

2017



Legislative Reference Bureau

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CAPITAL IMPROVEMENTS OVERVIEW



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Final Version

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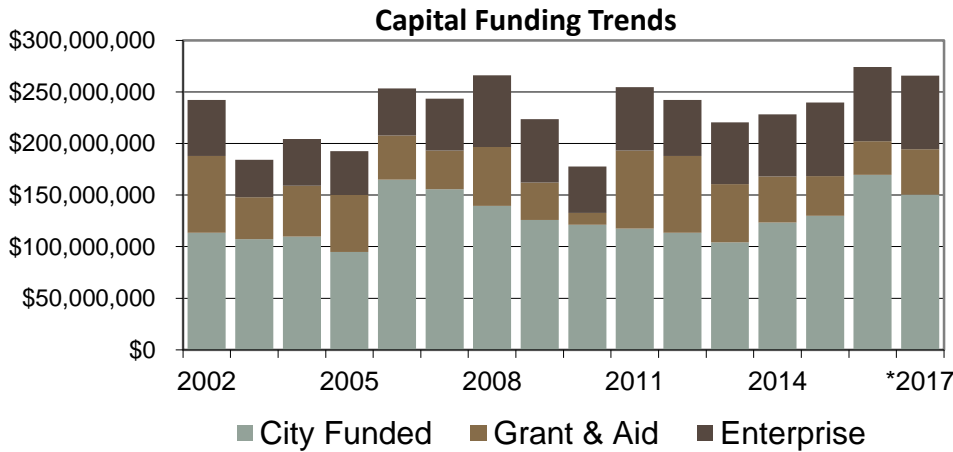
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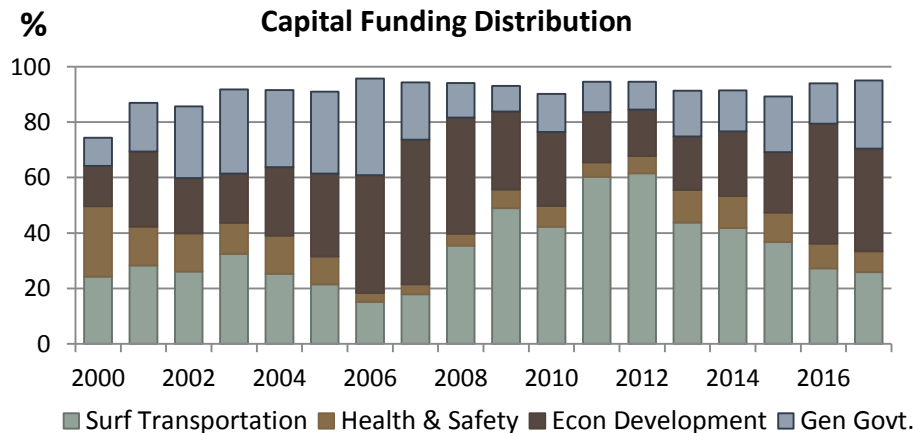
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1 Capital Improvements Overview



Source: Plan & Executive Budget Summary



Source: Plan & Executive Budget Summary

The total capital plan in the 2017 Proposed Budget is \$265.7 million. This is a decrease of \$14.5 million (5%) from the 2016 Budget. The total capital plan includes capital projects in all departments as well as the enterprise funds; Parking, Sewer and Water.

Several factors have driven the recent increases in the City’s capital program. These factors include aging and deteriorating core infrastructure; the large number of vacant, abandoned and foreclosed properties that have become the responsibility of the City as a result of the recent economic downturn and foreclosure crisis; and the growing number of information technology systems that are at the ends of their useful lives and need to be replaced or upgraded.

The decrease in the 2017 Proposed Budget is largely related to a reduction in borrowing for Tax Incremental Districts (\$9.4 million). Approximately \$4.4 million of the reduction is related to several large IT projects which are still ongoing, but which will not need additional funding in 2017.

Building and facility related projects will remain large components of the capital budgets for several years. The age-related deterioration of structural elements of City Hall will require a significant, multi-year investment to address. Phase 1 of the project was included in the 2016 Budget (\$13 million). An additional \$13 million is included in the 2017 Proposed Budget. The full cost of the project could be as much as \$55 million. Funding continues in 2017 for the renovation of the Police Administration Building (\$5.5 million). The Police Department anticipates needing \$37

million over the next six years to complete the project. Funding has also been increased in 2017 to begin addressing the deficiencies identified by the U.S. Department of Justice in order for the City to be in compliance with the Americans with Disabilities Act.

Prioritizing these and other large scale projects will be critical to maintaining a stable capital program and a manageable level of debt service.

Sources of Funds for Capital Improvements.

