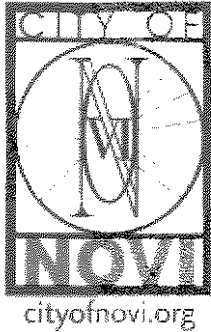



## MEMORANDUM



**TO:** CHARLES BOULARD  
BARBARA MCBETH

**FROM:** VICTOR CARDENAS, ASSISTANT CITY MANAGER 

**CC:** MARINA NEUMAIER  
LEADERSHIP GROUP

**SUBJECT:** CAPITAL IMPROVEMENT PLAN (CIP)

**DATE:** FEBRUARY 17, 2012

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Each year the City of Novi, as part of the annual budget process, prepares a Capital Improvement Plan (CIP). This document serves as a guidepost for major capital expenditures for next five (5) years. This is all done in accordance to the provisions outlined in the Municipal Planning Commission Act (PA285).

Attached is the City's most recent Capital Improvement Plan and was reviewed by a joint CIP Committee (which includes members of the City Council and Planning Commission) at their January 24, 2012 meeting. This plan is being presented to the Planning Commission for its consideration on February 22, 2012 meeting.

The City Manager will make recommendations for projects to be included in the 2012-13 Proposed Budget to City Council, which have not been identified to date, as staff continue to prepare information regarding funding and operating budgets.

If you have any questions, or would like any additional information, please let me know.

**2012-2018**

CAPITAL IMPROVEMENTS PROGRAM COMMITTEE

Justin Fischer, Novi City Council  
Wayne Wrobel, Novi City Council  
Laura Marie Casey, Novi City Council  
Michael Lynch, Novi Planning Commission  
Andrew Gutman, Novi Planning Commission  
Dave Baratta, Novi Planning Commission (alt.)  
Victor Cardenas, Staff Liaison

**Revised February 17, 2012**

**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.

# **Capital Improvements Program**

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## **City of Novi, Michigan**

### **2012-2018**

#### **Overview**

The City of Novi's Capital Improvements Program (CIP) is a planning tool, with a goal to identify and schedule capital improvements over a six-year period from 2012-2018. The CIP is an opportunity to formulate strategic long-term policy decisions that extend beyond the fiscal year 2012-2013 budget year. The CIP helps track multi-year projects that may require planning, design, land acquisition and construction. The projects identified in the CIP represent the 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, 2003-2008 (adopted October 20, 2003; amended July 25, 2005)
- Pathway and Sidewalk Prioritization Analysis and Process (adopted November 13, 2006)

#### **Definition of a Capital Improvement**

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.

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

- Identify and evaluate the needs for public facilities.
- Determine cost estimates for each capital project submitted.
- Determine if there will be future operating costs for such projects.
- Determine potential sources of funding for such projects.
- Adopt policies for implementing capital improvement construction.

- Anticipate and pre-plan projects with an emphasis on seizing opportunities for partnerships and alternative funding.

### **Impact of Capital Budget on the Operating Budget**

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 Municipal Planning Commission Act (Section 9, Public Act 285 of 1931). This mandate gives responsibility for preparing a CIP to local Planning Commission bodies, and reads as follows:

*"For the purpose of furthering the desirable future development of the municipality under the master plan the city planning commission, after the commission shall have adopted a master plan, shall prepare coordinated and comprehensive programs of public structures and improvements. The commission shall annually show those public structures and improvements, in the general order of their priority, which in the commissions judgment will be needed or desirable and can be undertaken within the six-year period. The above comprehensive coordinated programs shall be based upon the requirements of the community for all types of public improvements, and, to that end, each shall upon request furnish the commission with lists, plans and estimates of time and cost of public structures and improvements within the purview of such department."*

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

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

When capital improvements begin with careful planning and study, the 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 goals and policies. The CIP often avoids reactive planning, and instead replaces it with balanced growth initiatives.

## **Program Funding**

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

### Table of Icons

The following is a listing of the icons used to assist the reader:



Department of Public Services



Fiscal Year 12/13



Information Technology



Fiscal Year 13/14



Neighborhood and Business Relations



Fiscal Year 14/15



Facility Operations



Fiscal Year 15/16



Department of Public Safety



Fiscal Year 16/17



Department of Parks, Recreation and Cultural Services



Fiscal Year 17/18



Easement (temporary and permanent) Secured



Construction ready



Easement Needed



Grant Funding Possible



Design process initiated/complete



Grant Funding Secured

# Capital Improvements Program

## 2012-2018 Project Descriptions

### Roads

#### 1 Eight Mile Road Rehabilitation, Beck to Napier (Paser 3; Asphalt)

The Road Commission for Oakland County has obtained federal funding to repair and repaving of Eight Mile Road from Beck to Napier Road (Road Commission for Oakland County project). Federal Funding \$2,444,000, RCOC \$306,000, Local Share potentially \$306,000.



#### 2 Neighborhood Road Rehabilitation, Repaving and Reconstruction Road Program

The selection of streets is determined using the PASER surveys conducted in 2008, 2010 and 2011. 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.



#### 3 Crescent Blvd Extension between Grand River Avenue and Novi Road (Phase 2 and 3)

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. Potential for 80% Federal funding under the Federal Transportation Economic Development Fund Category A (TEDF-A) if a private entity develops or redevelops abutting property. The project would be completed in 3 phases over 3 fiscal years: 1- Northern section including intersections with Novi Rd. and Expo Center Drive (COMPLETED 2011), 2- Bridge and spur road to the west, 3- Completion of the road and intersection with Grand River.



#### 4 Bridge Repairs (Willowbrook Drive and Meadowbrook Road Bridges)

Project includes miscellaneous minor repairs to the Meadowbrook Road bridge over Ingersol Creek and routine preventative maintenance the Willowbrook Drive bridge over Ingersol Creek, based on findings of biannual bridge inspections.












































#### 5 Southwest Quadrant Ring Road (Flint St) Novi and Grand River (New Construction)













Study and potential future construction of a realignment of Flint Street to provide a connection to the ring road at the northwest quadrant of Grand River Avenue and Novi Road. A study of the Southwest Quadrant was recommended by the Ring Road study of the Northwest Quadrant.





- 6 Town Center Drive from Grand River to 11 Mile Rd. (Paser 3; Concrete to Asphalt)**  
Reconstruction of Town Center Drive from Grand River to 11 Mile (650 feet) as an asphalt road.
-  
- 7 Heslip Dr. Rehabilitation (Paser 3; Asphalt)**  
Rehabilitation of Heslip Drive from 9 Mile Road to the end (2,050 feet) to extend the life of the roadway.
-  
- 8 Town Center Drive Rehabilitation: Crescent Blvd. to 11 Mile Rd. (Paser 6, Concrete to Asphalt).**  
Rehabilitation of existing Town Center Drive from Crescent Blvd to 11 Mile Road (1,600 feet) to provide a smooth asphalt surface and to extend the useful life of the roadway.
-  
- 9 Pave Existing Paul Bunyan and Sixth Gate**  
These existing streets are gravel/chip seal and would provide better connectivity to the Main Street development from Grand River and Novi Road.
-  
- 10 West Road Repaving (West Park Drive to City Limits)**  
Rehabilitation/Repaving of 1,500 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.
-  
- 11 Crescent Blvd., Novi Rd to Town Center Dr. Rehabilitation (Paser 3-4; Concrete to Asphalt)**  
Rehabilitation 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.
-  
- 12 Karim Blvd. Rehabilitation (Paser 3-Asphalt)**  
Reconstruction of Karim Blvd between 10 Mile Road and Grand River Avenue (1,771 feet). The pavement is in poor condition and the road lacks sufficient drainage, requiring reconstruction of the road. The project will include the construction of all existing sidewalk gaps.
-   
- 13 11 Mile Rd., Town Center to Meadowbrook, Rehabilitation (Paser 4; Concrete to Asphalt)** Rehabilitation of existing 11 Mile Road from Town Center to west of Meadowbrook (3,100 feet) to provide a smooth asphalt surface and extend the life of the road.
-   

- 14 11 Mile Road Repaving: Taft Road to Beck Road (Paser 5-6; Asphalt)**  
 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.
-   
- 15 13 Mile Road Rehabilitation, Novi Road to Meadowbrook Road (Paser 5; Asphalt)**  
 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. Potential for 80% Federal funding.
-   
- 16 Meadowbrook Road Rehabilitation (I-96 to 12 Mile)**  
 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.
-   
- 17 Novi Rd. from 12 Mile to 13 Mile Rehabilitation (Paser 4-5; Asphalt)**  
 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. Potential for 80% Federal funding.
-     
- 18 Taft Road, 9 Mile Road to 10 Mile Road Rehabilitation (Paser 6-7; Asphalt)**  
 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.
-     
- 19 Old Novi Rd. Rehabilitation (Paser 7; Asphalt)**  
 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.
-    

- 20 Cabot Dr. Extension (New)--MacKenzie to 14 Mile Road--Private Funds**  
Private development project to construct a new north-south between M-5 and Haggerty Road from current northern end of Cabot Drive to 14 Mile Road.
-  
- 21 Wixom Road from 10 Mile Road to 11 Mile Road (PASER 5; Asphalt)**  
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.
-   
- 22 Trans-X Drive Rehabilitation (Paser 5/4; Concrete)**  
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.
-  
- 23 Meadowbrook Road Reconstruction - 9 Mile to 10 Mile (PASER 4-5, Concrete)**  
Reconstruct Meadowbrook Road from 9 Mile Road to 10 Mile Road in concrete (5,280 feet) and make safety improvements as needed. The existing roadway is concrete. Bike lanes would be added to the road as recommended by the non-motorized master plan to improve non-motorized connectivity for this corridor.
-  
- 24 Donelson to Sheraton and West Oaks - New Road Construction (as recommended in Master Plan)**  
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.
-   

## Intersections & Signals

- 25 Replacement of Town Center Area Street Lighting (SAD 108)**  
The street lighting and decorative walkway lighting that encircles Town Center along Town Center Drive, East Crescent Boulevard and portions of Novi Road and Grand River Avenue has exceeded its useful life and requires replacement. The cost to maintain defective poles and luminaires is prohibitive, and finding in-kind replacement materials for the existing system is difficult. DPS retained a consultant to make a set of recommendations for the future rehabilitation of this system. Diclemente & Siegel Associates recommends that all street lighting and walkway lighting be replaced with new poles and luminaires, new concrete bases and

feeder wiring. The new lamps would have energy efficient light-emitting diode (LED) technology to reduce future energy costs by nearly 60%. This project would be funded by the available fund balance in Special Assessment District (SAD) 108, and supplemented by the Major Street Fund if needed.



