \$225,000 | | | | | | | | | | \$225,000 | | |
| 35 Novi Road and 13 Mile Road Signal Modernization | Major Street Fund | \$260,000 | \$260,000 | | | | | | | | | | | | \$260,000 |
| | Intersections & Signals Total | \$5,975,044 | \$2,386,544 | \$101,500 | \$101,500 | \$2,750,000 | \$432,394 | \$337,000 | \$929,750 | \$400,000 | \$222,900 | | \$440,000 | | \$260,000 |
| Sidewalks & Pathways | | | | | | | | | | | | | | | |
| Americans with Disabilities Act (ADA) Compliance Plan Annual Implementation | Municipal Street Fund | \$300,000 | \$300,000 | | \$50,000 | | \$50,000 | | \$50,000 | | \$50,000 | | \$50,000 | | \$50,000 |
| 37 11 Mile Road Pathways (Town Center to Meadowbrook) | Major Road Fund | \$406,100 | \$406,100 | | \$406,100 | | | | | | | | | | |
| Segment 89Novi Road, East Side 10 Mile Road - Lidstrom (8' foot Pathway) Concrete | Municipal Street Fund | \$125,950 | \$125,950 | | \$125,950 | | | | | | | | | | |
| Segment 76Grand River, North Side, East of Seeley, (8' foot Pathway Short Segment) Concrete | Municipal Street Fund | \$30,560 | \$30,560 | | \$30,560 | | | | | | | | | | |
| Segment 14510 Mile Road (6', north side)CSX to Catherine Industrial (gap) | Municipal Street Fund | \$51,360 | \$51,360 | | \$51,360 | | | | | | | | | | |
| Pontiac Trail at Geisler Middle SchoolImprove Pedestrian 41 Crossing | Municipal Street Fund | \$99,250 | \$99,250 | | \$99,250 | | | | | | | | | | |
| Segment 1098 Mile Road (north side, 8' pathway) between 42 Garfield and Beck | Municipal Street Fund/Potential Grant | \$444,670 | \$444,670 | | \$444,670 | | | | | | | | | | |
| Segment 129-14 Mile Road (5', south side)Haverhill Farms to Maples Place | Municipal Street Fund | \$95,464 | \$95,464 | | | | \$95,464 | | | | | | | | |
| Segment NC4-Neighborhood Connection Between Main Street and Meadowbrook Glens | Municipal Street Fund | \$94,400 | \$94,400 | | | | \$94,400 | | | | | | | | |
| 45 Taft Road at Jacob Drive - Non-Motorized Crossing | Municipal Street Fund | \$25,000 | \$25,000 | | | | \$25,000 | | | | | | | | |

| | | | | Buc | get Projected 4-15 FY 2015-16 FY 2016-1 | | | | 214 17 | EV 20 |)17-18 | | ecast 118-19 | EV 20 | 019-20 |
|--|---|-----------------------|-----------------------|---------------------|--|----------|-----------------------|----------|-----------|----------|-----------|-----------|-----------------|----------|-----------------------|
| PROJECT NUMBER AND NAME | POTENTIAL FUNDING SOURCE(S) | TOTAL PROJECT | TOTAL CITY COST | Outside Leverage | CITY COST | Outside | CITY COST | Outoido | CITY COST | Outside | CITY COST | Outside | CITY COST | Outside | CITY COST |
| Segment 6210 Mile Road, Eaton Center to Churchill (6' 36 Sidewalk and Boardwalk) for North Side | Municipal Street Fund | COST | | Leverage | | Leverage | ¢1/1 220 | Leverage | | Leverage | | Leverage | | Leverage | |
| 46 Sidewalk and Boardwalk) for North Side Segment 10-Beck Road, East Side, South of Pontiac Trail, (5' 47 foot Sidewalk Short Segment) Concrete | Municipal Street Fund | \$161,330 \$30,930 | \$161,330 \$30,930 | | | | \$161,330 \$30,930 | | | | | | | | |
| Segment 9Pontiac Trail, South Side (6' foot Sidewalk) Beck Road to West Park Drive | Municipal Street Fund | \$455,495 | \$455,495 | | | | φοσγισσ | | \$46,410 | | \$409,085 | | | | |
| Segment 127ANovi Way, East Side (6' foot Sidewalk) 49 Concrete | Municipal Street Fund | \$27,387 | \$27,387 | | | | | | \$27,387 | | | | | | |
| Segment 53–Beck Road, West Side, (8' foot Pathway) 11 Mile 50 Road to Kirkway Place | Municipal Street Fund | \$81,000 | \$81,000 | | | | | | \$81,000 | | | | | | |
| Segment 105 - 8 Mile Road (north side, 8' pathway) between Garfield and Napier | Special Assessment Funds/Potential Federal Grant | \$735,260 | \$735,260 | | | | | | \$126,000 | | \$609,260 | | | | |
| Segment 51-10 Mile Road (5' wide, north side)-Dinser to Woodham | Municipal Street Fund | \$181,600 | \$181,600 | | | | | | | | \$181,600 | | | | |
