

# CITY OF DULUTH

## CAPITAL IMPROVEMENT BUDGET AND FIVE YEAR PLAN 2016 - 2020

**NOVEMBER 2015**



City of Duluth, MN  
2016-2020 Capital Improvement Plan

## Table of Contents

### Capital Improvement Section

	Page No.
Introduction and Summaries	1
2016 Program Funding Sources	3
2016 - 2020 Project Summary	4
Five Year Program by Funding Source	6
Capital Improvement Program	
Five Year Plan	7
Specific Project Detail	8-10
Parks and Trails	
Five Year Plan	11
Specific Project Detail	12-13
Street and Bridge Reconstruction & Preservation Program	
Five Year Plan Project Summary	14
Specific Project Detail	15-24
Capital Utility Projects	
Five Year Plan Project Summary	25
Specific Project Detail	26-30

### Capital Equipment Section

	Page No.
Introduction and Summaries	31
2016 - 2020 Rolling Stock Bond Proposal	32
2016 - 2018 Non-Rolling Stock Bond Proposal	33
2016 - 2020 Utility Funds Proposal	34

# CAPITAL BUDGET AND PLAN

The City of Duluth's Capital Budget includes capital improvement projects to City infrastructure, such as facility enhancements and expansion, upgrades to parks and trails, and improvements to streets and utilities. Also included in the Capital Budget are capital equipment rolling stock, such as public safety vehicles, and non-rolling stock such as technology and public safety equipment.

The City's Capital Budget and Plan addresses current and future improvements to the City's infrastructure, facilities, and properties by combining elements of both budgeting (current year needs) and planning (five year plan). The purpose of the Capital Budget is two-fold: first, to prioritize and fund the most urgent needs in the coming year's budget; and secondly, to identify future capital needs with sufficient lead time so decisions may be made to our best advantage. This section presents a summary of the 2016 Capital Budget and the 2016 through 2020 Capital Improvement Plans.

## 2016 Proposed Improvements

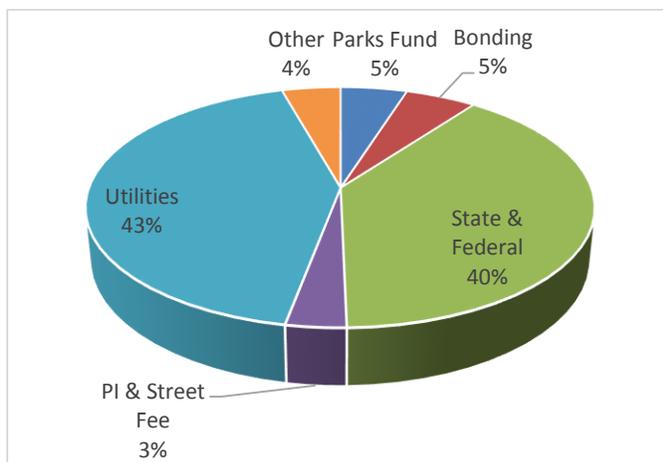
The 2016 Capital Program outlines total proposed projects in the amount of \$27,858,000 funded through various sources including bonding, the Parks Fund, the ½ and ½ tax, state and federal grants, the Permanent Improvement Fund, the Street System Maintenance Fee, and utility revenue. Included in the Capital Budget are projects for facilities, parks and trails, streets and bridges, and the Water, Gas, Sewer, Stormwater and Street Lighting utilities. The chart below shows the breakdown of funding for the 2016 program.

Capital improvements to city buildings and infrastructure will be funded by issuing a capital improvement bond in the amount of \$1,250,000.

Parks and trails are to be funded by federal grants totaling \$1,973,000; state grants totaling \$2,550,000; St Louis River Corridor bond proceeds (½ and ½ tax) of \$2,985,000; and the Parks Fund contribution of \$585,000 for a combined program total of \$8,093,000.

The Street and Bridge Improvement and Preservation program for 2016 totals \$8,405,300. Funding sources include aids and grants, current year utility revenue, Permanent Improvement Fund, developer contributions, and the Street System Maintenance Fee.

2016 Capital Utility Projects total \$10,109,700 and will be funded with utility revenue.

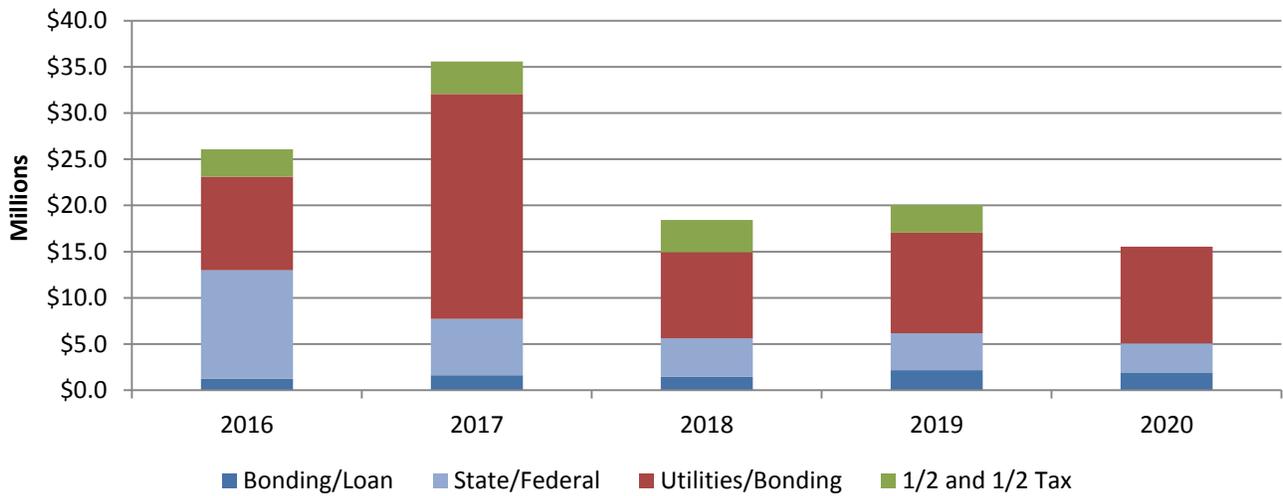


Bonding	\$ 1,250,000
Parks Fund	\$ 585,000
½ and ½ Tax	\$ 2,985,000
State/Fed	\$ 11,748,300
PI/Street Fee	\$ 780,000
Other	\$ 400,000
Utilities	<u>\$ 10,109,700</u>
Total 2016 Plan	\$ 27,858,000

### Five Year Improvement Plan Funding

The City has identified \$125.6 million in improvements along with funding sources over the course of the next five years. The City will bond for certain types of improvements as allowed in State Statute. For 2016, the City is proposing to bond for \$1.2 million in capital improvements. Future years of bonding include \$1.6 million in 2017, \$1.4 million in 2018, \$2.2 million in 2019, and \$1.9 million in 2020 for a combined five year total of \$8.3 million. Also included in the five year capital plan are park and trail projects totaling \$20.7 million; of which \$3 million will be funded out of the Parks Fund, \$2.1 million from Federal grants, \$13 million from the St Louis River Corridor bond proceeds (½ and ½ tax), and \$2.6 million from state grants. The five year plan for street and bridge projects includes \$31.4 million in projects with \$17.1 million in funding from Municipal State Aid. Additional funding sources for street and bridge projects include \$3 million from a state bridge bond, \$4.4 million from state and federal grants, \$1.4 million from property tax dollars levied in the Permanent Improvement Fund, \$5.1 million from the Street System Maintenance Fee, and \$.4 million from developer and St Louis County contributions for the Kenwood/Arrowhead project. Over the next five years, the Utility Funds will finance \$50.1 million using operating revenues, along with an additional \$15 million in bonding for a water pipe replacement project.

Shown in the chart below are the various funding sources by year for the plan.