**26 Meadowbrook Road and Nine Mile Road Signal Improvement/Modernization**

Reconstruction of the existing traffic signal for the intersection of Nine Mile Road at Meadowbrook Road to include left turn signals and connection to the FAST-TRAC signal coordination system with Road Commission for Oakland County. The project has been awarded 80% federal safety grant funding for construction in 2012 to address the number of crashes at the intersection due to lack of a dedicated left turn phase for the signal.



**27 Extend Right Turn Lane--WB Grand River Avenue at Beck Road**

The existing right turn lane for westbound Grand River Avenue to northbound Beck Road would be extended several hundred feet to increase the capacity of the intersection. This project would alleviate the traffic back-ups that occur for westbound Grand River during the afternoon peak hours. The project is being submitted for consideration of a federal congestion mitigation/air quality (CMAQ) improvement grant.



**28 Meadowbrook Road at Eight Mile Road Signal Improvements**

The project would reconstruct and modernize the existing signal at the intersection of Eight Mile Road and Meadowbrook Road to add a left turn phase to the signal. The existing signal is nearing the end of its useful life and lacks a dedicated left turn phase for EB Eight Mile Road to Meadowbrook Road. There were a significant number of crashes at this intersection that could be mitigated by adding a left turn phase.



**29 Taft and 9 Mile Road - New Roundabout**

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 study is currently underway.



**30 Napier Road and Ten Mile Road Intersection Improvements**

The project would improve the intersection by widening Napier and Ten 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 intersection

sin SE Michigan which can be mitigated by the improvements. The project would be a potential candidate for safety grant funding.



**31 Lewis and Haggerty Road - New Signal**

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



**32 Add Right Turn Lanes for WB 8 Mile at Beck and SB Beck Road at Eight Mile Road**

The project would construct a right turn lane for southbound Beck Road right turn at Eight Mile Road and for westbound Eight Mile Road to turn onto Beck Road. The 2011 crash analysis identified a significant crash rate at this intersection. The addition of right-turn lanes on the two approaches serving the City of Novi would help to mitigate the crash rate and improve safety.



**33 Add Dual Left Turn Lane--EB Grand River at Beck**

This project would widen 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.



**34 13 Mile and Cabot-New Signal**

Construct a new traffic signal for 13 Mile and Cabot Drive based on anticipated future need.



**Sidewalks & Pathways**

**35 Americans with Disabilities Act (ADA) Compliance Plan Annual Implementation**

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.



**36 M-5/I-275 Trail Connector (Phase 1)--10' pathway on east side of Meadowbrook Road from I-96 to 12 Mile**

Construction of 4,500 feet of 10-foot pathway along the east side of

Meadowbrook Road as the first phase of the connection between the terminus of the 275 trail at the south east corner of Meadowbrook Road and I-96 and the M-5 trail at 13 Mile and M-5 (west side). The project will include working with MDOT to identify and construct a crossing of I-96 on the existing Meadowbrook Road bridge. The pathway is proposed on the east side of Meadowbrook to minimize the number of property owners affected by easements for the project.



**37 Segment 144--Meadowbrook West side, Grand River to Cherry Hill (8' Pathway) - Concrete**

Design and construction of 700 feet of 8-foot wide pathway along the west side of Meadowbrook Road from Cherry Hill to Grand River. This project was identified as a top 20 priority segment by the 2011 Update to the Pathway and Sidewalk Prioritization Analysis. Easements required from two parcel owners.



**38 Segment 36--Taft Road (8' pathway, west side) 11 Mile Road to Andes Court**

Construction of 515 feet of 8-foot wide pathway along the west side of Taft Road from 11 Mile Road north to Andes Court. The project would connect the gaps between the Basilian Fathers, Sri Venkataswara, and Andes Hills developments.



**39 Extension of 10 ft. wide Regional Pathway from Medilodge Site to Beck Road (ITC Corridor Phase 3)**

This project would include the design and construction of a 2,000 foot extension of a 10-foot wide pathway that is proposed for construction from 11 Mile Road north along the ITC corridor to and through the eastern property line of the proposed Medilodge site plan, which the developer of the Medilodge site will be designing and constructing. The pathway extension would be constructed on top of the existing sanitary sewer and within an easement that is being negotiated with Providence Hospital. Along with the Medilodge pathway, the City's pathway would complete the connection from 11 Mile Road to Beck Road. (The remainder of the regional pathway is the PRCS CIP request for Greenway Plan.)



**40 Segment 89--Novi Road, East side, 10 Mile - Arena (8' Pathway) - Concrete**

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



**41 Segment NC1-East Lake Drive to Novi Road (8 foot asphalt)**

Design and construction of 1,000 feet of 8-foot wide pathway as a neighborhood connector between Novi Road and East Lake Drive through Hickory Woods Elementary School and via New Court.



**42 Segment 62--10 Mile Rd., Eaton Center to Churchill (6' sidewalk and boardwalk for north side)**

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 2011 Update to the Pathway and Sidewalk Prioritization Analysis.

**43 Segment 76--Grand River, North side, East of Seeley, (8' Pathway Short Segment)-Concrete**

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 west of Seeley proposed for construction with the Grand River Avenue rehabilitation project in 2012.

**44 Segment 133--Wixom Rd., Crossing North of 11 Mile (8' Pathway Short Segment) - Concrete**

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.

**45 Segment 10--Beck Rd., East side, South of Pontiac Trail, (5' Sidewalk Short Segment) - Concrete**

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.

**46 Annual Sidewalk Short Segment Connections – Concrete**

Short segments of sidewalk gap that have a construction cost of less than \$25,000 are selected annually for design and construction. The short segments for FY 2012-13, and FY 2013-14 are included in the CIP.

**47 Segment 92 – Novi Rd., 9 Mile to 10 Mile (6' Sidewalk for West side) Concrete**

Construction of 2,800 feet of 6-foot wide sidewalk to fill four gaps along the west side of Novi Road from 10 Mile Road to 9 Mile Road. This project was identified as a top 20 priority segment by the 2011 Update to the Pathway and Sidewalk Prioritization Analysis

**48 M-5/I-275 Regional Trail Connection (Phase 2)--Meadowbrook/13 Mile Road between 12 Mile and M-5**

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-foot wide connection between the I-275 regional pathway that ends and Meadowbrook Road and I-275 and the M-5 pathway that begins at M-5 and 13 Mile Road.



**49 Segment 90-10 Mile Road (8' pathway, south side) Novi Road to Chipmunk Trail – Concrete**

Construction of 2,400 feet of 8-foot 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.



**50 Segment 154--Ten Mile Rd (8' pathway, south side) between Pheasant Run and Quince Dr., with crosswalk to north**

Construction of 900 feet of 8' wide pathway along the south side of Ten 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 to Orchard Hills Elementary.



**51 Segment 127A--Novi Way (East side, 6' sidewalk) – Concrete**

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 sidewalk proposed along the Power Park access road and provide connectivity to the Civic Center.



**52 Segment 93--9 Mile, Novi to Taft, North side (6' Sidewalk)-Concrete**

Construction of 3,300 feet of 6-foot 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.



**53 Segment 73--Meadowbrook (6', east side) Grand River to 11 Mile.**

Design and construction of 550 feet of 6-foot wide pathway along the east side of Meadowbrook Road from Grand River to 11 Mile. This project was ranked 22nd in the 2011 Sidewalk Prioritization update and would link the I-275 pathway to Meadowbrook Road and Grand River Avenue.



**54 Segment NC4--Neighborhood Connection between Main Street and Meadowbrook Glens**

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.



**55 Non-motorized Crossing of I-96 at Novi Road**

Construction of a non-motorized crossing of I-96 at Novi Road by constructing sidewalk along the west side of Novi Road from Cresecent 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.



**56 Segment 99--10 Mile Rd., South side From Wixom to Beck Rd. (8' Pathway)**

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



**57 Segment 54-10 Mile Road (North side, 6' sidewalk) from Beck Road to Greenwood Oaks -Concrete**

Construction of 955 feet of 6-foot wide sidewalk along the north side of 10 Mile Road from Beck Road to Greenwood Oaks. This project was identified as a top 20 priority segment by Walkable Novi.



**58 Segment 55-Beck Road (West side, 8' pathway) 10 Mile Road to Cider Mill Road - Concrete**

Construction of 480 feet of 8-foot wide pathway along the west side of Beck Road from 10 Mile Road to Cider Mill. This project was identified as a top 20 priority segment by Walkable Novi.



**59 Installation of crosswalks on 12 Mile Road at Donelson Drive and Cabaret Drive**

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 pedestrians crossings of 12 Mile Road at Donelson and 12 Mile Road and Cabaret.



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

Construction of 4,400 feet of 6-foot 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.



**61 Segment 9--Pontiac Trail (south side, 6' sidewalk) Beck Road to West Park Drive**

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.



**62 Non-Motorized Crossing of I-96 at Taft Road**

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.



**63 Segment 88--9 Mile Rd., North side Novi-Railroad (6' Sidewalk) – Concrete**

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



## Storm Sewer & Drainage

**64 Repair of culverts carrying Munro Creek under Christina Lane**

The existing four culverts under Christina Lane were determined to be in poor condition during the Cedarsprings Detention project in 2012. The project would repair the existing culverts, which has corroded and cause some damage to the existing pavement, using a cast-in place liner that will provide a long term repair.



**65 Middle Rouge at Flint Street Streambank Stabilization**

Stabilization of Middle Rouge River streambanks upstream of Flint Street and Novi Road.



**66 Bishop District New Sedimentation Dredging Near 11 Mile Rd.**

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.