| Segment 81–10 Mile Road, South Side, (8' foot Pathway) 53 Meadowbrook Road to Haggerty Road | Municipal Street Fund | \$619,767 | \$619,767 | | | | | | | | \$100,800 | | \$279,067 | | \$239,900 |
| Segment 133Wixom Road Crossing, North of 11 Mile Road (8' foot Pathway Short Segment) Concrete | Municipal Street Fund | \$37,050 | \$37,050 | | | | | | | | \$37,050 | | | | |
| Segment 39–Beck Road, West Side, from 11 Mile Road to Providence | Municipal Street Fund | \$184,441 | \$184,441 | | | | | | | | \$184,441 | | | | |
| Segment 154–10 Mile Road (8' foot Pathway) South Side, Between Pheasant Run and Quince Drive, with Crosswalk to North | Municipal Street Fund | \$288 <i>,77</i> 0 | \$288,770 | | | | | | | | \$288,770 | | | | |
| M-5/I-275 Regional Trail Connection - Phase II - Meadowbrook 57 Road and 13 Mile Road, between 12 Mile Road and M-5 | Municipal Street Fund, Potential Transportation Enhancement Grant | \$1,118, <i>7</i> 30 | \$385,346 | | | | | | | | \$97,000 | \$733,384 | \$288,346 | | |
| Segment 939 Mile Road, Novi Road to Taft, North Side (6' foot Sidewalk) Concrete | Municipal Street Fund | \$288,920 | \$288,920 | | | | | | | | \$63,550 | | \$225,370 | | |
| Segment 9910 Mile Road, South Side, from Wixom Road to 59 Beck Road (8' foot Pathway) | Municipal Street Fund | \$462,312 | \$462,312 | | | | | | | | \$462,312 | | | | |
| Installation of Crosswalks on 12 Mile Road, at Donelson Drive and Cabaret Drive | Municipal Street Fund | \$476,000 | \$476,000 | | | | | | | | \$476,000 | | | | |
| Segment 119Meadowbrook Road, East Side, (6' foot 61 Sidewalk) 8 Mile Road to 9 Mile Road | Municipal Street Fund | \$377,000 | \$377,000 | | | | | | | | | | \$377,000 | | |
| Segment 90-10 Mile Road, (8' foot Pathway) South Side, Novi Road to Chipmunk Trail - Concrete | Municipal Street Fund | \$287,800 | \$287,800 | | | | | | | | | | \$287,800 | | |
| 63 Non-motorized Crossing of I-96 at Novi Road Segment 889 Mile Road, North Side, Novi Road - Railroad (6' 64 Sidewalk) Concrete | Municipal Street Fund Municipal Street Fund | \$763,100 | \$763,100 | | | | | | | | | | \$142,700 | | \$620,400 |
| 64 Sidewalk) Concrete Segment 29–12 Mile Road, South Side, Between 65 Meadowbrook Road and Novi Road | Municipal Street Fund | \$178,302 \$69,200 | \$178,302 \$69,200 | | | | | | | | | | | | \$178,302 \$69,200 |
| Segment 70Meadowbrook Road (8' wide, west side) 66 Gateway Village to 11 Mile | Municipal Street Fund | \$451,850 | \$451,850 | | | | | | | | | | | | \$451,850 |

| | | | | Bud | dget | | Proj | ected | | | | Fore | ecast | | |
|---|--------------------------------|--------------------------|--------------------|---------------------|-------------|---------------------|-------------|---------------------|-----------|---------------------|-------------|---------------------|-------------|---------------------|-------------|
| | | | | FY 20 |)14-15 | FY 20 | 015-16 | FY 2 | 016-17 | FY 20 |)17-18 | FY 20 | 18-19 | FY 20 | 019-20 |
| PROJECT NUMBER AND NAME | POTENTIAL FUNDING SOURCE(S) | TOTAL PROJECT COST | TOTAL CITY COST | Outside Leverage | CITY COST | Outside Leverage | CITY COST | Outside Leverage | CITY COST | Outside Leverage | CITY COST | Outside Leverage | CITY COST | Outside Leverage | CITY COST |
| Segment 514 Mile Road, South Side, Beach walk to East Lake | | | | | | | | | | | | | | | |
| 67 Drive | Municipal Street Fund | \$64,300 | \$64,300 | | | | | | | | | | | | \$64,300 |
| Segment 84Meadowbrook Road, 9 Mile Road to 10 Mile | | | | | | | | | | | | | | | |
| Road (6' Sidewalk) for East Side | Municipal Street Fund | \$795,013 | \$795,013 | | | | | | | | | | | | \$795,013 |
| 69 Non-Motorized Crossing of I-96 at Taft Road | Municipal Street Fund | \$2,070,172 | \$2,070,172 | | | | | | | | | | | | \$2,070,172 |
| | Sidewalks & Pathways Total | \$11,878,483 | \$11,145,099 | | \$1,207,890 | | \$457,124 | | \$330,797 | | \$2,959,868 | \$733,384 | \$1,650,283 | | \$4,539,137 |