	2016	2017	2018	2019	2020	Total
Bonding/Loan	1,250,000	1,600,000	1,450,000	2,175,000	1,870,000	8,345,000
State/Federal	11,748,300	6,100,400	4,175,000	4,000,000	3,200,000	29,223,700
PI & Street Fee	780,000	1,080,000	1,280,000	1,580,000	1,780,000	6,500,000
Utilities/Bonding	10,109,700	24,374,500	9,320,000	10,880,000	10,450,000	65,134,200
Parks Fund/Other	985,000	642,500	597,500	585,000	585,000	3,395,000
1/2 and 1/2 Tax	2,985,000	3,500,000	3,500,000	3,000,000	0.0	12,985,000
<b>Total Plan</b>	<b>27,858,000</b>	<b>37,297,400</b>	<b>20,322,500</b>	<b>22,220,000</b>	<b>17,885,000</b>	<b>125,582,900</b>

## 2016 CAPITAL IMPROVEMENTS PROGRAM FUNDING SOURCES

	Bond	Parks Fund	1/2 & 1/2 Tax	PI/ Prior Yr Pl	Aids/ Grants	Street Mtce Fee	Utility Revenue	Other	Total
<b>Facilities</b>									
Buildings City-Wide	725,000								725,000
Maintenance	450,000								450,000
Fire Department	75,000								75,000
	1,250,000	-							1,250,000
<b>Parks and Trails</b>									
Parks		410,000	1,430,000		1,900,000				3,740,000
Traverse Trail		100,000	400,000		400,000				900,000
Cross City Trail			630,000		1,723,000				2,353,000
Western Waterfront Renewal			425,000		500,000				925,000
Destination Loop Hikes			100,000						100,000
Lakewalk Phase VI		75,000							75,000
	-	585,000	2,985,000	-	4,523,000	-	-	-	8,093,000
<b>Street &amp; Bridge Reconstruction and Preservation Program</b>									
Misc Annual Infrastructure				280,000					280,000
Street Preservation					200,000	200,000			400,000
Skyline Parkway Walls					125,000				125,000
Superior Street Reconstruction					625,000				625,000
Congdon Boulevard					200,000				200,000
Aerial Lift Bridge					5,400,000				5,400,000
Arrowhead/Kenwood Intersection					300,000	300,000		400,000	1,000,000
Commonwealth Ave Reconstruction					375,300				375,300
	-	-		280,000	7,225,300	500,000	-	400,000	8,405,300
<b>Capital Utility Projects</b>									
4th Street Reconstruction							1,534,700		1,534,700
Michigan Street							150,000		150,000
Pump Station Service Upgrade							75,000		75,000
Water Plant HVAC							1,100,000		1,100,000
4th St., 4th Ave E to Hawthorne							950,000		950,000
18th & 19th Avenues East							650,000		650,000
Gas Main Extensions & Services							1,500,000		1,500,000
Meter Relocations							400,000		400,000
Michigan St. Regulator Station							75,000		75,000
Regulator Station Upgrades							100,000		100,000
4th Street Reconstruction							500,000		500,000
Superior Street Lining							1,500,000		1,500,000
Annual Street Projects							100,000		100,000
Brewery Creek							50,000		50,000
Citywide Down Drains							250,000		250,000
Culvert at Congdon Blvd							750,000		750,000
Lower Coffee Creek							75,000		75,000
4th Street Fiber Optic Project							250,000		250,000
Signals and Lights Ethernet							100,000		100,000
	-	-		-	-	-	10,109,700	-	10,109,700
	1,250,000	585,000	2,985,000	280,000	11,748,300	500,000	10,109,700	400,000	27,858,000

## 2016-2020 CAPITAL IMPROVEMENTS PROGRAM PROJECT SUMMARY

	2016	2017	2018	2019	2020	Total
<b>Capital Improvement Program</b>						
CIP eligible building improvements	505,000	1,000,000	880,000	1,310,000	1,095,000	4,790,000
City Center West police/library building improvements		50,000	425,000	50,000		525,000
Main library improvements	25,000					25,000
Mt Royal library improvements	125,000					125,000
Police multimodal substation building improvements	70,000					70,000
42nd tool house improvements				100,000		100,000
Riley Road tool house improvements	250,000	100,000				350,000
Fleet building improvements	200,000	50,000	75,000		75,000	400,000
Firehall #1 improvements		100,000		175,000	250,000	525,000
Firehall #2 improvements					130,000	130,000
Firehall #4 improvements			70,000		125,000	195,000
Firehall #7 improvements				40,000	195,000	235,000
Firehall #8 improvements	75,000					75,000
Firehall #10 improvements		300,000				300,000
Firehall #11 improvements				500,000		500,000
<b>Capital Improvement Program Total</b>	<b>1,250,000</b>	<b>1,600,000</b>	<b>1,450,000</b>	<b>2,175,000</b>	<b>1,870,000</b>	<b>8,345,000</b>
<b>Parks and Trails</b>						
Traverse Trail	900,000	100,000	100,000	100,000	100,000	1,300,000
Cross City Trail	2,353,000					2,353,000
Western Waterfront Renewal	925,000					925,000
Destination Loop Hikes	100,000					100,000
Trail - Other		1,800,000	1,800,000	2,000,000		5,600,000
Lakewalk VI - shared use - Water Street	75,000	312,900				387,900
Playground	105,000	80,000	100,000	100,000	100,000	485,000
Fields		75,000	165,000	185,000	185,000	610,000
Community Centers	150,000	100,000	100,000	100,000	100,000	550,000
Parks - Other	105,000	1,100,000	1,120,000	1,100,000	100,000	3,525,000
Zoo/Fairmount Park	1,200,000	700,000	700,000			2,600,000
Gary New Duluth CRA	530,000					530,000
Chambers Grove Park	1,000,000					1,000,000
Hartley Park	650,000	50,000				700,000
<b>Parks and Trails Total</b>	<b>8,093,000</b>	<b>4,317,900</b>	<b>4,085,000</b>	<b>3,585,000</b>	<b>585,000</b>	<b>20,665,900</b>
<b>Street &amp; Bridge Reconstruction and Preservation Program</b>						
9th and 8th Street Reclamation				1,300,000		1,300,000
Aerial Lift Bridge	5,400,000					5,400,000
Arrowhead/Kenwood	1,000,000					1,000,000
College Street		200,000				200,000
Commonwealth Avenue	375,300					375,300
Concrete Pavement Repairs		860,000				860,000
Congdon Blvd	200,000	3,215,000				3,415,000
Decker Road			1,412,500			1,412,500
East 3rd Street Recondition				1,400,000		1,400,000
Junction and St Marie					900,000	900,000
Maxwell Avenue			375,000			375,000
Misc Annual Infrastructure	280,000	280,000	280,000	280,000	280,000	1,400,000
Railroad Street					1,000,000	1,000,000
Redwing Street			600,000			600,000
Skyline Parkway Walls	125,000	950,000				1,075,000
Street Preservation	400,000	1,100,000	1,000,000	1,300,000	1,500,000	5,300,000
Superior Street	625,000	400,000	1,300,000	1,300,000	1,300,000	4,925,000
West Anoka Street			500,000			500,000
<b>Street, Bridge and Preservation Total</b>	<b>8,405,300</b>	<b>7,005,000</b>	<b>5,467,500</b>	<b>5,580,000</b>	<b>4,980,000</b>	<b>31,437,800</b>

## 2016-2020 CAPITAL IMPROVEMENTS PROGRAM PROJECT SUMMARY

	2016	2017	2018	2019	2020	Total
<b>Capital Utility Projects</b>						
4th Street Reconstruction	1,534,700	900,000				2,434,700
Downtown Streets Design		40,000				40,000
East Superior Water Main		70,000				70,000
Filter Sand Replacement		175,000				175,000
Hidden Valley Phase 2		1,050,000				1,050,000
Michigan Street - Water	150,000					150,000
Middle/Woodland Pump Station				2,000,000	2,000,000	4,000,000
Pump Station Service Upgrade	75,000					75,000
Riveted Steel Pipe Replacement		15,000,000				15,000,000
Superior Street Reconstruction - Water			1,400,000	1,600,000	2,000,000	5,000,000
Water Main Replacement			400,000	1,500,000	1,500,000	3,400,000
Water Plant HVAC	1,100,000					1,100,000
Water Plant Electrical Upgrade			1,600,000			1,600,000
WTP Building & Structure Repairs			900,000			900,000
3rd St, Vernon, 2nd Street Alley				200,000		200,000
4th St., 4th Ave E to Hawthorne	950,000	1,164,500				2,114,500
18th & 19th Avenues East	650,000					650,000
20th & 23rd Ave. W, 10th Street				1,000,000		1,000,000
48th Avenue East		750,000				750,000
58th Avenue West				200,000		200,000
Building Shells for Reg Stations			120,000			120,000
Gas Main Extensions & Services	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	7,500,000
London Road Gas Project		300,000				300,000
Meter Relocations	400,000	300,000	300,000	300,000		1,300,000
Michigan Street Gas Project			120,000			120,000
Michigan St. Regulator Station	75,000					75,000
Regulator Station Upgrades	100,000					100,000
Relocate Airpark/Martin Regs			150,000			150,000
Steel Main Replacements					500,000	500,000
Stora Enso Flow Meter				100,000		100,000
Superior Street Reconstruction - Gas			30,000	30,000		60,000
Woodland Ave Gas Project			500,000			500,000
4th Street Reconstruction	500,000	500,000				1,000,000
Lift Station Improvements				450,000	450,000	900,000
Sanitary Sewer Rehab/Reline		200,000	750,000	750,000	750,000	2,450,000
Superior Street Lining	1,500,000	1,500,000				3,000,000
Annual Street Projects	100,000	100,000	100,000	100,000	100,000	500,000
Block Long Culvert & Ditch			100,000	100,000	100,000	300,000
Brewery Creek	50,000	200,000	300,000			550,000
Citywide Down Drains	250,000		250,000	250,000	250,000	1,000,000
Clarkhouse Creek		75,000		100,000		175,000
Culvert at Congdon Boulevard	750,000					750,000
Downtown Streets Design		50,000				50,000
Gary New Duluth System		100,000	100,000	100,000	100,000	400,000
Greys Creek		100,000				100,000
Lower Coffee Creek	75,000		100,000			175,000
Norton Road & Thurber Road					600,000	600,000
Superior Street Reconstruction - Storm			300,000	300,000	300,000	900,000
4th Street Fiber Optic Project	250,000					250,000
Decorative Street Lights		200,000	200,000	200,000	200,000	800,000
Signals and Lights Ethernet	100,000	100,000	100,000	100,000	100,000	500,000
<b>Capital Utility Projects Total</b>	<b>10,109,700</b>	<b>24,374,500</b>	<b>9,320,000</b>	<b>10,880,000</b>	<b>10,450,000</b>	<b>65,134,200</b>
<b>GRAND TOTAL</b>	<b>27,858,000</b>	<b>37,297,400</b>	<b>20,322,500</b>	<b>22,220,000</b>	<b>17,885,000</b>	<b>125,582,900</b>