**67 Middle Rouge Near Balcombe Dr. Streambank Stabilization**

Stabilization of Middle Rouge River streambanks north of Balcombe Drive. Project may include removal of several small wooden dams. Park area recently acquired by City of Novi, and contains a conservation easement.



**68 Rotary Park Streambank Stabilization**

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

**Sanitary Sewer****69 Walled Lake Novi Wastewater Treatment Plant Improvements**

The project is led by the Oakland County Water Resource Commissioner to increase the capacity of the Walled Lake-Novı Wastewater treatment plant to meet current demand, comply with DEQ regulation and accommodate future build-out. The \$2.5 million dollar project will provide the capacity needed for Novi at the time of build-out at a direct cost to Novi of approximately \$500,000.

**70 Rehabilitation of Pipes and Structures in Areas F1 & F2**

Capital Preventative Maintenance on sanitary sewers in sub-district F1 & F2 (see map attached). The Sanitary Sewer Evaluation Survey (SSES) activities and Cleaning and Televising would be conducted as maintenance activities prior to this project to determine specific locations to be rehabilitated. The rehabilitation could include structural repairs, root intrusion repairs, repairs of defective taps and other repairs needed to remove inflow and infiltration from the system. Inflow and infiltration is groundwater and surface water sources (non-sewage) that enter the system and increase treatment costs and decrease available capacity.

**71 Rehabilitation of Pipes in Areas F3 & H**

Capital Preventative Maintenance on sanitary sewers in sub-district F3 & H (see map attached). The Sanitary Sewer Evaluation Survey (SSES) activities and Cleaning and Televising would be conducted as maintenance activities prior to this project to determine specific locations to be rehabilitated. The rehabilitation could include structural repairs, root intrusion repairs, repairs of defective taps and other repairs needed to remove inflow and infiltration from the system. Inflow and infiltration is groundwater and surface water sources (non-sewage) that enter the system and increase treatment costs and decrease available capacity.

**72 Sanitary Sewer Upgrade to Increase Pipe Capacity: 9 Mile Road East of Meadowbrook Road.**

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 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.



**73 Sanitary Sewer Upgrade to Increase Pipe Capacity: 9 Mile Road West of Novi Road**

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.



**74 Regency Lift Station Upgrades**

Purchase and installation of a 30kW onsite generator for the station.



## Water Distribution

**75 Garfield Road Water Main, Tuscany to 9 Mile (including Tuscany Reserve Phase II)**

Construction of a water main along Garfield Road to connect the 9 Mile water main constructed in FY 2005-06 with the water main to be constructed for Tuscany Reserve on 8 Mile Road. The water main connection is intended to improve system reliability and pressures in the southwest portion of the City. The project was originally funded for FY 2008-09, however, the connecting water main for Tuscany Reserve has not been constructed. It was projected for construction in FY 2010-11, but was not scheduled due to the economic slowdown. Recommended in 2008 Water System Master Plan.



**76 Water Supervisory Control and Data Acquisition System (SCADA)**

Installation of city-wide SCADA system for the water distribution system. The SCADA for the water distribution system would provide remote monitoring and control capabilities at the booster stations, metering stations at the connections to Detroit Water and Sewerage Department (DWSD) transmission mains, and at the pressure reducing valves. Recommended in 2008 Water System Master Plan and is required as part of the water storage tank operation.



**77 Water Storage Facility and Appurtenances**

The purpose of this project is to reduce wholesale water rates, and to provide storage for the purposes of becoming a Maximum Day Demand customer from DWSD, rather than a Peak Hour Demand Customer. Construct an 1.0 million gallon elevated storage tank along with associated improvements such as flow control valves at the feeds from DWSD and pressure reducing valve improvements. The project was originally recommended by the 2008 Water

Master Plan and further refined as part of the 2011 Storage Tank Feasibility Study. The reduced rates from DWSD are anticipated to create a 3.2 year project payback.



**78 9 Mile-Connemara Pressure Reducing Valve Replacement**

Replace existing pressure reducing valve from a 2-inch PRV to a larger PRV (which will be determined during project design). Recommended in 2008 Water System Master Plan.



**79 Construct New 12-inch Water Main Along 12 Mile Rd. from East of Napier to Wixom**

Construction of a 4,100 foot, 12-inch water main at Sloan St. and E. Bourne Terrace to the east along 12 Mile Road to connect to the existing long dead-end water main serving Knightsbridge Gate to the water main on Wixom Road. Includes a Pressure Reducing Valve (PRV) in a location that is yet to be determined to separate the Island Lake pressure district. The primary benefit of this project is redundancy, since the Knightsbridge Gate subdivision and surrounding area is served by a single, dead-end water main. Recommended in 2008 Water System Master Plan.



**80 West Park Booster Station Upgrade**

Enhance the West Park Booster Station with upgraded controls to operate the station in a more efficient manner. The station would be set to use downstream pressure readings to control the operation of the pumps rather than relying on flow settings, which is currently being done.



**81 16" Water Main Along Meadowbrook Under I-96**
















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. Recommended for system reliability and redundancy in 2008 Water System Master Plan. Easements and permits from MDOT will be a prerequisite for this project.



**82 13 Mile Rd. New Pressure Reducing Valve to Realign Pressure District**

Install a PRV on 13 Mile Road just west of Novi Road. The PRV should maintain downstream hydraulic grade line of approximately 1,091 feet. This will eliminate the need for a PRV at Cabot Road and the PRV at Twelve Mile Road and Meadowbrook Road will no longer be required. Recommended in 2008 Water System Master Plan.



- 83 12-inch Water Main Along 8 Mile Rd., Club Lane to Turnberry**  
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.
-   
- 84 12-inch Water Main Along 14 Mile Rd., Haverhill to Maples-New**  
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 area fire flows by over 1,000 gallons per minute. Recommended in 2008 Water System Master Plan.
-   
- 85 16" Water Main Along 9 Mile Rd., Center to Novi Rd.**  
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.
-   
- 86 Grand River Isolation Pressure Reducing Valve (PRV) West of Lanny's Road**  
Install a PRV at Grand River Avenue just west of Lanny's Road. The PRV should allow water to flow towards the West Park Pump Station. This will allow West Park Pump Station to better maintain pressures on the west side of the system. This location is preferred because it prevents creating a dead end 16-inch water main with no demands on it. By using a PRV rather than an isolation or check valve, the PRV direction provides redundancy to the west automatically if the West Park Pump Station or the West Park I-96 crossing fails and still has the option to reverse its flow direction with controls should the Novi Road crossing ever fail. Recommended in 2008 Water System Master Plan.
-   
- 87 Cabot Road Meter Installation and 24" Connection with DWSD**  
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.
-   
- 88 Cabot 24-inch Water Main, MacKenzie to 14 Mile Rd.**  
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.



**89 12" Water Main Along 9 Mile and Napier**

Construction of a 12-inch water main approximately 2,400 feet from the existing 12-inch water main at Torino Drive and 9 Mile Road to Park Place Drive and Napier Road along 9 Mile Road and Napier Road. Recommended in 2008 Water System Master Plan.



**90 12-inch Water Main Cross-Country from Island Lake to Provincial Glades**

Construct a 12-inch water main approximately 3,000 feet from the existing 12-inch water main west of Terra Del Mar Dr. and 10 Mile Road, cross-country to the south to the existing 12-inch water main at Avery Lane. The installation includes a pressure reducing valve in a location to be determined. Recommended in 2008 Water System Master Plan.



**91 12" Water Main along Napier, Park Place to 8 Mile**

Construct a 12-inch water main along Napier Road approximately 5,700 feet from Park Place to 8 Mile Road. Recommended in 2008 Water System Master Plan.



**92 12" Water Main Along 10 Mile from Wixom to Terra Del Mar**

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.



**93 12" Water Main along 11 Mile, Lee BeGole Dr. to the west**

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 Dr.** The installation will include a pressure reducing valve as it crosses a pressure district boundary. Recommended in 2008 Water System Master Plan.



**94 12" Water Main Along 8 Mile, Tuscany to Napier**

Construction of approximately 5,000 feet of water main along 8 Mile Road from Tuscany Reserve, east to Napier Road. Recommended in 2008 Water System Master Plan.



**95 12-inch water main on 11 Mile, Seeley to Meadowbrook**

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.



**96 12-inch Water Main Along Haggerty Road North of 12 Mile**

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.



**97 24-inch Water Main on 10 Mile, Beck to Lynwood**

Construct a 24-inch water main approximately 1,300 feet from the existing water mains at Beck and 10 Mile west to the existing 24-inch water main east of Lynwood Drive. Recommended in 2008 Water System Master Plan.



**98 24" Water Main Replacement at Grand River and Beck**

Complete the upgrade of 150 feet of water main at Beck Road and Grand River from 16-inch to 24-inch. This is the last remaining segment of the remaining 16-inch water main. Recommended in 2008 Water System Master Plan.



**99 11 Mile Rd., Water Main Gaps, Taft to Beck Rd.**

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.



**Parks**

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

Partnering with the Novi Community School District in developing seven acres of land to create multi-purpose athletic fields.



**101 Lakeshore Park Play Structure Replacement**

This project would remove one of two existing structures at the park. The structure would be replaced with a new accessible structure developed for children ages 2 - 12.



**102 Rotary Park Play Structure Replacement**

This project would remove the existing structure and replace it with a new



accessible structure developed for children ages 2-12



**103 Greenway Development Phase I**

To plan and build a paved 4.5 mile long north-south regional pathway for recreational use along the ITC Transmission Corridor. 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.



**104 North end Lakefront Park**

The City submitted a Michigan Natural Resource Trust Fund (MNRTF) development grant application through the Michigan Department of Natural Resources (MDNR) for The Landings property in March of 2010 for an overall total project cost of \$625,000. In May 2010 the MNRTF awarded Grant TF10-043 to the City of Novi. At the September 12, 2011 City Council Meeting, a Resolution approving the MNRTF project agreement and acceptance of the grant was adopted. Estimates will incorporate future phases of project



**105 Tim Pope Play Structure Replacement**

This project would remove the Tim Pope Play Structure (built in 1997, currently 14 years old) located at ITC Community Sports Park, off the 8 Mile entrance. The structure would be replaced with a new accessible structure and accessible safety surfacing. The intent would be to keep the name of the playground the same after replacement of the structure.