| Storm Sewer & Drainage | • | | | • | • | | • | • | • | | • | | • | | |
| Streambank Stabilization-Bishop Creek and Ingersol (10 Mile | | | | | | | | | | | | | | | |
| 70 to Meadowbrook) | Drain Fund | \$927,050 | \$927,050 | | \$176,390 | | \$750,660 | | | | | | | | |
| | | | | | | | | | | | | | | | |
| 71 Orchard Hill Place Regional Detention Basin Improvement | Drain Fund | \$152,975 | \$152,975 | | \$26,375 | | \$126,600 | | | | | | | | |
| 72 Middle Rouge at Flint Street, Streambank Stabilization | Drain Fund | \$337,840 | \$337,840 | | \$337,840 | | | | | | | | | | |
| Village Wood Lake/Village Oaks Lake Inlet and Outlet | | | | | | | | | | | | | | | |
| 73 Improvements | Drain Fund | \$929,170 | \$929,170 | | | | \$929,170 | | | | | | | | |
| Bishop District New Sedimentation Dredging Near 11 Mile | | | | | | | | | | | | | | | |
| 74 Road | Drain Fund | \$200,832 | \$200,832 | | | | | | \$200,832 | | | | | | |
| 75 Rotary Park Streambank Stabilization | Drain Fund | \$160,900 | \$160,900 | | | | | | \$160,900 | | | | | | |
| Streambank Stabilization Ingersol Creek (10 Mile Road to | | | | | | | | | | | | | | | |
| 76 Willowbrook Drive) | Drain Fund | \$409,397 | \$409,397 | | | | | | | | \$87,137 | | \$322,260 | | |
| Streambank Stabilization Bishop Creek (along Meadowbrook, | | | | | | | | | | | | | | | |
| 77 north of Grand River) | Drain Fund | \$531,197 | \$531,197 | | | | | | | | | | \$531,197 | | |
| 78 Streambank Stabilization on Rouge River near 9 Mile Road | Drain Fund | \$1,316,820 | \$1,316,820 | | | | | | | | | | | | \$1,316,820 |
| | Storm Sewer & Drainage Total | \$4,966,181 | \$4,966,181 | | \$540,605 | | \$1,806,430 | | \$361,732 | | \$87,137 | | \$853,457 | | \$1,316,820 |
| Sanitary Sewer | • | | | | | | | | | | | | | | |
| Sanitary Sewer Upgrade to Increase Pipe Capacity - 9 Mile | | | | | | | | | | | | | | | |
| 79 Road East of Meadowbrook Road. | Water & Sewer Fund | \$514,000 | \$514,000 | | \$514,000 | | | | | | | | | | |
| 80 Park Place Pump Station Upgrades | Water & Sewer Fund | \$240,000 | \$240,000 | | \$240,000 | | | | | | | | | | |
| 81 8 New Sewer Flow Meters | Water & Sewer Fund | \$40,000 | \$40,000 | | \$40,000 | | | | | | | | | | |
| Sanitary Sewer Upgrade to Increase Pipe Capacity - 9 Mile | | | | | | | | | | | | | | | |
| Road, West of Novi Road | Water & Sewer Fund | \$350,000 | \$350,000 | | | | \$350,000 | | | | | | | | |
| | Sanitary Sewer Total | \$1,144,000 | \$1,144,000 | | \$794,000 | | \$350,000 | | | | | | | | |
| Water Distribution | | | | | | | | | | | | | | | |
| 12" inch Water Main Along 14 Mile Road, Haverhill to Maples- | | | | | | | | | | | | | | | |
| 83 New | Water & Sewer Fund | \$140,000 | \$140,000 | | \$140,000 | | | | | | | | | | |
| | | | <u> </u> | | | | | | | | | | | | |
| 84 16" inch Water Main Along Meadowbrook Road Under I-96 | Water & Sewer Fund | \$489,000 | \$489,000 | | \$489,000 | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| 85 16" inch Water Main Along 9 Mile Road, Center to Novi Road | Water & Sewer Fund | \$499,000 | \$499,000 | | \$499,000 | | | | | | | | | | |
| Cabot Road Meter Installation and 24" inch Connection with | | | | | | | | | | | | | | | |
| 86 Detroit Water and Sewerage Department (DWSD) | Water & Sewer Fund | \$832,000 | \$832,000 | | | | \$832,000 | | | | | | | | |
| | Water 6 Carren 5 | | | | | | | | | | | | | | |
| 87 Cabot 24" inch Water Main, MacKenzie to 14 Mile Road | Water & Sewer Fund | \$710,000 | \$710,000 | | | | \$710,000 | | | | | | | | |

| | | | | | Bud | get | • | | | | | | Fore | ecast | | |
|------|--|---|--------------------------|--------------------|---------------------|-------------|---------------------|-------------|---------------------|-----------|---------------------|-------------|---------------------|-------------|---------------------|-----------|