## 5 YEAR CAPITAL IMPROVEMENTS PROGRAM BY FUNDING SOURCE

	2016	2017	2018	2019	2020	Total
Bond	1,250,000	1,600,000	1,450,000	2,175,000	1,870,000	8,345,000
Parks Fund	585,000	632,500	585,000	585,000	585,000	2,972,500
1/2 & 1/2 Tax	2,985,000	3,500,000	3,500,000	3,000,000	-	12,985,000
Permanent Improvement Fund	280,000	280,000	280,000	280,000	280,000	1,400,000
Street System Maintenance Fee	500,000	800,000	1,000,000	1,300,000	1,500,000	5,100,000
Federal Grants	1,973,000	2,485,400	900,000	860,000	-	6,218,400
State Funding						
State Bridge Bond	3,000,000					3,000,000
MSA	3,850,000	3,615,000	3,275,000	3,140,000	3,200,000	17,080,000
DNR	375,300					375,300
Grants	2,550,000	-	-	-	-	2,550,000
Other Funding Sources	400,000	10,000	12,500			422,500
Utilities - Bonding						
Water		15,000,000				15,000,000
Utilities - Current Year Revenue						
Water	2,859,700	2,235,000	4,300,000	5,100,000	5,500,000	19,994,700
Gas	3,675,000	4,014,500	2,720,000	3,330,000	2,000,000	15,739,500
Sewer	2,000,000	2,200,000	750,000	1,200,000	1,200,000	7,350,000
Stormwater	1,225,000	625,000	1,250,000	950,000	1,450,000	5,500,000
Street Lighting	350,000	300,000	300,000	300,000	300,000	1,550,000
	10,109,700	9,374,500	9,320,000	10,880,000	10,450,000	50,134,200
<b>TOTAL ALL FUNDING SOURCES</b>	<b>27,858,000</b>	<b>37,297,400</b>	<b>20,322,500</b>	<b>22,220,000</b>	<b>17,885,000</b>	<b>125,582,900</b>

## Capital Improvement Program Summary

---

### Operating Cost Implications of 2016 Proposed Projects:

The Capital Improvement Program is the principal funding program the City uses to make large, planned improvements and corrections to its building inventory and infrastructure. It traditionally consists of issuing general obligation bonds for city hall, public safety facilities, libraries and public works facilities. The City maintains 150 structures with an average age of over 40 years. These structures require continued accessibility and code compliance efforts.

<b>Projects</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Buildings City-Wide	725,000	1,050,000	1,305,000	1,360,000	1,095,000	5,535,000
Maintenance Buildings	450,000	150,000	75,000	100,000	75,000	850,000
Fire Buildings	75,000	400,000	70,000	715,000	700,000	1,960,000
<b>Total</b>	<b>1,250,000</b>	<b>1,600,000</b>	<b>1,450,000</b>	<b>2,175,000</b>	<b>1,870,000</b>	<b>8,345,000</b>

<b>Funding</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Capital Improvement Bond	1,250,000	1,600,000	1,450,000	2,175,000	1,870,000	8,345,000

## Buildings City-Wide

---

**Description:**

It is important to maintain a city-wide program of facility system replacements and accessibility compliance for structures. Many remote sites need masonry tuck pointing; this is our primary point of water migration into finished spaces. We have damaged window heads, sills and parapets which also need repairs. Additionally, many remote sites are being heated with boilers or furnaces which are 20 years old and beyond. Replacing these with modern, high efficient units with electronic controls can realize 15% annual energy savings over the continued life of the structure. All of these types of system replacements and facility upgrades are aimed at keeping these public buildings in the best state of repair and function possible with the funding available.

<b>Project</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
CIP eligible building improvements	505,000	1,000,000	880,000	1,310,000	1,095,000	4,790,000
City Center West police/library building improvements	-	50,000	425,000	50,000	-	525,000
Main library improvements	25,000					25,000
Mt Royal library improvements	125,000	-	-	-	-	125,000
Police multimodal substation building improvements	70,000	-	-	-	-	70,000
<b>Total</b>	<b>725,000</b>	<b>1,050,000</b>	<b>1,305,000</b>	<b>1,360,000</b>	<b>1,095,000</b>	<b>5,535,000</b>

<b>Funding</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Capital Improvement Bond	725,000	1,050,000	1,305,000	1,360,000	1,095,000	5,535,000

# Maintenance

---

**Description:**

As a group of CIP eligible facilities, the Maintenance buildings that support the activities of Property and Facilities Management and Maintenance Operations represent some of the most rapidly deteriorating CIP eligible facilities that the City currently owns. Each of these facilities have significant capital needs that are extremely critical to maintain facility integrity and to continue operations as viable assets housing core City services. The group of maintenance facilities represents many challenges and some opportunities. As part of a longer term strategy for this element of the portfolio, the reality that most of these facilities have capital improvement needs in excess of 50% of their replacement value has driven Property and Facilities Management to consider investments that are primarily aimed at maintaining the facility integrity and ensuring the safety and comfort of City staff working out of these facilities while not significantly improving the assets. As assets, this group of buildings have significant value for potential resale, as most are located on prime real estate, and should a longer term solution aimed at a total consolidation of maintenance activities into one newly constructed facility come to fruition, the focus of this part of the capital plan is on - primarily - maintaining the status quo in a manner that sufficiently meets the operational needs and protects the assets from significant deterioration over the next 5 years.

<b>Project</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
42nd tool house improvements				100,000	-	100,000
Riley Road tool house improvements	250,000	100,000				350,000
Fleet building improvements	200,000	50,000	75,000		75,000	400,000
<b>Total</b>	450,000	150,000	75,000	100,000	75,000	850,000

<b>Funding</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Capital Improvement Bond	450,000	150,000	75,000	100,000	75,000	850,000

## Fire Department

---

**Description:**

Over the next five years, the City is proposing to invest \$1.96 million in capital maintenance projects at firehalls throughout the City. There are remodeling projects to accommodate staff reorganizations as part of the Fire Department consolidation plan. Energy improvements consist of installing new windows and overhead doors, and replacing furnaces and roofs. Repair and maintenance projects consist of masonry and brick repair, as well as resolving drainage issues and replacing driveways.

<b>Project</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Firehall #1 improvements	-	100,000	-	175,000	250,000	525,000
Firehall #2 improvements	-	-	-	-	130,000	130,000
Firehall #4 improvements	-	-	70,000	-	125,000	195,000
Firehall #7 improvements	-	-	-	40,000	195,000	235,000
Firehall #8 improvements	75,000	-	-	-	-	75,000
Firehall #10 improvements	-	300,000	-	-	-	300,000
Firehall #11 improvements	-	-	-	500,000	-	500,000
<b>Total</b>	<b>75,000</b>	<b>400,000</b>	<b>70,000</b>	<b>715,000</b>	<b>700,000</b>	<b>1,960,000</b>

<b>Funding</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Capital Improvement Bond	75,000	400,000	70,000	715,000	700,000	1,960,000

## Parks and Trails Summary

**Description:**

Park and trail capital projects are funded from three major sources: the Parks Fund, the 1/2 and 1/2 tax, and federal and state grants. The Parks Fund allocates monies each year for small park and trail capital projects (usually less than \$100,000 each). The 1/2 and 1/2 tax was authorized to fund a total of \$18 million park, trail, and outdoor recreation projects in the St. Louis River Corridor. The City Council in 2015 preliminarily approved a slate of projects to be funded by the 1/2 and 1/2 tax. The 1/2 and 1/2 tax and the Parks Fund are used to leverage large state and federal grants that substantially increase the magnitude of park and trail capital improvements. Selection and design of capital projects is shaped by input and direction from the community, the Parks Commission, and the City Council.