**106 ITC Community Sports Park Play Structure Replacement**

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



**107 Power Park Play Structure Replacement**

Ella Mae Power Park currently has two structures. The newest structure is designed for children ages 5 - 12 and the older unit is designed for ages 2 - 5. This project would remove the existing structure in the first quarter and replace it with a new accessible structure developed for children 2-5 by the end of the third quarter.



**108 ITC Community Sports Park Pathway Resurfacing**

This project will revitalize the park pathway system and support the active, healthy lifestyle we provide our citizens.

**109 Greenway Development Phase II**

To plan and build a paved 4.5 mile long north-south regional pathway for recreational use along the ITC Transmission Corridor. 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 2 of the pathway (1.5 miles long) follows existing pathways along the west side of Wixom Road and the north side of 11 Mile Road to connect Fire Station No. 4 to the ITC corridor north of 11 Mile Road.

**110 Lakeshore Park Asphalt Paved Parking Lot and Drive-New**

Reduce maintenance costs for Lakeshore Park's lot and drives by replacing gravel surfaces with asphalt.

**111 Greenway Development Phase III**

To plan and build a paved 4.5 mile long north-south regional pathway for recreational use along the ITC Transmission Corridor. 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 3 of the pathway (.75 miles long) utilizes the ITC corridors and an existing sanitary sewer easement on Providence Park property to make the connection to Beck Road from 11 Mile Road. This phase would also connect the regional path to Wildlife Woods Park and Providence Park's trail system by construction spurs from the regional pathway. This phase also includes potential parking at Beck Road if additional easements are secured through Providence Park Hospital.

**112 ITC Sports Park Asphalt Paved Parking lots**

Reduce maintenance costs for ITC Sports Park's lot and drives by replacing gravel surfaces with asphalt.

**Technology****113 Biometric Access Control System – New**

The Biometric Access Control System is an electronic system that is used to track, secure and provide full accountability of critical assets. It is the intent of the Police Department to use the system as a tool for efficient equipment security and

management of the rifles in the armory. The system individually secures items in lockers or gun racks and allows officers access to them through a touch screen kiosk. The administrator of the system will be able to manage the system remotely through a standard web browser. System includes a basic kiosk station which consists of a touch-screen PC with biometric fingerprint reader for authentication, gun racks to secure 40 long guns, and asset identification chips.



## Equipment

### 114 Utility Truck (Replaces #708, 1999 Ford F-350)

The Water & Sewer Utility Truck is used to transport tools and equipment for water and sewer projects. It is intended to house all of the necessary parts and supplies that may be required during water main breaks and lift station repairs.



### 115 Two Single-Axle 5 Cubic Yard Dump Trucks w/Front Plows and Underbody Scrapers (Replaces #670, 1988 Ford, #671, 1988 Ford)

Two dump trucks to replace existing trucks (#670, #671). The dump trucks are used to transport materials and equipment, road maintenance and drainage work, and snow removal operations. The replacement trucks will come equipped with new V-Box inserts which have the ability to reduce annual salt consumption by 30% compared to conventional methods.



### 116 Vibratory Roller – New

A vibratory roller can be used to compact stone, and multi lift layers of asphalt greater than 2", and to improve athletic fields. This roller would provide flexibility for material compaction on larger jobs and could be used on a wide variety of projects, compared to the small static unit that is used now. Purchasing a new vibratory roller would allow staff to schedule and perform asphalt and other types of repairs throughout the construction season. On average, staff rents a roller for \$2,000 per month for three months per year, resulting in a payback period of approximately six years.



### 117 One - 1-Ton Dump Truck w/Plow (Replace #684,1991 GMC)

Used daily to transport materials for road maintenance, drainage activities, and snow removal operations. Replace one each over the next three years.



### 118 Engine #4 (Replaces #331, 1995 Seagrave)

The Engine will be equipped with an enclosed 6-person cab, a 1,250 gallon per minute Class "A" single stage centrifugal type pump, a 1,000 gallon tank , ground

ladders and all required equipment including hoses, nozzles & appliances, emergency warning devices, hand tools, power tools and EMS (BLC) equipment . The new engine will also be equipped with a Foam Proportioning system that is suitable for all types of Class A & B foams.



### 119 **One - 1-Ton Dump Truck w/Plow – New**

Used daily to transport materials for road maintenance, drainage activities and snow maintenance operations.



### 120 **Four- Combination V-Box Salt Spreader Inserts**

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.



### 121 **Six Force America Commandall 5100 Regulating Controllers for Winter Maintenance**

Update six of DPS's dump trucks with Force America Commandall 5100 equipment & material regulating controllers, and retrofit required mechanical components for real time winter maintenance tracking. The enhanced systems will uniform truck controls with technology that has been installed on the two most recent truck purchases in 2011-12 and uniform the primary snow clearing fleet for operator convenience and administrative record keeping. These controls mesh seamlessly with the PreCise AVL system recently purchased by the City and will report directly through the software associated with the tracking system



### 122 **Squad #2 (Replaces #321, 2000 McCoy-Miller Ambulance)**

This project is for the replacement of Squad #2 (Vehicle #321) a 2000 McCoy Miller Ambulance with 47,934 miles on it. This vehicle is a transport-capable basic life support (BLS) medium-duty vehicle. It is currently in fair condition. The vehicle responds to fire and emergencies on a daily basis. Following the direction of the ICMA Recommendations and the success we have had with the replacement of similar squads with SUV-type vehicles, this vehicle will be replaced with a Expedition EL 4x4. The vehicle scheduled to be replaced in the 2013-14 budget year per the Long-Term Fire Apparatus Schedule.



**123 Ditching Machine (Replaces #675, 1991 Gradall)**

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.

**124 Mini Excavator Replacement (Replaces #622, 2000 Bobcat)**

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.

**125 Two - Tandem-Axle 7 Cubic Yard Dump Trucks w/Front Plows and Underbody Scrapers (Replaces #699, 2000, #620, 2001 Sterlings)**

Used year round for snow maintenance, road maintenance, drain repairs, grading gravel road shoulders and for hauling material.

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

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.

**127 Salt Dome Loading Conveyor**

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.

**128 Tanker #1 (Replaces #311, 1997 Chevrolet)**

This project is for the replacement of Tanker 1 (Vehicle #311- 1997 Chevrolet C8500 KME Water Tanker, 9,796 miles). The Tanker carries 1,500 gallons of water and is equipped with a 500 gallon per minute power take off pump. It has 48 feet of ground ladders, 2 self-contained breathing apparatus, a 2,000 gallon portable water tank and is licensed by the State of Michigan as a Medical First Response vehicle. Mileage is not the sole determination for replacement of an apparatus. Advances in technology make new apparatus easier to operate making the fire

fighters job easier. With changes in the response matrix for the Novi Fire Department in the near future it would be a good time to replace the Tanker with a vehicle that would better suit the department.



**129 Bobcat All-Wheel Loader - New**

Used to transport materials for confined space projects in rear yards, storm drain easements, snow removal on bridge decks, and heavily landscaped locations.



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

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.



**131 Zamboni Ice Resurfacers - Replacement**

Replace the existing Model 500 Zamboni (1998, 7,031 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.



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

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.



**133 One - Single-Axle Large Dump Truck w/Front Plow and Underbody Scraper - New**

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



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

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.



**135 Ladder #1 (Replaces #312, 2001 Freightliner)**

This request is for the replacement of Ladder 1 (#312 -2001 American LaFrance Eagle Tandem Axle 100 foot Aerial Fire Apparatus, 30,976 miles). This apparatus has a custom six person cab, a 100 foot ladder, 1,500 gallon per minute pump with a 350 gallon booster tank. Lighting is supplied by a 6kW hydraulic generator. 119 feet of ground ladders are carried on the apparatus along with 6 self-contained breathing apparatus, forcible entry, ventilation, and salvage and overhaul tools. The apparatus is licensed as a State of Michigan Medical First Response Vehicle. Mileage is not the sole determining factor for this replacement. The more specialized the vehicle the more maintenance is needed to keep it in service as it nears the end of its fifteen year service expectancy. Aerial devices are one of the most specialized apparatus used by the fire service.



**136 One 1-Ton Dump Truck w/Plow (Replaces #633, 1998 GMC)**

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.



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

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.



**138 Grader (Replaces #612, 2005 CAT)**

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.



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

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 Vector is down for repair.



**Buildings & Property****140 DPS Field Services Complex Improvements - Mechanical**

This project addresses the critical needs of the DPS facility as identified in the 2006 Facility Needs Master Plan prepared by Wold Architects and Engineers.

Mechanical needs include: replace existing make-up air unit serving Garage, re-commission existing top unit serving Administrative area, provide sound alteration and ventilation for Administrative Conference Room, replace existing furnaces, air conditioning unit and exhaust fans serving Forestry/Sign Shop area with a new roof top unit, replace existing furnaces and exhaust fans serving Workshop with a new roof top unit.

**141 Lower Lobby, Hallway and Locker Room Flooring Replacement**

The original flooring in the lower level of the ice arena was laid in 1998 and is approaching the end of its useful life. There is heavy wear with hockey and figure skates, along with regular foot traffic on that flooring. This project proposes to replace all of the flooring in the lower level with similar product. This project has been planned and budgeted for in the Capital Needs Assessment that was conducted in August 2009. The plan would be to replace the existing flooring during a time of the year to not affect the normal operation of the facility.

**142 Police Locker Room Renovation - Replacement**

This project is for the renovation of the men and women's locker rooms at the Police Department. The project includes the replacement of the existing lockers (72 male 17 female), electrical upgrades, new toilets and partitions, new sinks and counter tops, and flooring. The majority of the lockers are over 31 years old. The lockers are damaged/defective, rusted, and are all showing signs of three decades of wear and tear. In addition, when the department added lockers in 2000 the color of the of the lockers and flooring were not consistent. The current conditions of the restrooms and changing areas are damaged and missing wall and ceramic tiles, poor lighting, stained counters tops that are inconsistent in color, leaky and stained/rusted plumbing fixtures, damaged/defective and rusted toilet and urinal partitions, missing base cover ceramic tiles and different floor color tiles throughout.