| | | | | | FY 201 | 14-15 | FY 20 | 015-16 | FY 2 | 016-17 | FY 20 | 17-18 | FY 20 | 18-19 | FY 20 | 019-20 |
| | PROJECT NUMBER AND NAME | POTENTIAL FUNDING SOURCE(S) | TOTAL PROJECT COST | TOTAL CITY COST | Outside Leverage | CITY COST | Outside Leverage | CITY COST | Outside Leverage | CITY COST | Outside Leverage | CITY COST | Outside Leverage | CITY COST | Outside Leverage | CITY COST |
| 88 | 12" inch Water Main Along 8 Mile Road, Club Lane to Turnberry | Water & Sewer Fund | \$203,000 | \$203,000 | | | | \$203,000 | | | | | | | | |
| 89 | 12" inch Water Main Along 10 Mile from Wixom to Terra Del Mar | Water & Sewer Fund/Private Funding | \$421,000 | \$421,000 | | | | | | \$421,000 | | | | | | |
| 90 | 12" inch Water Main Along 11 Mile Road, Lee BeGole Drive to the West | Private Funding | \$413,000 | \$413,000 | | | | | | \$413,000 | | | | | | |
| 91 | 12" inch Water Main on 11 Mile Road, Seeley to Meadowbrook Road | Water & Sewer Fund | \$819,000 | \$819,000 | | | | | | | | \$819,000 | | | | |
| 92 | 12" inch Water Main Along Haggerty Road North of 12 Mile Road | Water & Sewer Fund | \$128,000 | \$128,000 | | | | | | | | \$128,000 | | | | |
| 93 | 11 Mile Road Water Main Gaps, 1att to Beck Road | Water & Sewer Fund | \$474,500 | \$474,500 | | | | | | | | \$474,500 | | | | |
| | | Water Distribution Total | \$5,128,500 | \$5,128,500 | | \$1,128,000 | | \$1,745,000 | | \$834,000 | | \$1,421,500 | | | | |
| Park | | | | | | | | | | | | | | | | |
| 94 | Ella Mae Power Park Access Road, Parking Lot and Pathway Resurfacing - Phase III | Parks, Recreation & Cultural Services | \$33,140 | \$33,140 | | \$33,140 | | | | | | | | | | |
| 95 | Tim Pope Play Structure Replacement | Parks, Recreation & Cultural Services | \$250,000 | \$250,000 | | \$250,000 | | | | | | | | | | |
| 96 | Greenway Development Phase IA (ITC Community Sports Park to 9 Mile Rd.) | Services/Potential Grant | \$445,552 | \$445,552 | | | | \$445,552 | | | | | | | | |
| 97 | Brookfarm Park Parking, Tables and Grills | Parks, Recreation and Cultural Services | \$39,880 | \$39,880 | | | | \$39,880 | | | | | | | | |
| 98 | ITC Community Sports Park Pathway Resurfacing | Parks, Recreation & Cultural Services | \$85,670 | \$85,670 | | | | \$85,670 | | | | | | | | |
| 99 | Ella Mae Power Park Play Structure Replacement | Federal/State Grant/Potential Grant | \$85,000 | \$85,000 | | | | | | \$85,000 | | | | | | |
| 100 | ITC Community Sports Park Trail | Parks, Recreation and Cultural Services | \$439,637 | \$439,637 | | | | | | \$439,637 | | | | | | |
| 101 | ITC Community Sports Park Asphalt Paved Parking lots | Parks, Recreation & Cultural Services | \$374,924 | \$374,924 | | | | | | | | \$374,924 | | | | |
| 102 | Pavilion Shore Park - Phase V (Water Feature and Restroom Facility) | Parks, Recreation and Cultural Services | \$420,000 | \$420,000 | | | | | | | | \$420,000 | | | | |
| 103 | ITC Community Sports Park Play Structure Replacement | Parks, Recreation & Cultural Services | \$75,000 | \$75,000 | | | | | | | | \$75,000 | | | | |
| 104 | Lakeshore Park Asphalt Paved Parking Lot and Drive - New | Parks, Recreation and Cultural Services | \$228,276 | \$228,276 | | | | | | | | \$228,276 | | | | |
| 105 | Pavilion Shore Park Play Structure - New | Parks, Recreation & Cultural Services/Potential Grant | \$104,955 | \$104,955 | | | | | | | | \$104,955 | | | | |
| 106 | Disc Golf Course at Power Park | Parks, Recreation and Cultural Services | \$73,100 | \$73,100 | | | | | | | | \$73,100 | | | | |
| 107 | Wildlife Woods Trail | Parks, Recreation & Cultural Services | \$95,630 | \$95,630 | | | | | | | | \$95,630 | | | | |
| 108 | Greenway Development Phase IB (9 Mile Rd. to Fire Station 4 Parking Lot) | Parks, Recreation & Cultural Services/Potential Grant | \$1,345,065 | \$1,345,065 | | | | | | | | | | \$1,345,065 | | |