<b>Projects</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Trails	4,353,000	2,212,900	1,900,000	2,100,000	100,000	10,665,900
Parks	3,740,000	2,105,000	2,185,000	1,485,000	485,000	10,000,000
<b>Total</b>	<b>8,093,000</b>	<b>4,317,900</b>	<b>4,085,000</b>	<b>3,585,000</b>	<b>585,000</b>	<b>20,665,900</b>

<b>Funding</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Federal Grant	1,973,000	185,400	-	-	-	2,158,400
State Grant	2,550,000	-	-	-	-	2,550,000
Parks Fund	585,000	632,500	585,000	585,000	585,000	2,972,500
1/2 and 1/2 Tax	2,985,000	3,500,000	3,500,000	3,000,000	-	12,985,000
<b>Total</b>	<b>8,093,000</b>	<b>4,317,900</b>	<b>4,085,000</b>	<b>3,585,000</b>	<b>585,000</b>	<b>20,665,900</b>

Assumptions

\*Full spending of 1/2 and 1/2 tax by 2019.

\*No new grant awards for 2016-2020.

City of Duluth 2016-2020 Capital Improvement Plan

## Parks Detail

<b>Project</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Playground	105,000	80,000	100,000	100,000	100,000	485,000
Fields	-	75,000	165,000	185,000	185,000	610,000
Community Centers	150,000	100,000	100,000	100,000	100,000	550,000
Parks - Other	105,000	1,100,000	1,120,000	1,100,000	100,000	3,525,000
Zoo/Fairmount Park	1,200,000	700,000	700,000			2,600,000
Gary New Duluth CRA	530,000					530,000
Chambers Grove Park	1,000,000					1,000,000
Hartley Park	650,000	50,000				700,000
<b>Total</b>	<b>3,740,000</b>	<b>2,105,000</b>	<b>2,185,000</b>	<b>1,485,000</b>	<b>485,000</b>	<b>10,000,000</b>

<b>Funding</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Federal Grant						
State Grant	1,900,000					1,900,000
Parks Fund	410,000	405,000	485,000	485,000	485,000	2,270,000
1/2 and 1/2 Tax	1,430,000	1,700,000	1,700,000	1,000,000		5,830,000
<b>Total</b>	<b>3,740,000</b>	<b>2,105,000</b>	<b>2,185,000</b>	<b>1,485,000</b>	<b>485,000</b>	<b>10,000,000</b>

City of Duluth 2016-2020 Capital Improvement Plan

## Trails Detail

---

<b>Project</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Traverse Trail	900,000	100,000	100,000	100,000	100,000	1,300,000
Cross City Trail	2,353,000					2,353,000
Western Waterfront Renewal	925,000					925,000
Destination Loop Hikes	100,000					100,000
Trail - Other		1,800,000	1,800,000	2,000,000		5,600,000
Lakewalk VI - shared use Water St	75,000	312,900				387,900
<b>Total</b>	4,353,000	2,212,900	1,900,000	2,100,000	100,000	10,665,900

<b>Funding</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Federal Grant	1,973,000	185,400				2,158,400
State Grant	650,000					650,000
Parks Fund	175,000	227,500	100,000	100,000	100,000	702,500
1/2 and 1/2 Tax	1,555,000	1,800,000	1,800,000	2,000,000		7,155,000
<b>Total</b>	4,353,000	2,212,900	1,900,000	2,100,000	100,000	10,665,900

## Street Improvement & Bridge Projects Summary

### Description:

These projects include street reconstruction, street preservation and bridge maintenance. Funding sources include municipal state aid, federal funds, grants, street system maintenance fee, St Louis County, developer contributions, and utility revenue.

### Operating Cost Implications of 2016 Approved Projects:

Operating costs for street maintenance will remain fairly constant as the same number of streets are overlaid or reconstructed annually.

Project	2016	2017	2018	2019	2020	Total
9th and 8th Street Reclamation				1,300,000		1,300,000
Aerial Lift Bridge	5,400,000					5,400,000
Arrowhead/Kenwood	1,000,000					1,000,000
College Street		200,000				200,000
Commonwealth Avenue	375,300					375,300
Concrete Pavement Repairs		860,000				860,000
Congdon Blvd	200,000	3,215,000				3,415,000
Decker Road			1,412,500			1,412,500
East 3rd Street Recondition				1,400,000		1,400,000
Junction and St Marie					900,000	900,000
Maxwell Avenue			375,000			375,000
Misc Annual Infrastructure	280,000	280,000	280,000	280,000	280,000	1,400,000
Railroad Street					1,000,000	1,000,000
Redwing Street			600,000			600,000
Skyline Parkway Walls	125,000	950,000				1,075,000
Street Preservation	400,000	1,100,000	1,000,000	1,300,000	1,500,000	5,300,000
Superior Street	625,000	400,000	1,300,000	1,300,000	1,300,000	4,925,000
West Anoka Street			500,000			500,000
<b>Total</b>	<b>8,405,300</b>	<b>7,005,000</b>	<b>5,467,500</b>	<b>5,580,000</b>	<b>4,980,000</b>	<b>31,437,800</b>

Funding	2016	2017	2018	2019	2020	Total
Federal	-	2,300,000	900,000	860,000	-	4,060,000
State	7,225,300	3,615,000	3,275,000	3,140,000	3,200,000	20,455,300
Street System Mtce Fee	500,000	800,000	1,000,000	1,300,000	1,500,000	5,100,000
Permanent Improvement	280,000	280,000	280,000	280,000	280,000	1,400,000
Other	400,000	10,000	12,500	-	-	422,500
<b>Total</b>	<b>8,405,300</b>	<b>7,005,000</b>	<b>5,467,500</b>	<b>5,580,000</b>	<b>4,980,000</b>	<b>31,437,800</b>

## Miscellaneous Annual Infrastructure

---

**Description:**

Miscellaneous annual infrastructure projects include those that are funded by the permanent improvement property tax levy and limited use of special assessments to the affected property owner. Permanent improvement projects are generally limited to intersections, bridges, and other items that are not eligible for other funding sources. These projects include repair or replacement of the brick streets and sidewalks, a portion of the utility trench patch program, one way street conversions, retaining walls, and guard rail repair.

<b>Project</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Permanent Improvements	225,000	200,000	200,000	200,000	200,000	1,025,000
Patch & Sidewalks	55,000	80,000	80,000	80,000	80,000	375,000
<b>Total</b>	<u>280,000</u>	<u>280,000</u>	<u>280,000</u>	<u>280,000</u>	<u>280,000</u>	1,400,000

<b>Funding</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
PI Fund	280,000	280,000	280,000	280,000	280,000	1,400,000

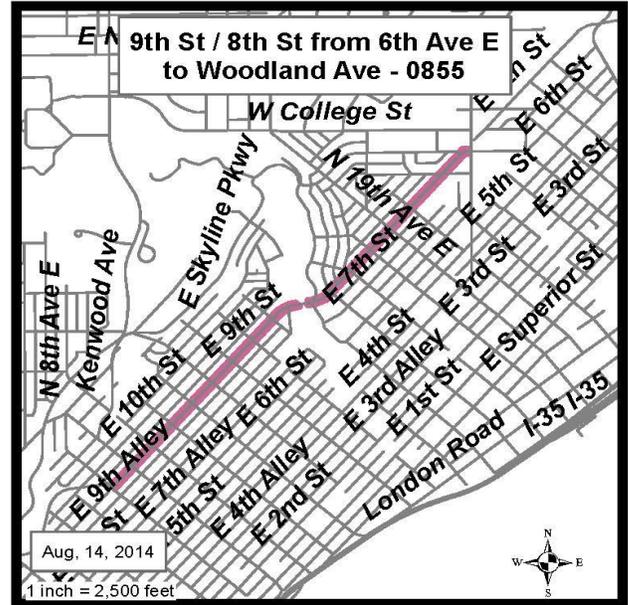
## Street Improvement & Bridge Projects

**Project Title:**

9th Street/8th Street Reclamation  
6th Ave E to Woodland Ave

**Funding Source:**

	FY 2019
Federal/ATP	860,000
MSA	440,000
<b>PROJECT TOTAL:</b>	<b>\$1,300,000</b>



**Project Title:**

Aerial Lift Bridge  
Painting and Misc Structural Repairs

**Funding Source:**

	FY 2016
MSA	2,400,000
State Bridge Bond	3,000,000
<b>PROJECT TOTAL:</b>	<b>\$5,400,000</b>