**143 Fuel System Underground Storage Tank Sumps Replacement**

Three underground fuel storage tank sumps need to be removed and new tank sumps installed. The ground water level at the Field Services Complex is high and water is continuously getting into the tank sumps which are 26 years old. New technology can replace the tank sumps and eliminate the water leakage into the sump area.





**144 Meadowbrook Commons Ground Water Mitigation**

Planned site work to address ground water drainage on the west side of Meadowbrook Commons main building parking lot road way. Meadowbrook Commons has an ongoing issue with a high level of ground water. A project to mitigate the ground water was completed in the past at the south end of the community which has helped control the ground water issues. This project would add extra drainage to control and divert the excess ground water to the detention pond.

**145 Civic Center HVAC Boiler Replacement**

The existing boiler in City Hall is over 20 years old and is serviced regularly. The unit can be replaced with two units. This efficiency savings and reduced maintenance costs save money and manpower.

**146 Fire Parking Lot Improvements - Replacement**

A 2010 review conducted by the DPS indicates that several improvements are needed to the Fire Department parking lots. CEMS Building - The parking lot is covered with severe alligator cracking, the best option would be to pulverize the existing asphalt pavement and add 3-inches of hot mix asphalt over top. Fire Station #1: There is some alligator cracking near two of the storm structures as well as some meander cracks throughout the pavement. Crack sealing and a seal coat is recommended. Fire Station #2: There are a few meander cracks throughout the parking lot where crack sealing would be helpful. Fire Station #3: There is severe alligator cracking, especially in the wheel base. Recommendation is to pulverize the existing asphalt and overlay with 3-inch hot mix asphalt.

**147 Council Chamber AV System Upgrade Project**

This project entails renovating/building out the back of the Council Chambers (coat room areas) to create a state-of-the-art Audio-Visual Room on one side and an ADA accessible seating area complete with microphone capability on the other side. The renovation would include new HD cameras for the Council Chambers, overhead projector, screen, flat screen on the podium, and the ability to control all presentation equipment from the podium, making the room attractive for rental opportunities. The current A/V room is a closet which has been retrofitted throughout the years, does not have adequate ventilation, and is not positioned for optimal cablecasting of meetings in the Chambers. Additional Cable Franchise Fees garnered from Bright House would enable the renovation/upgrade.

**148 Civic Center Carpet Replacement Program - Phase III (2012-2013)**

This is a phased approach to the replacement of the 20+ year old carpeting in the Civic Center. The project includes the removal and disposal of the original flooring,

furniture relocation and installation of new carpet. The cost per square varies greatly depending on the office furniture relocation costs. The meeting rooms located in the Community Center section was upgraded to wood flooring during FY 2010-11. Priority will be given to areas that enhance revenue opportunities and/or are focal points for citizens. The FY 2012-13 targeted areas are Community Development, Assessing, IT, Facility Operations.



#### 149 Meadowbrook Commons Asphalt Repairs

There is \$31,155 estimated for repairs to the asphalt parking lot at Meadowbrook Commons. This money for the repairs has been scheduled for year 2014, year five, of the Capital Needs Assessment report (CAN). The final scope of work will be determined at that time due to the unforeseen weather, wear and tear that the asphalt will incur between now and then. Please see attached pictures for various examples of possible repairs that will need to be completed.



#### 150 Police Parking Lot Improvements - Replacement

The Police Department's back parking lot has not been resurfaced in over 16 years. The asphalt driveway has deteriorated over the years. Payment is breaking up and sinking. The cracking and shifting in the material is causing a safety hazard. The parking lot is used 24/7. A 2010 review conducted by the Department of Public Services indicates that the northern half of the parking lot shows rutting in the wheel path, severe alligator/block cracking and pot holes. The southern half is in better shape with only a few meander cracks. Solution being recommended is to pulverize the northern half of the parking lot and overly 3-inches of hot mix asphalt and route/crack seal the southern half with a sear coat over top. It is recommended that the front parking lot and Firearms Training Center parking lot have seal coating applied.



#### 151 Parking Lot and Walkway Lighting Replacement

Lighting in the Ice Arena parking lot and walkway were installed in 1998 and are the original fixtures. Retrofitting current parking lot metal halide fixtures with more energy efficient lighting. There are currently 13 poles and 19 fixtures. Current poles will remain, but the fixtures will be replaced/retrofitted with new lights. Also includes allowances to replace current bollard type walkway lighting with new fixtures for better visibility along the sidewalks in front of the arena. Walkway lighting does not currently work.



#### 152 DPS Mezzanine Elevator

Install a Garaventa-Genesis Vertical Shaftway Wheelchair lift (elevator) in the DPS main garage to gain much needed space and access to the mezzanine area, which would add 4,076 square feet of usable space that is currently unusable because the area is not accessible to all users according to barrier-free design

requirements of the Michigan Construction Code. The lift can travel as high as 14 feet and is much less expensive than a typical elevator.



### 153 Fuel Island Canopy - New

The Field Services Complex (FSC) is home to the City's fuel system. The fuel island is comprised of one diesel pump dispenser, two regular unleaded pump dispensers, a fuel spill kit and a Gasboy key reader. A 24' x 30', two column fuel island canopy with two foundations is requested to provide safe illumination, security and shelter for City staff.



### 154 Additional Parking - North Side of Civic Center & Sidewalk Ramp Rehabilitation

This project would add 18 new parking spaces to the north side of the Civic Center, in part using the existing dead end driveway. The project would have a major sustainability component in that the aisle and stalls would be paved with porous concrete pavement, a relatively new technology that allows storm water run off to percolate through the pavement and into the ground, as opposed to discharging directly to a storm water collection system and potentially introducing pollutants (i.e., grease, oil, brake fluid, etc.) to Novi's waterways. This project would also serve as a visible example of an environmental sustainability initiative that the City has implemented. Also, 19 of 21 of the Civic Center's sidewalk ramps do not comply with Americans with Disability Act requirements. Rehabilitating these ramps and abutting sidewalk segments would also be included in the project scope.



### 155 DPS Field Services Complex Improvements - Electrical

This project addresses the critical electrical needs of the DPS facility as identified in the 2006 Facility Needs Master Plan prepared by Wold Architects & Engineers and includes; Electrical needs include: upgrading the electrical service branch circuiting to accommodate mechanical improvements, upgrading generator system to separate fire safety devices from switchgear and distribution panels for new mechanical units.



### 156 Civic Center HVAC Air Handling Units #3 and #4 Replacement

The existing air handling units numbers 3 and 4 within City Hall are over 20 years old. They have reached the end of their useful life and maintenance costs are rising.



### 157 Meadowbrook Commons - Roof Replacements

Five of the ten roofs is scheduled to be replaced per the Capital Needs Assessment report (CAN) for Meadowbrook Commons. Meadowbrook Commons was built in 2001, all of the roofs are original and several roofing companies have stated the roofs seem to be aging faster than normal.



**158 Fire Tower Retrofit - New**

The retrofit of the fire training tower located at Fire Station #4 would upgrade the facility with realistic gas burners for all firefighter training. System provides for challenging training scenarios for both seasoned veterans and new recruits. Instructor maintains complete command over the fire scenarios, allowing for instant ignition, shutdown, and re-flash of fires. The clean-burning, gas-fueled fires are environmentally sound, alleviating concerns over air, soil, and water pollution. Powerful smoke generation obscures vision during fire training, or can be used independently for search and rescue and breathing apparatus training. The system features self-diagnostics easy use.

**159 Civic Center Carpet Replacement Program- Phase IV (2013-2014)**

This is a phased approach to the replacement of the 20+ year old carpeting in the Civic Center. The project includes the removal and disposal of the original flooring, furniture relocation and installation of new carpet. The cost per square varies greatly depending on the office furniture relocation costs. The meeting rooms located in the Community Center section were upgraded to wood flooring during FY 2010-11. Priority will be given to areas that enhance revenue opportunities and/or are focal points for citizens. The FY 2013-14 targeted areas are Finance, Managers and City Clerks.

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

The existing air handling units numbers 1 and 2 within City Hall are over 20 years old. They have reached the end of their useful life and maintenance costs are rising.

**161 Civic Center Atrium Window Film Replacement**

Tinted window film installed on Atrium windows needs to be replaced.

**162 Civic Center Irrigation Well and Filter System**

Installation of a well for irrigation purposes at the Civic Center and Police Department. The well would also include an iron removal system so that staining of sidewalks, signage, etc. does not occur.

**163 Department of Public Services Complex - Building Expansion Project**

This project was recommended in the 2006 Facility Needs Master Plan to provide DPS with a facility that will meet the needs of the City at full build-out. The completed project will create a facility large enough to store all equipment and materials and 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 existing main DPS building to provide enclosed storage space for all Field Operations Division vehicles and equipment, expanded lunch/meeting/office/restroom/locker room space, and additional vehicle/equipment maintenance areas; 2) a 14,250 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) the build-out of 4,100 square feet of mezzanine space in the existing building that is currently unusable.



**164 Evaporative Cooling Tower Replacement**

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.



**165 Munters Dehumidification Unit Replacement**

Replace the current dehumidifier (1998 Munters #AM 30) with a new unit. The 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 in the rinks at a minimum. The ice condition is also dependent on proper relative humidity. Too much humidity and the ice quality is too soft and does not set up properly and if the air is too dry the ice will also be too dry and will have a tendency to crack and chip.