| 109 | Field/Parking Development with Novi Community School District for School's 11 Mile/Beck Road Property | Parks, Recreation & Cultural Services | \$182,000 | \$182,000 | | | | | | | | | | \$182,000 | | |

| | | | | | Buc | dget | • | | | | | | Fore | ecast | | |
|------|--|--------------------------------|--------------------------|--------------------|---------------------|-----------|---------------------|-----------|---------------------|-----------|---------------------|-------------|---------------------|-------------|---------------------|-----------|
| | | | | | FY 20 | 14-15 | FY 20 | 015-16 | FY 2 | 016-17 | FY 20 | 17-18 | FY 20 |)18-19 | FY 20 | 019-20 |
| | PROJECT NUMBER AND NAME | POTENTIAL FUNDING SOURCE(S) | TOTAL PROJECT COST | TOTAL CITY COST | Outside Leverage | CITY COST | Outside Leverage | CITY COST | Outside Leverage | CITY COST |
| | Ella Mae Power Park Irrigation and Fencing Fields 5 & 6 | Parks, Recreation & Cultural | | | | | | | | | | | | | | |
| 110 | Replacement | Services | \$113,380 | \$113,380 | | | | | | | | | | | | \$113,380 |
| | | Parks, Recreation & Cultural | | | | | | | | | | | | | | |
| 111 | Ella Mae Power Park Lighting - Ball fields 5 & 6 - New | Services | \$255,000 | \$255,000 | | | | | | | | | | | | \$255,000 |
| | Pavilion Shore Park Phase III (Pavilion and Waterfront Picnic | Parks, Recreation & Cultural | | | | | | | | | | | | | | |
| 112 | Plaza, Site Lighting)-Grant Match | Services/Potential Grant | \$270,900 | \$81,300 | | | | | | | | | | | \$189,600 | \$81,300 |
| | | Parks Total | \$4,917,109 | \$4,727,509 | | \$283,140 | | \$571,102 | | \$524,637 | | \$1,371,885 | | \$1,527,065 | \$189,600 | \$449,680 |
| Equi | pment | | | | | | | | | | | | | | | |
| | Lieutenant (Vehicle #336 - 2009 Ford Expedition) - | | | | | | | | | | | | | | | |
| 113 | Replacement | General Fund | \$57,000 | \$57,000 | | \$57,000 | | | | | | | | | | |
| 114 | One - 1-Ton Dump Truck w/Plow, and Swap Loader - New | General Fund | \$110,000 | \$110,000 | | \$110,000 | | | | | | | | | | |
| 115 | Roadside Mower - Replacement | General Fund | \$113,335 | \$113,335 | | \$113,335 | | | | | | | | | | |
| | Civic Center HVAC Air Handling Units #1 and #2 | | | | | | | | | | | | | | | |
| 116 | Replacement | General Fund | \$130,000 | \$130,000 | | \$130,000 | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| 117 | Phone System Upgrade to Voice Over Internet Protocol (VOIP) | | \$146,671 | \$146,671 | | \$146,671 | | | | | | | | | | |
| 118 | Police Department Air Handlers - Replacement | General Fund | \$151,800 | \$151,800 | | \$151,800 | | | | | | | | | | |
| 119 | Three New Wing Plows | General Fund | \$45,000 | \$45,000 | | \$45,000 | | | | | | | | | | |
| 120 | Firearms Training Simulator (FATS) Replacement | General Fund | \$74,650 | \$74,650 | | | | \$74,650 | | | | | | | | |
| 121 | Zamboni Ice Resurfacer - Replacement | Ice Arena Fund | \$92,500 | \$92,500 | | | | \$92,500 | | | | | | | | |
| | Compressed Air Foam System - Engine #2 & #3 (Vehicles | | | | | | | | | | | | | | | |
| 122 | #322, 313) - New | General Fund | \$98,175 | \$98,175 | | | | \$98,175 | | | | | | | | |
| 123 | Civic Center Parking Lot Video Project | General Fund | \$55,000 | \$55,000 | | | | \$55,000 | | | | | | | | |
| 124 | Tanker #1 (Vehicle #311 - 1997 Chevrolet) - Replacement | General Fund | \$284,500 | \$284,500 | | | | \$284,500 | | | | | | | | |
| | Two Single-Axle 5 Cubic Yard Dump Trucks w/Front Plows & Underbody Scrapers - (Replaces #686 & #687, 1994 Fords) | General Fund | \$330,000 | \$330,000 | | | | \$165,000 | | \$165,000 | | | | | | |
| 126 | Salt Dome Loading Conveyor | General Fund | \$170,000 | \$170,000 | | | | | | \$170,000 | | | | | | |
| 127 | Munters Dehumidification Unit Replacement | Ice Arena Fund | \$184,500 | \$184,500 | | | | | | \$184,500 | | | | | | |
| 128 | Two - Tandem-Axle Swap Loader Dump Trucks w/Front Plows, Underbody Scrapers (Replaces #699, 2000, #620, 2001 | | | | | | | | | | | | | | | |