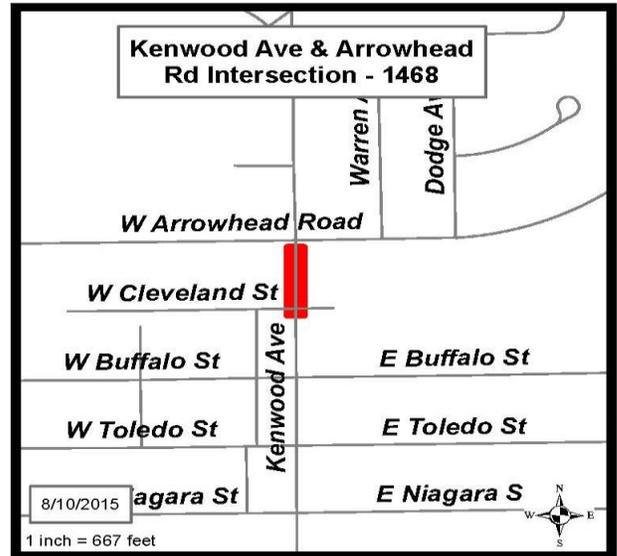
## Street Improvement & Bridge Projects

**Project Title:**

Arrowhead/Kenwood and West Cleveland Intersections

**Funding Source:**

	FY 2016
MSA	300,000
Street System Mtce Fee	300,000
Other	400,000
<b>PROJECT TOTAL:</b>	<b>\$1,000,000</b>

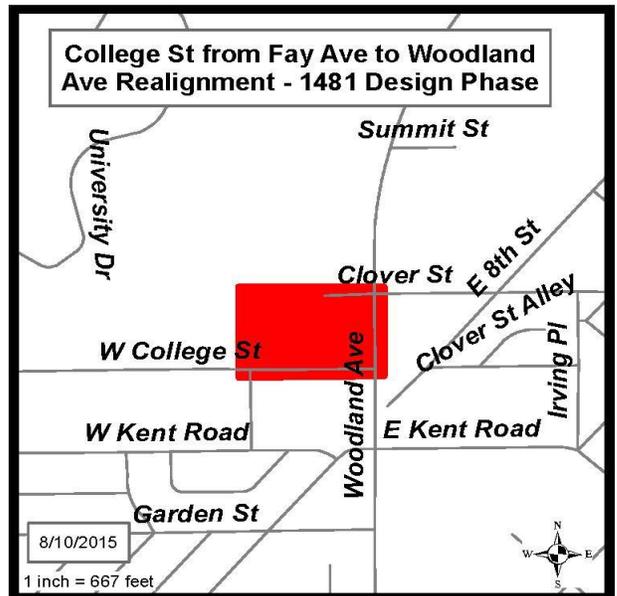


**Project Title:**

College Street Realignment - Design Phase

**Funding Source:**

	FY 2017
Street System Mtce Fee	200,000
<b>PROJECT TOTAL:</b>	<b>\$200,000</b>



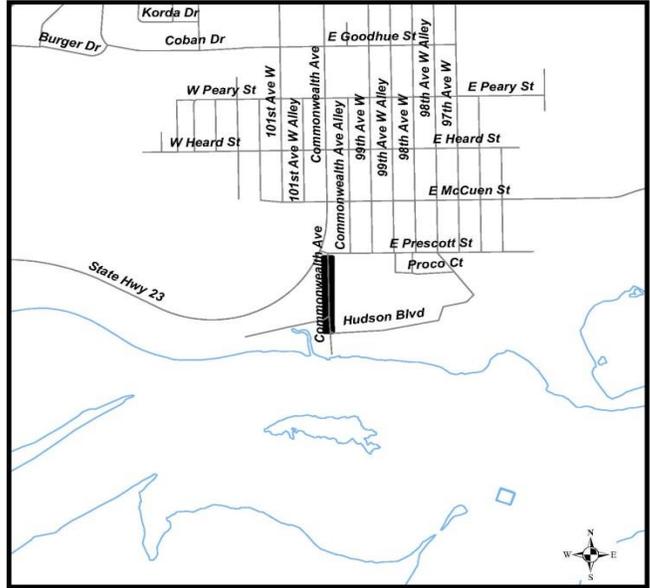
# Street Improvement & Bridge Projects

**Project Title:**

Commonwealth Ave Reconstruction,  
from East Prescott St to Boy Scout Landing

**Funding Source:**

	<u>FY 2016</u>
DNR	375,300
<b>PROJECT TOTAL:</b>	<b>\$375,300</b>



Commonwealth Ave from Prescott St to Boy Scout Landing - 1319

**Project Title:**

Concrete Pavement Repairs -  
Various Locations

**Funding Source:**

NO MAP AVAILABLE

	<u>FY 2017</u>
MSA	850,000
Sewer	5,000
Water	5,000
<b>PROJECT TOTAL:</b>	<b>\$860,000</b>

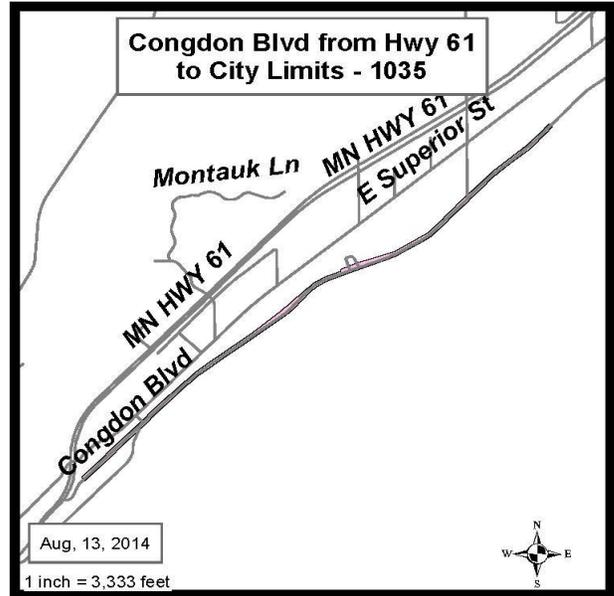
## Street Improvement & Bridge Projects

**Project Title:**

Congdon Boulevard widening  
and reclamation

**Funding Source:**

	FY 2016 - 2017
Federal/ATP	1,500,000
MSA	1,915,000
	\$3,415,000
<b>PROJECT TOTAL:</b>	<b>\$3,415,000</b>

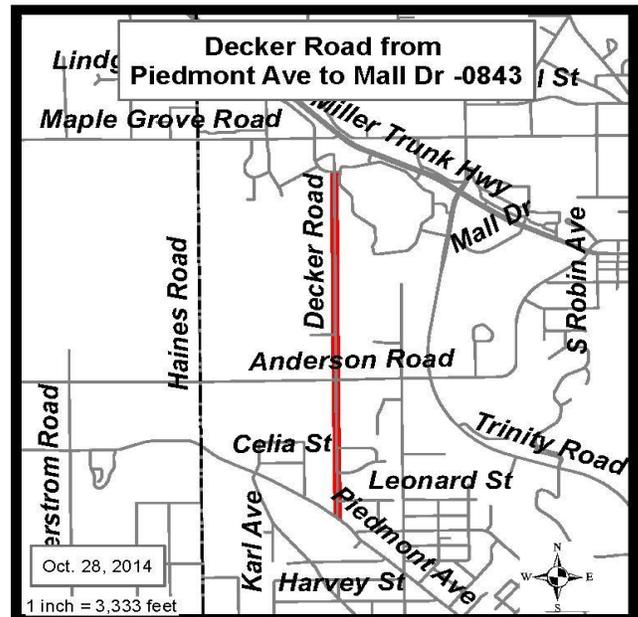


**Project Title:**

Decker Road, Piedmont Avenue to  
Mall Drive

**Funding Source:**

	FY 2018
Federal/ATP	900,000
MSA	500,000
Water	12,500
	\$1,412,500
<b>PROJECT TOTAL:</b>	<b>\$1,412,500</b>