**CAPITAL IMPROVEMENT PROGRAM**

**2012-2018 Project Summary**

Project Name Roads	CIP #	Budget	Projected		Forecast		TOTAL	Funding Source
		FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17		
1 Eight Mile Road Rehabilitation, Beck to Napier (Paser 3; Asphalt)	* 109-11	\$2,200,000 \$200,000					\$2,200,000 \$200,000	\$2,000,000 in Federal Grant, \$200,000 by RCOC, \$200,000 Municipal Street Fund
2 Neighborhood Road Rehabilitation, Repaving and Reconstruction Road Program	102-01	\$1,300,000	\$1,400,000	\$1,400,000	\$1,500,000	\$1,500,000	\$1,500,000	\$8,600,000 Local Street Fund
3 Crescent Blvd Extension between Grand River Avenue and Novi Road (Phase 2 and 3)	082-03	\$3,297,000					\$3,297,000	Municipal Street Fund, Potential Fed Grant, Phase 2 stream work (\$140,000) could be funded with Drain Fund.
4 Bridge Repairs (Willowbrook Drive and Meadowbrook Road Bridges)	10-2022	\$64,530					\$64,530	Municipal Street Fund
5 Southwest Quadrant Ring Road (Flint St) Novi and Grand River (New Construction)	092-50	\$55,000				\$1,750,000	\$1,805,000	Municipal Street Fund
6 Town Center Drive from Grand River to 11 Mile Rd. (Paser 3; Concrete to Asphalt)	092-10		\$759,900				\$759,900	Major Street Fund
7 Heslip Dr. Rehabilitation (Paser 3; Asphalt)	082-25		\$58,047				\$58,047	Major Street Fund
8 Town Center Drive Rehabilitation: Crescent Blvd to 11 Mile Rd. (PASER 6, Concrete to Asphalt)	082-11			\$520,340			\$520,340	Major Street Fund
9 Pave Existing Paul Bunyan and Sixth Gate	111-01			\$132,800			\$132,800	Local Street Fund
10 West Road Repaving (West Park Drive to City limits)				\$148,800			\$148,800	Major Road Funds
11 Crescent Blvd., Novi Rd to Town Center Dr. Rehabilitation (Paser 3-4; Concrete to Asphalt)	082-10			\$854,200			\$854,200	Major Street Fund
12 Karim Blvd. Rehabilitation (Paser 3-Asphalt)	082-18				\$94,500	\$453,300	\$547,800	Major Street Fund
13 11 Mile Rd., Town Center to Meadowbrook, Rehabilitation (Paser 4; Concrete to Asphalt)	082-12				\$142,500	\$684,300	\$826,800	Major Street Fund
14 11 Mile Road Repaving: Taft Road to Beck Road (Paser 5-6; Asphalt)	082-30				\$84,500	\$405,500	\$490,000	Major Street Fund
15 13 Mile Road Rehabilitation, Novi Road to Meadowbrook Road (PASER 5; Asphalt)	10-2023				\$75,120	\$360,570	\$435,690	Major Street Fund and potential Federal Grant
16 Meadowbrook Road Rehabilitation (I-96 to 12 Mile)	111-02				\$204,600	\$622,000	\$826,600	Major Street Fund
17 Novi Rd. from 12 Mile to 13 Mile Rehabilitation (Paser 4-5; Asphalt)	102-03				\$203,390	\$976,520	\$1,179,910	Major Street Fund/Potential Federal Grant opportunity
18 Taft Road, 9 Mile Road to 10 Mile Road Rehabilitation (Paser 6-7; Asphalt)	102-05				\$536,100		\$536,100	Major Street Fund/Potential Federal Grant opportunity (application submitted 2010)
19 Old Novi Rd. Rehabilitation (Paser 7; Asphalt)	102-04					\$185,990	\$185,990	Major Street Fund
20 Cabot Dr. Extension (New)--MacKenzie to 14 Mile Road--Private Funds	089-11					\$1,900,000	\$1,900,000	Private Funding
21 Wixom Road from 10 Mile Road to 11 Mile Road (PASER 5; Asphalt)	092-22					\$650,530	\$650,530	Major Street fund, Federal Grant application submitted 2011

Project Name	CIP #	Budget	Projected		Forecast			TOTAL	Funding Source
		FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18		
22 Trans-X Drive Rehabilitation (Paser 5/4; Concrete)	082-16						\$316,600	\$316,600	Major Street Fund
23 Meadowbrook Road Reconstruction - 9 Mile to 10 Mile (PASER 4-5, Concrete)	10-2024						\$1,115,000	\$1,115,000	Major Street Fund
24 Donelson to Sheraton and West Oaks - New Road Construction (as recommended in Master Plan)	082-32						\$901,000	\$901,000	Municipal Street Fund
<b>Roads Total:</b>		\$2,200,000						\$2,200,000	AverageX Cc "Ufg
		\$4,916,530	\$2,217,947	\$3,056,140	\$2,840,710	\$9,488,710	\$3,832,600	\$26,352,637	Costs of City Accounts

**Intersections & Signals**

25 Replacement of Town Center area street lighting (SAD 108)		\$420,000						\$420,000	Municipal Street Fund, Special Assessment
26 Meadowbrook Road and Nine Mile Road Signal Improvement/Modernization	* 116-01	\$121,600						\$121,600	\$121,600 Federal Grant, \$50,400 Municipal Street Fund
		\$50,400						\$50,400	
27 Extend Right Turn Lane--WB Grand River Avenue at Beck Road	116-02		\$120,000					\$120,000	Potential 80% Federal Grant, Municipal Street Fund
			\$30,000					\$30,000	
28 Meadowbrook Road at Eight Mile Road Signal Improvements	116-05				\$140,000			\$140,000	Potential Grant, Municipal Street Fund
				\$43,750	\$35,000			\$78,750	
29 Taft and 9 Mile Road - New Roundabout	086-08				\$82,394	\$397,990		\$480,384	Potential Grant, Major Road Funds
30 Napier Road and Ten Mile Road Intersection Improvements	116-04				\$250,000			\$250,000	Potential Grant, Municipal Street Fund, Tri-Party
31 Lewis and Haggerty Road - New Signal	086-07					\$210,000		\$210,000	Municipal Street Fund
32 Add Right Turn Lanes for WB 8 Mile at Beck and SB Beck Road at Eight Mile Road	116-03					\$250,000		\$250,000	Potential Federal Safety Grant, Municipal Street Fund
33 Add Dual Left Turn Lane--EB Grand River at Beck	116-06						\$375,000	\$375,000	Possible Grant, Possible Tri-Party, Municipal Street Fund
34 13 Mile and Cabot-New Signal	086-06						\$220,000	\$220,000	Municipal Street Fund
<b>Intersections &amp; Signals Total:</b>		\$121,600	\$120,000	\$43,750	\$140,000	\$857,990	\$595,000	\$381,600	Leveraged Dollars
		\$470,400	\$30,000	\$43,750	\$507,394	\$857,990	\$595,000	\$2,364,534	Costs of City Accounts

**Sidewalks & Pathways**

35 Americans with Disabilities Act (ADA) Compliance Plan Annual Implementation	10-5002	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$300,000	Municipal Street Fund
36 M-5/I-275 Trail Connector (Phase 1)--10' pathway on east side of Meadowbrook Road from I-96 to 12 Mile	115-022	\$24,000			\$460,000			\$484,000	Municipal Street Fund and Potential Transportation Enhancement Grant
37 Segment 144--Meadowbrook West side, Grand River to Cherry Hill (8' Pathway) - Concrete	105-144	\$119,097						\$119,097	Municipal Street Fund
38 Segment 36--Taft Road (8' pathway, west side) 11 Mile Road to Andes Court	115-036	\$108,600						\$108,600	Municipal Street Fund
39 Extension of 10 ft. wide Regional Pathway from Medilodge Site to Beck Road (ITC Corridor Phase 3)	10-5001		\$129,540					\$129,540	Municipal Street Fund
40 Segment 89--Novi Road, East side, 10 Mile - Arena (8' Pathway) - Concrete	085-89		\$110,594					\$110,594	Municipal Street Fund

Project Name	CIP #	Budget	Projected		Forecast			TOTAL	Funding Source
		FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18		
41 Segment NC1-East Lake Drive to Novi Road (8 foot asphalt)	10-5004		\$109,200					\$109,200	Municipal Street Fund,
42 Segment 62--10 Mile Rd., Eaton Center to Churchill (6' sidewalk and boardwalk for north side)	085-62			\$104,514				\$104,514	Municipal Street Fund
43 Segment 76--Grand River, North side, East of Seeley, (8' Pathway Short Segment)-Concrete	095-76			\$53,000				\$53,000	Municipal Street Fund
44 Segment 133--Wixom Rd., Crossing North of 11 Mile (8' Pathway Short Segment) - Concrete	095-133			\$27,578				\$27,578	Municipal Street Fund
45 Segment 10--Beck Rd., East side, South of Pontiac Trail, (5' Sidewalk Short Segment) - Concrete	095-10			\$39,100				\$39,100	Municipal Street Fund
46 Annual Sidewalk Short Segment Connections - Concrete	105-11			\$25,000	\$25,000	\$25,000	\$25,000	\$100,000	Municipal Street Fund
47 Segment 92--Novi Rd., 9 Mile to 10 Mile (6' Sidewalk for West side)-Concrete	085-92				\$190,554			\$190,554	Municipal Street Fund
48 M-5/I-275 Regional Trail Connection (Phase 2)--Meadowbrook/13 Mile Road between 12 Mile and M-5	115-0003				\$182,000	\$816,510		\$998,510	Municipal Street Fund, Potential Transportation Enhancement Grant
49 Segment 90-10 Mile Road (8' pathway, south side) Novi Road to Chipmunk Trail - Concrete	105-90				\$320,705			\$320,705	Municipal Street Fund
50 Segment 154--Ten Mile Rd (8' pathway, south side) between Pheasant Run and Quince Dr., with crosswalk to north	115-154				\$288,770			\$288,770	Municipal Street Fund
51 Segment 127A--Novi Way (East side, 6' sidewalk) - Concrete	101-127				\$31,120			\$31,120	Municipal Street Fund
52 Segment 93--9 Mile, Novi to Taft, North side (6' Sidewalk)-Concrete	095-93				\$298,718			\$298,718	Municipal Street Fund
53 Segment 73--Meadowbrook (6', east side) Grand River to 11 Mile.	115-73				\$95,200			\$95,200	Municipal Street Fund
54 Segment NC4--Neighborhood Connection between Main Street and Meadowbrook Glens	10-5007				\$93,300			\$93,300	Municipal Street Fund
55 Non-motorized Crossing of I-96 at Novi Road	115-0002				\$770,750			\$770,750	Municipal Street Fund
56 Segment 99--10 Mile Rd., South side From Wixom to Beck Rd. (8' Pathway)	095-99					\$398,000		\$398,000	Municipal Street Fund
57 Segment 54-10 Mile Road (North side, 6' sidewalk) from Beck Road to Greenwood Oaks -Concrete	105-54					\$112,705		\$112,705	Municipal Street Fund
58 Segment 55-Beck Road (West side, 8' pathway) 10 Mile Road to Cider Mill Road - Concrete	101-55					\$66,400		\$66,400	Municipal Street Fund
59 Installation of crosswalks on 12 Mile Road at Donelson Drive and Cabaret Drive	10-5008					\$476,000		\$476,000	Municipal Street Fund
60 Segment 84--Meadowbrook, 9 Mile to 10 Mile, (6' Sidewalk for East Side)	085-84						\$615,351	\$615,351	Municipal Street Fund
61 Segment 9--Pontiac Trail (south side, 6' sidewalk) Beck Road to West Park Drive	115-009						\$471,135	\$471,135	Municipal Street Fund
62 Non-Motorized Crossing of I-96 at Taft Road	115-0005						\$2,063,000	\$2,063,000	Municipal Street Fund
63 Segment 88--9 Mile Rd., North side Novi-Railroad (6' Sidewalk) - Concrete	095-88						\$163,000	\$163,000	Municipal Street Fund