| | Sterling) | General Fund | \$568,000 | \$568,000 | | | | | | \$284,000 | | \$284,000 | | | | |
| 129 | Public Address and Stereo System - Replacement | Ice Arena | \$26,100 | \$26,100 | | | | | | | | \$26,100 | | | | |
| 130 | Bobcat All-Wheel Loader - New | General Fund | \$50,000 | \$50,000 | | | | | | | | \$50,000 | | | | |
| 131 | One - Single-Axle 5 Cubic Yard Dump Truck w/Front Plow and Underbody Scraper - New | General Fund | \$165,000 | \$165,000 | | | | | | | | \$165,000 | | | | |
| | One - Single-Axle 5 Cubic Yard Dump Truck w/Front Plow and Underbody Scraper (Replaces #621, 2001 Sterling) | General Fund | \$165,000 | \$165,000 | | | | | | | | \$165,000 | | | | |
| 133 | Four- Combination V-Box Salt Spreader Inserts | General Fund | \$240,000 | \$240,000 | | | | | | | | \$240,000 | | | | |
| 134 | Mini Excavator Replacement (Replaces #622, 2000 Bobcat) | General Fund | \$85,000 | \$85,000 | | | | | | | | \$85,000 | | | | |

| PROJECT NUMBER AND NAME PROJECT NUMBER AND NAME PROJECT NUMBER AND NAME NOW NAME PROJECT NUMBER AND NAME NAME PROJECT NUMBER AND NAME NAME PROJECT NUMBER AND NAME NAME NAME NAME NAME NAME NAME NAME | | | | | | Bud | dget | Projected | | | Forecast | | | | | | |
|---|-----|--|-------------------------|-----------------|-----------------|-------|-----------|-----------|-----------------------|--|---------------|--|-------------|------------|-----------------|--------|-------------|
| PROJECT NUMBER AND MAKE Color Vord During Traces which Place on Color (Color Vord During Traces) Color Vord During Traces which Place on Color (Color Vord During Traces) Color Vord During Traces which Place on Color (Color Vord During Traces) Color Vord During Traces which Place on Color (Color Vord During Traces) Color Vord During Traces which Place on Color (Color Vord During Traces) | | | | | | FY 20 | 14-15 | FY 20 | FY 2015-16 FY 2016-17 | | FY 2017-18 FY | | | 2018-19 FY | | 119-20 | |
| 10 | | PROJECT NUMBER AND NAME | | PROJECT | | | CITY COST | | CITY COST | | CITY COST | | CITY COST | | CITY COST | | CITY COST |
| 10 | | | | | | | | | | | | | | | | | |
| 15 General Name Dorson Process will be control of the Control | | - · · · · · · · · · · · · · · · · · · · | | | | | | | | | | | | | | | |
| Separation Common Activity Control (MACL (195) Production Prod Salado Sa | 135 | Underbody Scraper (Replaces #605, 2001 Osh Kosh) | General Fund | \$165,000 | \$165,000 | | | | | | | | \$165,000 | | | | |
| 127 Recovery of Vertice 8144 2011 Foot Specification Spe | 136 | | General Fund | \$116,600 | \$116,600 | | | | | | | | \$116,600 | | | | |
| Section 27 (Aprilhone 2844 - 2011 First depotations) | | · | Saurian Hausinan Funad | | | | | | | | | | | | | | |
| 133 Recoverant Center Section 1 | | | serior Housing Fund | \$36,403 | \$36,403 | | | | | | | | | | \$36,403 | | |
| Comparison of Comparison (1997) 1997 1 | | · · · · · · · · · · · · · · · · · · · | General Fund | * (0.000 | # 40,000 | | | | | | | | | | # (0.000 | | |
| 19 | | | General Fond | \$69,200 | \$69,200 | | | | | | | | | | \$69,200 | | |
| 140 Closmor Replacement Replaces #644, 2073 Setting Vector Second Fund Second Fund Fund Fund Fund Fund Fund Fund Fu | | · · · · · · · · · · · · · · · · · · · | General Fund | \$165,000 | \$165,000 | | | | | | | | | | \$165,000 | | |
| 140 Closmor Replacement Replaces #644, 2073 Setting Vector Second Fund Second Fund Fund Fund Fund Fund Fund Fund Fu | | Truck-Mounted Combination (Jet and Vacuum) Sewer | | | | | | | | | | | | | | | |
| Special File (Vehicle #314 - 2009 Netentional Medical Ambitional Registerant) - Registerant - Regi | 140 | · · · · · · · · · · · · · · · · · · · | General Fund | \$400,000 | \$400,000 | | | | | | | | | | \$400,000 | | |
| 142 Ambielance) - Replacement | 141 | Front-End Loader Replacement (Replaces #689,1995 Case) | General Fund | \$252,000 | \$252,000 | | | | | | | | | | \$252,000 | | |