## Street Improvement & Bridge Projects

**Project Title:**

East 3rd Street Recondition,  
from Mesaba Ave to 21st Ave E

**Funding Source:**

	FY 2019
MSA	1,400,000
<b>PROJECT TOTAL:</b>	<b>\$1,400,000</b>

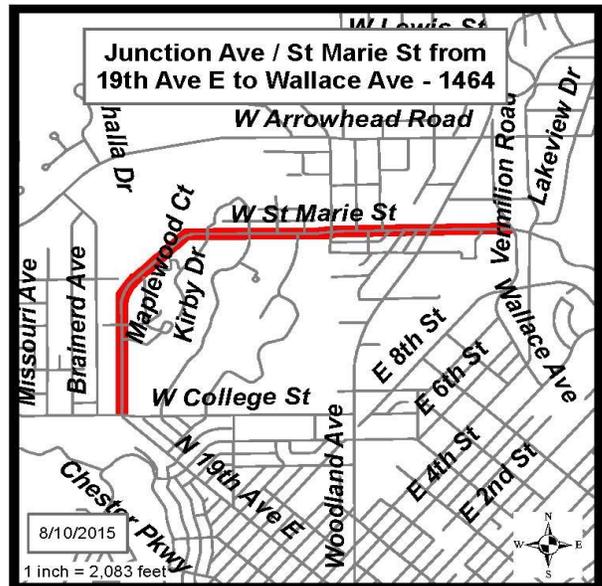


**Project Title:**

Junction Ave / St. Marie, from  
19th Ave E to Wallace

**Funding Source:**

	FY 2020
MSA	900,000
<b>PROJECT TOTAL:</b>	<b>\$900,000</b>



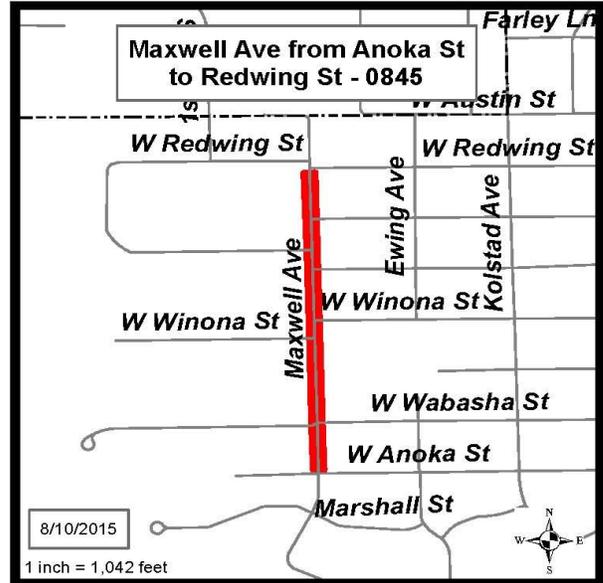
## Street Improvement & Bridge Projects

**Project Title:**

Maxwell Ave, from Anoka Street  
to Redwing Street

**Funding Source:**

	FY 2018
MSA	375,000
<b>PROJECT TOTAL:</b>	<b>\$375,000</b>

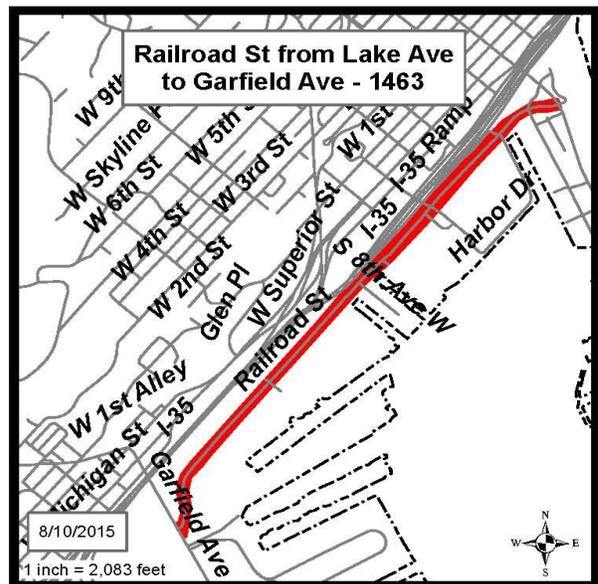


**Project Title:**

Railroad Street, from Lake Ave  
to Garfield Ave

**Funding Source:**

	FY 2020
MSA	1,000,000
<b>PROJECT TOTAL:</b>	<b>\$1,000,000</b>



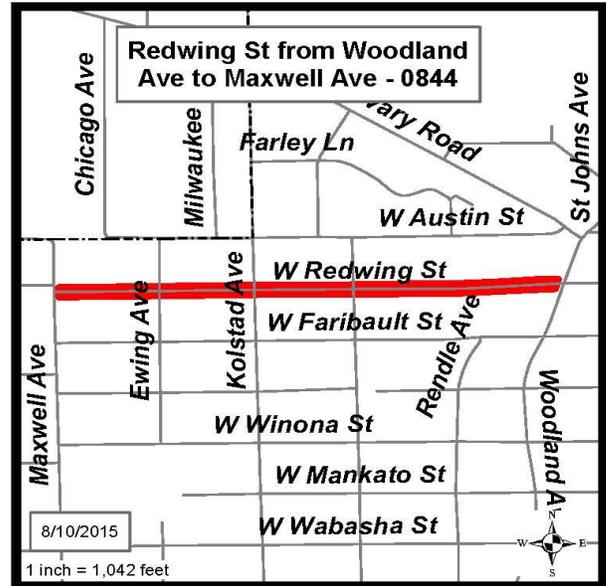
## Street Improvement & Bridge Projects

**Project Title:**

Redwing Street: Mill and Overlay

**Funding Source:**

	FY 2018
MSA	600,000
<b>PROJECT TOTAL:</b>	<b>\$600,000</b>



**Project Title:**

Skyline Parkway Retaining Wall Repairs

**Funding Source:**

	FY 2016-2017
MSA	275,000
Federal/ATP	800,000
<b>PROJECT TOTAL:</b>	<b>\$1,075,000</b>

NO MAP AVAILABLE

## Street Improvement & Bridge Projects

**Project Title:**

Street Preservation Projects -  
Various Locations

**Funding Source:**

NO MAP AVAILABLE

FY 2016-2020

MSA	700,000
Street System Mtce Fee	4,600,000

PROJECT TOTAL: \$5,300,000

**Project Title:**

Superior Street Reconstruction

**Funding Source:**

FY 2016-2020

MSA	4,925,000
-----	-----------

PROJECT TOTAL: \$4,925,000



## Street Improvement & Bridge Projects

---

**Project Title:**

West Anoka Street

**Funding Source:**

FY 2018

MSA

500,000

PROJECT TOTAL:

\$500,000



## Capital Utility Projects Summary

Utility projects within the five year capital improvement plan primarily focus on the continued rehabilitation and replacement of aging infrastructure, as well as the continued extension of the city's natural gas system.

### Operating Cost Implications of 2016 Approved Projects:

The Water Fund projects are for replacement and rehabilitation of the water system to increase system reliability and will have no operating expense impact. The Gas Fund projects will have very little operating expense impact with the exception of the gas main extensions, which will have minimal maintenance and corrosion protection costs that will be offset by new customer account revenue. Sanitary sewer projects for rehabilitation and relining will provide future savings to sanitary sewer treatment costs through a reduction of inflow and infiltration flows. Stormwater projects will result in indirect savings through cost avoidance of surface water damage. Street Lighting's citywide replacement of existing street light fixtures to LED luminaires is anticipated to reduce annual costs for electricity and maintenance.

Projects	2016	2017	2018	2019	2020	Total
Water	2,859,700	17,235,000	4,300,000	5,100,000	5,500,000	34,994,700
Gas	3,675,000	4,014,500	2,720,000	3,330,000	2,000,000	15,739,500
Sewer	2,000,000	2,200,000	750,000	1,200,000	1,200,000	7,350,000
Stormwater	1,225,000	625,000	1,250,000	950,000	1,450,000	5,500,000
Street Lighting	350,000	300,000	300,000	300,000	300,000	1,550,000
<b>Total</b>	<b>10,109,700</b>	<b>24,374,500</b>	<b>9,320,000</b>	<b>10,880,000</b>	<b>10,450,000</b>	<b>65,134,200</b>

Funding	2016	2017	2018	2019	2020	Total
Water - Current Revenue	2,859,700	2,235,000	4,300,000	5,100,000	5,500,000	19,994,700
Water - Improvement Bonds	-	15,000,000	-	-	-	15,000,000
Gas - Current Revenue	3,675,000	4,014,500	2,720,000	3,330,000	2,000,000	15,739,500
Sewer - Current Revenue	2,000,000	2,200,000	750,000	1,200,000	1,200,000	7,350,000
Stormwater - Current Revenue	1,225,000	625,000	1,250,000	950,000	1,450,000	5,500,000
Street Lighting - Current Revenue	350,000	300,000	300,000	300,000	300,000	1,550,000
<b>Total</b>	<b>10,109,700</b>	<b>24,374,500</b>	<b>9,320,000</b>	<b>10,880,000</b>	<b>10,450,000</b>	<b>65,134,200</b>

## Capital Utility Projects

**Description:** **Water Capital Projects**

The proposed water projects over the next five years include updating the aging infrastructure by replacing those distribution mains with a high number of recurring leaks. Rehabilitation of primary transmission lines and pump station upgrades will increase system reliability to meet water demand. Significant facility improvements are required at the Lakewood Water Treatment Plant. Built in 1975, this facility is aging and requires renovation of HVAC and electrical systems as well as structural repairs to both the treatment plant and pump building.