Project Name	CIP #	Budget	Projected		Forecast			TOTAL	Funding Source
		FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18		
<b>Sidewalks &amp; Pathways Total:</b>		\$301,697	\$399,334	\$299,192	\$2,806,117	\$1,944,615	\$3,387,486	\$9,138,441	

**Storm Sewer & Drainage**

64	Repair of culverts carrying Munro Creek under Christina Lane	113-01	\$137,500						\$137,500	Drain Fund
65	Middle Rouge at Flint Street Streambank Stabilization	103-03		\$111,900					\$111,900	Drain Fund
66	Bishop District New Sedimentation Dredging Near 11 Mile Rd.	093-11			\$200,800				\$200,800	Drain Fund
67	Middle Rouge Near Balcombe Dr. Streambank Stabilization	103-01				\$278,700			\$278,700	Drain Fund
68	Rotary Park Streambank Stabilization	093-10					\$160,900		\$160,900	Drain Fund
<b>Storm Sewer &amp; Drainage Total:</b>			\$137,500	\$111,900	\$200,800	\$278,700	\$160,900	\$-	\$889,800	

**Sanitary Sewer**

69	Walled Lake Novi Wastewater Treatment Plant Improvements	111-01	\$2,000,000 / \$500,000						\$2,000,000 / \$500,000	\$500,000 Water & Sewer Fund, \$2,000,000 Walled Lake Novi WWTP
70	Rehabilitation of Pipes and Structures in Areas F1 & F2	091-64		\$250,000					\$250,000	Water & Sewer Fund
71	Rehabilitation of Pipes in Areas F3 & H	091-60			\$250,000				\$250,000	Water & Sewer Fund
72	Sanitary Sewer Upgrade to Increase Pipe Capacity: 9 Mile Road East of Meadowbrook Road.	091-71			\$200,000				\$200,000	Water & Sewer Fund
73	Sanitary Sewer Upgrade to Increase Pipe Capacity: 9 Mile Road West of Novi Road	091-70				\$350,000			\$350,000	Water & Sewer Fund
74	Regency Lift Station Upgrades	091-77					\$188,500		\$188,500	Water & Sewer Fund
<b>Sanitary Sewer Total:</b>			\$2,000,000 / \$500,000	\$250,000	\$450,000	\$350,000	\$188,500	\$-	\$2,000,000 / \$1,738,500	Leveraged dollars / Costs of City Accounts

**Water Distribution**

75	Garfield Road Water Main, Tuscany to 9 Mile (including Tuscany Reserve Phase II)	091-24	\$489,363 / \$634,300						\$489,363 / \$634,300	\$634,300 Water & Sewer Fund; remainder by developer agreement
76	Water Supervisory Control and Data Acquisition System (SCADA)	091-05	\$303,200						\$303,200	Water & Sewer Fund
77	Water Storage Facility and Appurtenances	091-09	\$1,063,500	\$4,236,500					\$5,300,000	Water & Sewer Fund
78	9 Mile-Connemara Pressure Reducing Valve Replacement	091-08		\$351,000					\$351,000	Water & Sewer Fund
79	Construct New 12-inch Water Main Along 12 Mile Rd. from East of Napier to Wixom	091-13		\$991,000					\$991,000	Water & Sewer Fund
80	West Park Booster Station Upgrade	091-02		\$65,000					\$65,000	Water & Sewer Fund
81	16" Water Main Along Meadowbrook Under I-96	091-01		\$489,000					\$489,000	Water & Sewer Fund
82	13 Mile Rd. New Pressure Reducing Valve to Realign Pressure District	091-06			\$351,000				\$351,000	Water & Sewer Fund

Project Name	CIP #	Budget	Projected		Forecast			TOTAL	Funding Source	
		FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18			
83	12-inch Water Main Along 8 Mile Rd., Club Lane to Turnberry	091-26			\$203,000			\$203,000	Water & Sewer Fund	
84	12-inch Water Main Along 14 Mile Rd., Haverhill to Maples-New	091-16			\$140,000			\$140,000	Water & Sewer Fund	
85	16" Water Main Along 9 Mile Rd., Center to Novi Rd.	091-25			\$499,000			\$499,000	Water & Sewer Fund	
86	Grand River Isolation Pressure Reducing Valve (PRV) West of Lanny's Road	091-07				\$351,000		\$351,000	Water & Sewer Fund	
87	Cabot Road Meter Installation and 24" Connection with DWSD	091-11				\$832,000		\$832,000	Water & Sewer Fund	
88	Cabot 24-inch Water Main, MacKenzie to 14 Mile Rd.	091-10				\$710,000		\$710,000	Water & Sewer Fund	
89	12" Water Main Along 9 Mile and Napier	091-14					\$374,000	\$374,000	Water & Sewer Fund	
90	12-inch Water Main Cross-Country from Island Lake to Provincial Glades	091-28					\$819,000	\$819,000	Water & Sewer Fund	
91	12" Water Main along Napier, Park Place to 8 Mile	091-23					\$889,000	\$889,000	Water & Sewer Fund	
92	12" Water Main Along 10 Mile from Wixom to Terra Del Mar	091-22					\$421,000	\$421,000	Water & Sewer Fund/Private Funding	
93	12" Water Main along 11 Mile, Lee BeGole to the west	091-17					\$413,000	\$413,000	Private Funding	
94	12" Water Main Along 8 Mile, Tuscany to Napier	091-15					\$733,000	\$733,000	Water & Sewer Fund	
95	12-inch water main on 11 Mile, Seeley to Meadowbrook	091-18					\$819,000	\$819,000	Water & Sewer Fund	
96	12-inch Water Main Along Haggerty Road North of 12 Mile	091-31					\$128,000	\$128,000	Water & Sewer Fund	
97	24-inch Water Main on 10 Mile, Beck to Lynwood	091-21					\$355,000	\$355,000	Water & Sewer Fund	
98	24" Water Main Replacement at Grand River and Beck	091-12					\$310,000	\$310,000	Private Funding	
99	11 Mile Rd., Water Main Gaps, Taft to Beck Rd.	091-19					\$474,500	\$474,500	Water & Sewer Fund	
<b>Water Distribution Total:</b>			\$489,363					\$489,363	Leveraged dollars	
			<b>\$2,001,000</b>	<b>\$6,132,500</b>	<b>\$1,193,000</b>	<b>\$1,893,000</b>	<b>\$2,916,000</b>	<b>\$2,819,500</b>	<b>\$16,955,000</b>	Costs of City Accounts

**Parks**

100	Field/Parking Development with Novi Community School District for School's 11 Mile/Beck Road Property	PRCS	\$25,000	\$182,000				\$207,000	Parks, Recreation & Cultural Services
101	Lakeshore Park Play Structure Replacement	109-08	\$85,000					\$85,000	Parks, Recreation & Cultural Services
102	Rotary Park Play Structure Replacement	109-09	\$65,000					\$65,000	Federal/State Grants/Potential Grants
103	Greenway Development Phase I	109-06	\$72,080	\$288,322	\$1,272,705			\$2,263,487	Parks, Recreation & Cultural Services
104	Northend Lake Front Park	PRCS	\$287,964	\$291,884	\$198,000	\$554,400		\$500,000	Parks, Recreation & Cultural Services

Project Name	CIP #	Budget	Projected		Forecast			TOTAL	Funding Source
		FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18		
105	Tim Pope Play Structure Replacement	109-03		\$300,000				\$300,000	Parks, Recreation & Cultural Services
106	ITC Community Sports Park Play Structure Replacement	100-003		\$75,000				\$75,000	Parks, Recreation & Cultural Services
107	Power Park Play Structure Replacement	109-10		\$75,000				\$75,000	Federal/State Grant/Potential Grant
108	ITC Community Sports Park Pathway Resurfacing	100-05		\$95,445				\$95,445	Parks, Recreation & Cultural Services
109	Greenway Development Phase II	109-06		\$116,000				\$116,000	Parks, Recreation & Cultural Services
110	Lakeshore Park Asphalt Paved Parking Lot and Drive-New	100-002		\$254,227				\$254,227	Parks, Recreation & Cultural Services Fund/Potential Grant
111	Greenway Development Phase III	109-06			\$425,000			\$425,000	Parks, Recreation & Cultural Services
112	ITC Sports Park Asphalt Paved Parking lots	PRCS			\$374,923			\$374,923	Parks, Recreation & Cultural Services
<b>Parks Total:</b>			<b>\$535,044</b>	<b>\$1,677,878</b>	<b>\$2,270,628</b>	<b>\$554,400</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$4,836,082</b>

**Technology**

113	Biometric Access Control System - New	POLICE		\$74,555				\$74,555	Federal Forfeiture Fund
<b>Technology Total:</b>				<b>\$74,555</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$74,555</b>