| Activity Content Con | | · | | | | | | | | | | | | | | | |
| 144 Groder (Replaces #612, 2005 CAT) General Fund \$300,000 \$3000,000 \$300,000 \$300,000 \$300,000 \$300,000 \$300,000 \$300,00 | | | General Fund | \$243,200 | \$243,200 | | | | | | | | | | | | \$243,200 |
| Comparison Com | 143 | | General Fund | \$300,000 | \$300,000 | | | | | | | | | | | | \$300,000 |
| Lide | 144 | Grader (Replaces #612, 2005 CAT) | General Fund | \$300,000 | \$300,000 | | | | | | | | | | | | \$300,000 |
| 146 M433, 1998 GMC General Fund \$123,200 \$123,200 \$123,200 \$123,200 \$123,200 \$123,200 \$123,200 \$123,200 \$129,000 \$12 | | Underbody Scraper (Replaces #603, 2003 Sterling) | | \$284,000 | \$284,000 | | | | | | | | | | | | \$284,000 |
| Name Section | 146 | | | \$123,200 | \$123,200 | | | | | | | | | | | | \$123,200 |
| 147 Arcade Demo and Upper Lobby Build Out Ice Arena \$50,000 \$50,000 \$50,000 \$50,000 148 Replacement General Fund \$233,100 \$233,100 \$84,900 \$148,200 149 New Front Entranceway Doors and Foyer Remodel Ice Arena Fund \$35,000 \$35 | | | Equipment Total | \$5,796,834 | \$5,796,834 | | \$753,806 | | \$769,825 | | \$803,500 | | \$1,296,700 | | \$922,603 | | \$1,250,400 |
| Fire Parking Lot Improvements (FS #2, #3, #4 & CEMS) - General Fund \$233,100 \$233,100 \$34,900 \$148,200 \$15 | | • | | | | | | | | | | | | | | | |
| 148 Replacement General Fund \$233,100 \$233,100 \$84,900 \$148,200 | 147 | | Ice Arena | \$50,000 | \$50,000 | | \$50,000 | | | | | | | | | | |
| Villa Barr Park Property Sewer Extension Water and Sewer Fund \$304,000 | 148 | | General Fund | \$233,100 | \$233,100 | | \$84,900 | | | | | | \$148,200 | | | | |
| 151 Civic Center Parking Lot & Novi Way Improvements General Fund \$431,000 \$431,000 \$430,000 \$391,000 \$10 | 149 | | Ice Arena Fund | \$35,000 | \$35,000 | | \$35,000 | | | | | | | | | | |
| 152 Community Development Furniture Replacement General Fund \$189,351 | 150 | Villa Barr Park Property Sewer Extension | Water and Sewer Fund | \$304,000 | \$304,000 | | \$304,000 | | | | | | | | | | |
| 153 Police Parking Lot East Improvements General Fund \$36,000 \$36, | 151 | Civic Center Parking Lot & Novi Way Improvements | General Fund | \$431,000 | \$431,000 | | \$40,000 | | \$391,000 | | | | | | | | |
| Police Access Driveway and Firearms Training Center Parking Lot - Replacement General Fund \$48,400 | 152 | Community Development Furniture Replacement | General Fund | \$189,351 | \$189,351 | | | | \$189,351 | | | | | | | | |
| 154 Lot - Replacement General Fund \$48,400 | 153 | Police Parking Lot East Improvements | General Fund | \$36,000 | \$36,000 | | | | \$36,000 | | | | | | | | |
| 156 DPS Mezzanine Build-Out General Obligation Bond \$456,500 \$456,500 \$ 157 DPS Field Services Complex Improvements - Electrical General Obligation Bond \$430,628 \$ DPS Field Services Complex - Building Expansion (Construction) General Obligation Bond \$8,751,105 \$ 158 (Library Parking Lot Improvements General Fund \$53,400 \$ Standard Services Complex - Building Expansion (Seneral Obligation Bond \$8,751,105 \$ Standard Services Complex - Building Expansion (Seneral Obligation Bond \$8,751,105 \$ Standard Services Complex - Building Expansion (Seneral Obligation Bond \$8,751,105 \$ Standard Services Complex - Building Expansion (Seneral Obligation Bond \$8,751,105 \$ Standard Services Complex - Building Expansion (Seneral Obligation Bond \$8,751,105 \$ Standard Services Complex - Building Expansion (Seneral Obligation Bond \$8,751,105 \$ Standard Services Complex - Building Expansion (Seneral Obligation Bond \$8,751,105 \$ Standard Services Complex - Building Expansion (Seneral Obligation Bond \$8,751,105 \$ Standard Services Complex - Building Expansion (Seneral Obligation Bond \$8,751,105 \$ Standard Services Complex - Building Expansion (Seneral Obligation Bond \$8,751,105 \$ Standard Services Complex - Building Expansion (Seneral