<b>Project</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
4th Street Reconstruction	1,534,700	900,000				2,434,700
Downtown Streets Design		40,000				40,000
East Superior Water Main		70,000				70,000
Filter Sand Replacement		175,000				175,000
Hidden Valley Phase 2		1,050,000				1,050,000
Michigan Street - Water	150,000					150,000
Middle/Woodland Pump Station				2,000,000	2,000,000	4,000,000
Pump Station Service Upgrade	75,000					75,000
Riveted Steel Pipe Replacement		15,000,000				15,000,000
Superior Street Reconstruction - Water			1,400,000	1,600,000	2,000,000	5,000,000
Water Main Replacement			400,000	1,500,000	1,500,000	3,400,000
Water Plant HVAC	1,100,000					1,100,000
Water Plant Electrical Upgrade			1,600,000			1,600,000
WTP Building & Structure Repairs			900,000			900,000
<b>Total</b>	<b>2,859,700</b>	<b>17,235,000</b>	<b>4,300,000</b>	<b>5,100,000</b>	<b>5,500,000</b>	<b>34,994,700</b>

<b>Funding</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Water - Current Revenue	2,859,700	2,235,000	4,300,000	5,100,000	5,500,000	19,994,700
Water - Improvement Bond	-	15,000,000	-	-	-	15,000,000
<b>Total</b>	<b>2,859,700</b>	<b>17,235,000</b>	<b>4,300,000</b>	<b>5,100,000</b>	<b>5,500,000</b>	<b>34,994,700</b>

## Capital Utility Projects

**Description:** **Natural Gas Capital Projects**

The proposed gas projects over the next five years include the continued extension of the system into unserved areas and the relocation of gas meters due to code requirements. Other significant costs include projects to replace existing thin wall plastic mains and older steel mains where leaks occur.

<b>Project</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
3rd St, Vernon, 2nd Street Alley				200,000		200,000
4th St., 4th Ave E to Hawthorne	950,000	1,164,500				2,114,500
18th & 19th Avenues East	650,000					650,000
20th & 23rd Ave. W, 10th Street				1,000,000		1,000,000
48th Avenue East		750,000				750,000
58th Avenue West				200,000		200,000
Building Shells for Reg Stations			120,000			120,000
Gas Main Extensions & Services	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	7,500,000
London Road Gas Project		300,000				300,000
Meter Relocations	400,000	300,000	300,000	300,000		1,300,000
Michigan Street Gas Project			120,000			120,000
Michigan St. Regulator Station	75,000					75,000
Regulator Station Upgrades	100,000					100,000
Relocate Airpark/Martin Regs			150,000			150,000
Steel Main Replacements					500,000	500,000
Stora Enso Flow Meter				100,000		100,000
Superior Street Reconstruction - Gas			30,000	30,000		60,000
Woodland Ave Gas Project			500,000			500,000
<b>Total</b>	<b>3,675,000</b>	<b>4,014,500</b>	<b>2,720,000</b>	<b>3,330,000</b>	<b>2,000,000</b>	<b>15,739,500</b>

<b>Funding</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Gas - Current Revenue	3,675,000	4,014,500	2,720,000	3,330,000	2,000,000	15,739,500



## Capital Utility Projects

**Description:** **Stormwater Capital Projects**

The proposed storm water projects over the next five years include continued replacement of failing storm sewer lines and large culverts. Reconstruction of Brewery and Greys Creek is planned to repair deteriorated public infrastructure. Significant future costs will occur in the repair and replacement of storm sewer in steep slope areas that discharge into streams located throughout the city.

<b>Project</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Annual Street Projects	100,000	100,000	100,000	100,000	100,000	500,000
Block Long Culvert & Ditch			100,000	100,000	100,000	300,000
Brewery Creek	50,000	200,000	300,000			550,000
Citywide Down Drains	250,000		250,000	250,000	250,000	1,000,000
Clarkhouse Creek		75,000		100,000		175,000
Culvert at Congdon Boulevard	750,000					750,000
Downtown Streets Design		50,000				50,000
Gary New Duluth System		100,000	100,000	100,000	100,000	400,000
Greys Creek		100,000				100,000
Lower Coffee Creek	75,000		100,000			175,000
Norton Road & Thurber Road					600,000	600,000
Superior Street Reconstruction - Storm			300,000	300,000	300,000	900,000
<b>Total</b>	1,225,000	625,000	1,250,000	950,000	1,450,000	5,500,000

<b>Funding</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Stormwater - Current Revenue	1,225,000	625,000	1,250,000	950,000	1,450,000	5,500,000

## Capital Utility Projects

---

**Description:** **Street Lighting Capital Projects**

The proposed Street Lighting Capital plan over the next five years continues the city wide replacement of roadway and decorative street light fixtures with energy saving LED luminaires and control systems. It also includes funding to provide city wide communications connectivity to the signals and lighting systems, and will specifically fund installation of fiber optic communications as part of the County's Fourth Street project in 2016.

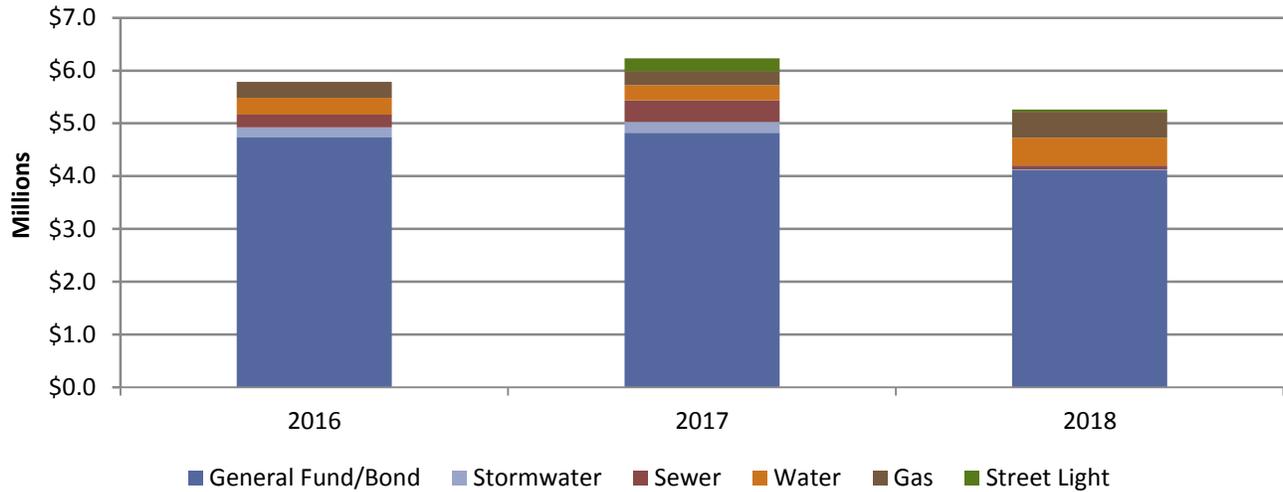
<b>Project</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
4th Street Fiber Optic Project	250,000	-	-	-	-	250,000
Decorative Street Lights	-	200,000	200,000	200,000	200,000	800,000
Signals and Lights Ethernet	100,000	100,000	100,000	100,000	100,000	500,000
<b>Total</b>	<b>350,000</b>	<b>300,000</b>	<b>300,000</b>	<b>300,000</b>	<b>300,000</b>	<b>1,550,000</b>

<b>Funding</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Street Lighting - Current	350,000	300,000	300,000	300,000	300,000	1,550,000

# CAPITAL EQUIPMENT BUDGET AND PLAN

## Three Year Equipment Plan

The objective of the City's Three year equipment plan is to maintain city equipment by budgeting an adequate dollar amount annually for replacement on a timely basis. \$17.3 million is proposed in this plan for the period of 2016 through 2018. Of that total, equipment for the General Fund is \$13.7 million to be financed with bonds. The balance of \$3.6 million is proposed for the combined enterprise funds of Water, Gas, Stormwater, Sewer, and Street Lighting. Shown in the chart below are the various funding sources by year for the plan.



	2016	2017	2018	Total
General Fund/Bond	4,743,910	4,824,000	4,113,000	13,680,910
Stormwater	181,800	202,400	15,800	400,000
Sewer	240,300	408,300	71,200	719,800
Water	320,000	292,800	527,400	1,140,200
Gas	300,500	260,000	490,600	1,051,100
Street Light	-	244,000	45,000	289,000
<b>Total Plan</b>	<b>5,786,510</b>	<b>6,231,500</b>	<b>5,263,000</b>	<b>17,281,010</b>

## 2016 Proposed Equipment

The City is proposing a total of \$5.8 million in capital equipment expenditures for 2016. This includes equipment for General Fund operating departments and the utility funds named above. The General Fund portion is \$4.7 million to be financed with bonds and the utility portion is \$1.1 million to be paid for out of current year revenues.