**Equipment**

114	Utility Truck (Replaces #708, 1999 Ford F-350)	W & S	\$155,000					\$155,000	Water & Sewer Fund
115	Two Single-Axle 5 Cubic Yard Dump Trucks w/Front Plows and Underbody Scrapers (Replaces #670, 1988 Ford, #671, 1988 Ford)	FIELD	\$314,000					\$314,000	General Fund
116	Vibratory Roller - New	FIELD	\$36,800					\$36,800	General Fund
117	One - 1-Ton Dump Truck w/Plow (Replace #684,1991 GMC)	FIELD	\$74,760					\$74,760	General Fund
118	Engine #4 (Replaces #331, 1995 Seagrave)	FIRE		\$540,000				\$540,000	General Fund
119	One - 1-Ton Dump Truck w/Plow - New	FIELD		\$74,760				\$74,760	General Fund
120	Four- Combination V-Box Salt Spreader Inserts	FIELD		\$252,000				\$252,000	General Fund
121	Six Force America Commandall 5100 Regulating Controllers for Winter Maintenance	FIELD		\$85,000				\$85,000	General Fund/Major Street Fund/Local Street Fund
122	Squad #2 (Replaces #321, 2000 McCoy-Miller Ambulance)	FIRE		\$56,200				\$56,200	General Fund
123	Ditching Machine (Replaces #675, 1991 Gradall)	FIELD		\$300,000				\$300,000	General Fund
124	Mini Excavator Replacement (Replaces #622, 2000 Bobcat)	FIELD		\$85,000				\$85,000	General Fund
125	Two - Tandem-Axle 7 Cubic Yard Dump Trucks w/Front Plows and Underbody Scrapers (Replaces #699, 2000, #620, 2001 Sterlings)	FIELD		\$356,000				\$356,000	General Fund

Project Name	CIP #	Budget	Projected		Forecast			TOTAL	Funding Source
		FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18		
126 Two - Single-Axle 5 Cubic Yard Dump Trucks w/Front Plows & Underbody Scrapers - Replacement (Replaces #686, #687, 1994 Ford)	FIELD		\$330,000					\$330,000	General Fund
127 Salt Dome Loading Conveyor	FIELD			\$170,000				\$170,000	General Fund
128 Tanker #1 (Replaces #311, 1997 Chevrolet)	FIRE			\$293,600				\$293,600	General Fund
129 Bobcat All-Wheel Loader - New	FIELD			\$50,000				\$50,000	General Fund
130 One - Single-Axle 5 Cubic Yard Dump Truck w/Front Plow and Underbody Scraper (Replaces #605, 2001 Osh Kosh)	FIELD				\$165,000			\$165,000	General Fund
131 Zamboni Ice Resurfacers - Replacement	ICE				\$92,241			\$92,241	Ice Arena Fund
132 One - Single-Axle 5 Cubic Yard Dump Truck w/Front Plow and Underbody Scraper (Replaces #621, 2001 Sterling)	FIELD				\$165,000			\$165,000	General Fund
133 One - Single-Axle Large Dump Truck w/Front Plow and Underbody Scraper - New	FIELD				\$165,000			\$165,000	General Fund
134 One Single-Axle 5 Cubic Yard Dump Truck w/Front Plow and Underbody Scraper (Replaces #698, 1998 Ford)	FIELD					\$170,000		\$170,000	General Fund
135 Ladder #1 (Replaces #312, 2001 Freightliner)	FIRE					\$1,152,200		\$1,152,200	General Fund
136 One - 1-Ton Dump Truck w/Plow (Replaces #633, 1998 GMC)	FIELD					\$78,498		\$78,498	General Fund
137 Front-End Loader Replacement (Replaces #689, 1995 Case)	FIELD					\$252,000		\$252,000	General Fund
138 Grader (Replaces #612, 2005 CAT)	FIELD					\$300,000		\$300,000	General Fund
139 Truck-Mounted Combination (Jet and Vacuum) Sewer Cleaner Replacement (Replaces #614, 2007 Sterling Vactor)	FIELD						\$400,000	\$400,000	General Fund
<b>Equipment Total:</b>			<b>\$580,560</b>	<b>\$2,078,960</b>	<b>\$513,600</b>	<b>\$587,241</b>	<b>\$1,952,698</b>	<b>\$400,000</b>	<b>\$6,113,059</b>

**Buildings & Property**

140 DPS Field Services Complex Improvements - Mechanical	DPS	\$209,253						\$209,253	General Fund
141 Lower Lobby, Hallway and Locker Room Flooring Replacement	ICE	\$50,300						\$50,300	Ice Arena Fund
142 Police Locker Room Renovation - Replacement	POLICE	\$163,500						\$163,500	State Forfeiture Fund
143 Fuel System Underground Storage Tank Sumps Replacement	FLEET	\$28,000						\$28,000	General Fund
144 Meadowbrook Commons Ground Water Mitigation	SENIOR	\$54,640						\$54,640	Senior Housing Fund
145 Civic Center HVAC Boiler Replacement	FACILITY	\$60,000						\$60,000	General Fund
146 Fire Parking Lot Improvements - Replacement	FIRE	\$95,310						\$95,310	General Fund

Project Name	CIP #	Budget	Projected		Forecast			TOTAL	Funding Source
		FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18		
147 Council Chamber AV System Upgrade Project	NEIGH	\$281,339						\$281,339	General Fund (via Franchise Fees)
148 Civic Center Carpet Replacement Program - Phase III (2012-2013)	FACILITY	\$50,000						\$50,000	General Fund
149 Meadowbrook Commons Asphalt Repairs	SENIOR	\$31,160						\$31,160	Senior Housing Fund
150 Police Parking Lot Improvements - Replacement	POLICE	\$128,065						\$128,065	General Fund
151 Parking Lot and Walkway Lighting Replacement	ICE	\$27,250						\$27,250	Ice Arena Fund
152 DPS Mezzanine Elevator	DPS	\$35,000						\$35,000	General Fund, Water & Sewer Fund
153 Fuel Island Canopy - New	FLEET	\$40,000						\$40,000	General Fund, Water & Sewer Fund, Parks, Recreation & Cultural Services Fund.
154 Additional Parking - North Side of Civic Center & Sidewalk Ramp Rehabilitation	11-2001	\$104,100						\$104,100	General Fund
155 DPS Field Services Complex Improvements - Electrical	DPS		\$430,628					\$430,628	General Fund
156 Civic Center HVAC Air Handling Units #3 and #4 Replacement	FACILITY		\$250,000					\$250,000	General Fund
157 Meadowbrook Commons - Roof Replacements	SENIOR		\$39,600	\$40,800	\$42,100	\$43,300	\$44,580	\$210,380	Senior Housing Fund
158 Fire Tower Retrofit - New	FIRE		\$173,645					\$173,645	General Fund
159 Civic Center Carpet Replacement Program- Phase IV (2013-2014)	FACILITY		\$50,000					\$50,000	General Fund
160 Civic Center HVAC Air Handling Units #1 and #2 Replacement	FACILITY			\$250,000				\$250,000	General Fund
161 Civic Center Atrium Window Film Replacement	FACILITY			\$50,000				\$50,000	General Fund
162 Civic Center Irrigation Well and Filter System	FACILITY				\$25,000			\$25,000	General Fund
163 DPS Field Services Complex - Building Expansion Project	DPS				\$800,000	\$849,550	\$13,948,043	\$15,597,593	General Fund
164 Evaporative Cooling Tower Replacement	ICE					\$64,568		\$64,568	Ice Arena Fund
165 Munters Dehumidification Unit Replacement	ICE					\$184,481		\$184,481	Ice Arena Fund
<b>Buildings &amp; Property Total:</b>		<b>\$1,357,917</b>	<b>\$943,873</b>	<b>\$340,800</b>	<b>\$867,100</b>	<b>\$1,141,899</b>	<b>\$13,992,623</b>	<b>\$18,644,212</b>	

Project Name	CIP #	Budget	Projected		Forecast		TOTAL	Funding Source
		FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17		

**Summary**

	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18	TOTAL
<b>Roads</b>	\$ 4,916,530	\$ 2,217,947	\$ 3,056,140	\$ 2,840,710	\$ 9,488,710	\$ 3,832,600	\$ 26,352,637
<b>Intersections &amp; Signals</b>	\$ 470,400	\$ 30,000	\$ 43,750	\$ 507,394	\$ 857,990	\$ 595,000	\$ 2,364,534
<b>Sidewalks &amp; Pathways</b>	\$ 301,697	\$ 399,334	\$ 299,192	\$ 2,806,117	\$ 1,944,615	\$ 3,387,486	\$ 9,138,441
<b>Storm Sewer &amp; Drainage</b>	\$ 137,500	\$ 111,900	\$ 200,800	\$ 278,700	\$ 160,900	\$ -	\$ 889,800
<b>Sanitary Sewer</b>	\$ 500,000	\$ 250,000	\$ 450,000	\$ 350,000	\$ 188,500	\$ -	\$ 1,738,500
<b>Water Distribution</b>	\$ 2,001,000	\$ 6,132,500	\$ 1,193,000	\$ 1,893,000	\$ 2,916,000	\$ 2,819,500	\$ 16,955,000
<b>Parks</b>	\$ 535,044	\$ 1,677,878	\$ 2,270,628	\$ 554,400	\$ -	\$ -	\$ 4,836,082
<b>Technology</b>	\$ -	\$ 74,555	\$ -	\$ -	\$ -	\$ -	\$ 74,555
<b>Equipment</b>	\$ 580,560	\$ 2,078,960	\$ 513,600	\$ 587,241	\$ 1,952,698	\$ 400,000	\$ 6,113,059
<b>Buildings &amp; Property</b>	\$ 1,357,917	\$ 943,873	\$ 340,800	\$ 867,100	\$ 1,141,899	\$ 13,992,623	\$ 18,644,212
	<b>\$ 10,800,648</b>	<b>\$ 13,916,947</b>	<b>\$ 8,367,910</b>	<b>\$ 10,684,662</b>	<b>\$ 18,651,312</b>	<b>\$ 25,027,209</b>	<b>\$ 87,106,820</b>