Obligation Bond \$8,751,105 \$ Standard Services Complex - Building Expansion (Seneral Obligation Bond \$8,751,105 \$ Standard Services Complex - Building Expansion (Seneral Obligation Bond \$8,751,105 \$ Standard Services Complex - Building Expansion (Seneral Obligation Bond \$8,751,105 \$ Standard Services Complex - Building Expansion (Seneral Obligation Bond \$8,751,105 \$ Standard Services Complex - Building Expansion (Seneral Obligation Bond \$8,751,105 \$ Standard Services Complex - Building Expansion (Seneral Obligation Bond \$8,751,105 \$ Standard Services Complex - Building Expansion (Seneral Obligation Bond \$8,751,105 \$ Standard Services Complex - Building Expansion (Seneral Obligation Bond \$8,751,105 \$ Standard Services Complex - Building Expansion (Seneral Obligation Bond \$8,751,105 | 154 | | General Fund | \$48,400 | \$48,400 | | | | | | \$48,400 | | | | | | |
| 157 DPS Field Services Complex Improvements - Electrical General Obligation Bond \$430,628 \$430,628 \$ \$ \$430,628 \$ \$430,62 | 155 | Evaporative Cooling Tower Replacement | Ice Arena Fund | \$65,000 | \$65,000 | | | | | | \$65,000 | | | | | | |
| DPS Field Services Complex - Building Expansion (Construction) General Obligation Bond \$8,751,105 \$8,751,105 \$8,751,105 \$159 Library Parking Lot Improvements General Fund \$53,400 | | | | \$456,500 | \$456,500 | | | | | | \$456,500 | | | | | | |
| 158 (Construction) General Obligation Bond \$8,751,105 < | 157 | DPS Field Services Complex Improvements - Electrical | General Obligation Bond | \$430,628 | \$430,628 | | | | | | \$430,628 | | | | | | |
| 107 | 158 | | | \$8,751,105 | \$8,751,105 | | | | | | \$8,751,105 | | | | | | |
| Construction of a new Fire Station 1 General Obligation Bond \$3,125,000 \$3,125,000 \$3,125,000 | 159 | Library Parking Lot Improvements | General Fund | \$53,400 | \$53,400 | | | | | | \$53,400 | | | | | | |
| | 160 | Construction of a new Fire Station 1 | General Obligation Bond | \$3,125,000 | \$3,125,000 | | | | | | \$3,125,000 | | | | | | |

| | | | | | Bu | dget | Projected | | | | Forecast | | | | | | |
|-----|--|-------------------------------|--------------------------|--------------------|---------------------|-----------|---------------------|-----------|---------------------|--------------|---------------------|-----------|---------------------|-----------|---------------------|-----------|--|
| | | | | | FY 20 | 014-15 | FY 2015-16 | | FY 2016-17 | | FY 2017-18 | | FY 2018-19 | | FY 2019-20 | | |
| | PROJECT NUMBER AND NAME | POTENTIAL FUNDING SOURCE(S) | TOTAL PROJECT COST | TOTAL CITY COST | Outside Leverage | CITY COST | Outside Leverage | CITY COST | Outside Leverage | CITY COST | Outside Leverage | CITY COST | Outside Leverage | CITY COST | Outside Leverage | CITY COST | |
| | Villa, Davis Davil, Diana andr. Ch., alia | Parks Recreation and Cultural | | | | | | | | | | | | | | | |
| 161 | | Services | \$135,000 | \$135,000 | | | | | | | | \$135,000 | | | | | |
| | Carpet (Training Center/2nd Floor) & Furniture Replacement | | | | | | | | | | | | | | | | |
| 162 | (Records & Investigations) | General Fund | \$173,000 | \$173,000 | | | | | | | | \$173,000 | | | | | |
| 163 | Furniture Replacement - Police Training Center/EOC | General Fund | \$43,500 | \$43,500 | | | | | | | | \$43,500 | | | | | |
| 164 | ITC Community Sports Park Parking Lot Improvements | General Fund | \$157,500 | \$157,500 | | | | | | | | \$157,500 | | | | | |
| 165 | Lakeshore Park Parking Lot Improvements | General Fund | \$33,600 | \$33,600 | | | | | | | | | | \$33,600 | | | |
| | Meadowbrook Commons Activity Center Partial Parking Lot | | | | | | | | | | | | | | | | |
| 166 | Repair | Senior Housing Fund | \$75,245 | \$75,245 | | | | | | | | | | | | \$75,245 | |
| | | Bullaings & Property Total | \$14,826,329 | \$14,826,329 | | \$513,900 | | \$616,351 | | \$12,930,033 | | \$657,200 | | \$33,600 | | \$75,245 | |