For General Fund departments, the City is proposing the purchase of \$2.1 million in rolling stock vehicles – the largest purchase being Maintenance Operations equipment totaling \$806,000; fire apparatus totaling \$600,000; police vehicles totaling \$600,000; and Construction Services totaling \$50,000. The non-rolling stock equipment plan of \$2.7 million proposed by City for 2016 is for technology improvements and replacements, as well as library, police, and fire equipment.

The breakdown of equipment for the utility funds in 2016 includes \$81,600 for non-rolling stock equipment and \$961,000 for rolling stock vehicles for a total of \$1,042,600 in 2016.

# City of Duluth 2016 - 2018 Capital Equipment Program

## General Fund Rolling Stock Vehicles

	2016	2017	2018	Total
<b>Fire Department</b>				
Fire Trucks/Apparatus	600,000	600,000	625,000	1,825,000
Vehicle Replacements		35,000		35,000
Arson Van Replacement		35,000		35,000
Rescue Boat/Plow Truck			40,000	40,000
Subtotal Fire Department	600,000	670,000	665,000	1,935,000
<b>Construction Services</b>				
Inspector Vehicles	50,000	50,000	50,000	150,000
Subtotal Constructive Services	50,000	50,000	50,000	150,000
<b>Police Department</b>				
Police Vehicles	600,000	600,000	600,000	1,800,000
Subtotal Police Department	600,000	600,000	600,000	1,800,000
<b>Facilities Management</b>				
Platform Truck		100,000		100,000
1 Ton w/Service Body		60,000	60,000	120,000
1 Ton Cargo Van			40,000	40,000
Subtotal Facilities Management		160,000	100,000	260,000
<b>Maintenance Operations</b>				
<b>Street Maintenance</b>				
Sweeper	200,000	200,000	200,000	600,000
4 x 4 Pickup	40,000	40,000	45,000	125,000
3/4 ton pickup w/plow		60,000		60,000
Tandem Dump Truck		300,000		300,000
Plow Truck w/wing	230,000	230,000		460,000
1 ton cab/chassis w/dump & plow		125,000		125,000
3 yard Loader		195,000	225,000	420,000
Retro Sander Truck - perm mount	168,000	340,000	340,000	848,000
Retro - RDS Body truck w/plow	168,000			168,000
Subtotal Street Maintenance	806,000	1,490,000	810,000	3,106,000
<b>Park Maintenance</b>				
4WD wide area mower		22,000		22,000
Turbo wide area mower		53,000		53,000
1 Ton w/Plow		71,000		71,000
4 x 4 Dump & Chipper Truck		58,000		58,000
Skidsteer			62,000	62,000
Pickup			42,000	42,000
Various Mowers			75,000	75,000
Trailers			42,000	42,000
Subtotal Park Maintenance		204,000	221,000	425,000
<b>Subtotal Maintenance Operations</b>				
<b>Public Works</b>				
Engineering Vehicles			17,000	17,000
Subtotal Transportation Engineering			17,000	17,000
<b>Rolling Stock Bond Total</b>	<b>\$ 2,056,000</b>	<b>\$ 3,174,000</b>	<b>\$ 2,463,000</b>	<b>\$ 7,693,000</b>

**City of Duluth 2016 - 2018 Capital Equipment Program**

**General Fund Non-Rolling Stock Equipment**

	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>Total</b>
<b>IT</b>				
Enterprise Wide PC Replacements	180,000	200,000	200,000	580,000
Enterprise Wide Laptop Replacements	100,000	100,000	100,000	300,000
Microsoft License True-Up	75,000	50,000	50,000	175,000
Software Replacement	1,500,000			1,500,000
Police Evidence Inventory Scanner and PDA	15,000			15,000
Police AFIS Machine	15,000			15,000
Radio System VHF/ARMER Replacement	200,000			200,000
Network Equipment Replacements	270,000	300,000	300,000	870,000
PCI Security Requirements		50,000	50,000	100,000
Pictometry Imagery	30,000			30,000
Document Mgt		100,000	100,000	200,000
Personnel Actions	20,000			20,000
Library Credit Card Acceptance	25,000			25,000
Conference Room Technology Needs		50,000	50,000	100,000
Desktop Re-cabling Project		100,000	100,000	200,000
Security Card Access Door Additions		100,000	100,000	200,000
Communications Systems Enhancements		200,000	200,000	400,000
BCA Security Regulations		50,000	50,000	100,000
High Speed WAN Expansion		50,000	50,000	100,000
ITSC Project Planning		300,000	300,000	600,000
<b>Total Proposed MIS Non-Rolling Stock</b>	<b>2,430,000</b>	<b>1,650,000</b>	<b>1,650,000</b>	<b>5,730,000</b>
<b>Library</b>				
Microfilm reader/printer/scanner	10,000			10,000
Interior Book Drop for main library	5,000			5,000
Exterior book drop for Michigan St level of main library	7,500			7,500
<b>Fire</b>				
Turnout Gear, Hose, SCBA	50,000			50,000
<b>Police</b>				
TRT Equipment	40,000			40,000
Body Camera Replacements	35,060			35,060
Digital Recorders	70,350			70,350
Patrol Rifles	10,000			10,000
Taser	30,000			30,000
	257,910	0	0	257,910
<b>Non-Rolling Stock Bond Total</b>	<b>\$ 2,687,910</b>	<b>\$ 1,650,000</b>	<b>\$ 1,650,000</b>	<b>\$ 5,987,910</b>
<b>TOTAL GENERAL FUND EQUIPMENT BOND PROPOSAL</b>	<b>\$4,743,910</b>	<b>\$4,824,000</b>	<b>\$4,113,000</b>	<b>\$13,680,910</b>

**City of Duluth 2016 - 2018 Capital Equipment Program**

**Utility Funds Equipment**

	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>Total</b>
<b>Water Fund</b>				
Cars/Pick-ups	64,700	54,500	33,700	152,900
Trucks/Vans	136,000	39,200	213,200	388,400
Dump Trucks	77,500	43,200	147,200	267,900
Backhoe/Loader	0	78,700	84,000	162,700
Excavator/Vactor	0	0	0	0
Other Rolling Stock	2,500	57,200	29,300	89,000
Non-Rolling Capital Equip.	39,300	20,000	20,000	79,300
Subtotal Water Fund	320,000	292,800	527,400	1,140,200
<b>Gas Fund</b>				
Cars/Pick-ups	36,200	51,300	37,700	125,200
Trucks/Vans	235,000	156,800	246,800	638,600
Dump Trucks	0	10,800	162,800	173,600
Backhoe/Loader	0	26,300	21,000	47,300
Excavator/Vactor	0	0	0	0
Other Rolling Stock	2,500	4,800	12,300	19,600
Non-Rolling Capital Equip.	26,800	10,000	10,000	46,800
Subtotal Gas Fund	300,500	260,000	490,600	1,051,100
<b>Sewer Fund</b>				
Cars/Pick-ups	30,500	9,200	5,800	45,500
Trucks/Vans	172,000	56,000	0	228,000
Dump Trucks	0	54,000	54,000	108,000
Backhoe/Loader	0	19,600	0	19,600
Excavator/Vactor	0	150,000	0	150,000
Other Rolling Stock	28,500	109,500	1,400	139,400
Non-Rolling Capital Equip.	9,300	10,000	10,000	29,300
Subtotal Sewer Fund	240,300	408,300	71,200	719,800
<b>Stormwater Fund</b>				
Cars/Pick-ups	23,600	0	5,800	29,400
Trucks/Vans	0	0	0	0
Dump Trucks	131,500	155,000	0	286,500
Backhoe/Loader	0	29,400	0	29,400
Excavator/Vactor	0	0	0	0
Other Rolling Stock	20,500	8,000	0	28,500
Non-Rolling Capital Equip.	6,200	10,000	10,000	26,200
Subtotal Stormwater Fund	181,800	202,400	15,800	400,000
<b>Street Lighting</b>				
Cars/Pick-ups	0	36,000	27,000	63,000
Trucks/Vans	0	0	0	0
Aerial Bucket Truck	0	190,000	0	190,000
Non-Rolling Capital Equip.	0	18,000	18,000	36,000
Subtotal Street Lighting Fund	0	244,000	45,000	289,000
<b>Utility Funds Grand Total</b>	<b>\$ 1,042,600</b>	<b>\$ 1,407,500</b>	<b>\$ 1,150,000</b>	<b>\$3,600,100</b>