City-Funded (non-enterprise)

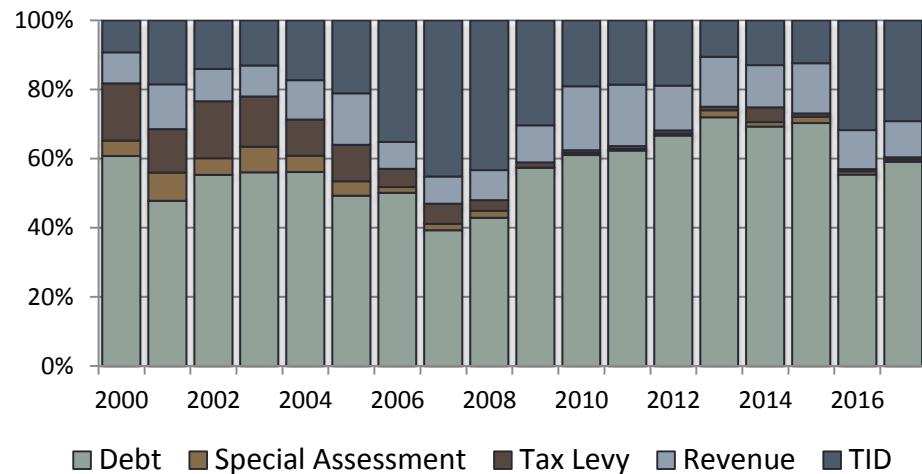
The City-funded (non-enterprise) portion of the capital program has several funding sources. The largest source in the 2017 Proposed Budget is tax-levy-supported debt (59.1%). Other sources include the tax levy (0.7%), cash revenues from various fees (10.4%), special assessments (0.6%), and the increments from tax incremental districts (29.2%). In addition to these sources, the City also receives grant and aid funding from the State, primarily for surface transportation projects. Grant funding in 2017 for capital related projects is expected to be \$43.6 million.

Funding for non-enterprise capital improvements has become less diverse. Changes to the cost recovery policy for street and alley paving in 2008 significantly reduced the amount of special assessments collected. The reduction in special assessments was offset by an increase in revenue from the Motor Vehicle Registration fee. The MVR fee provides a revenue stream based on the number of cars registered in the City. It does not vary with the size of the paving programs in the same manner as special assessments.

The portion of the capital program financed by the tax levy has also decreased significantly since 2005. This reflects a suspension of the Infrastructure Cash Conversion (ICC) policy. Between 2000 and 2005, an average of 13.5% of the capital program was financed with cash from the tax levy. The average since 2010 has been 1.2%.

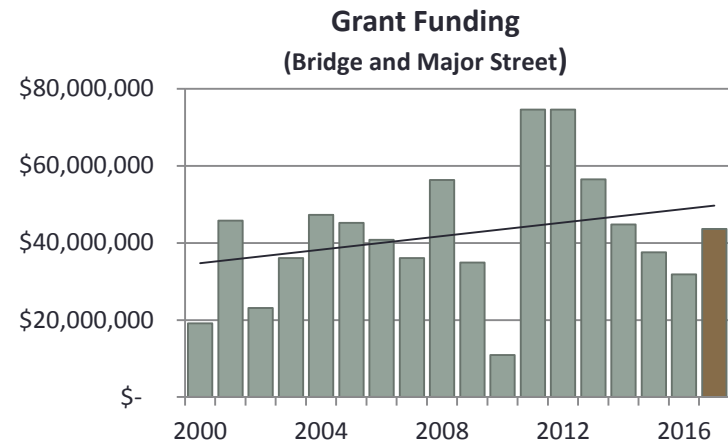
As the cash in the capital program has decreased, the amount of tax levy-supported debt has increased. The percentage of tax-levy-supported debt, however, has varied depending on the level of TID borrowing.

Funding Sources for Non-Enterprise Capital Investments



Grant Funding

The most variable portion of the capital program from year to year is grant and aid funding, which is received for the Major Bridge and Major Street programs. Funding is received from both the state and the federal government. Grant funding for major streets has been trending upward, offsetting a significant decline in the availability grant funding for bridges. The decline in bridge funding is putting considerable pressure on the Local Bridge Program. Although total grant funding for major streets and bridges has declined each year from 2013 through 2016, the trend in grant funding since 2000 has been upward. The City has received significant amounts of American Recovery and Reinvestment Act funding.



Transfer from the Sewer Maintenance Fund

Because of their mitigating effects on storm water, certain infrastructure improvements are financed with transfers from the Sewer Maintenance Fund. Most of the capital programs that receive such transfers are in Forestry. They include the Tree Planting and Production program, the Emerald Ash Borer Readiness and Response program, Concealed Irrigation, and Stump Removal. The Sewer Maintenance Fund will also provide funding in 2017 for two DPW-ISD programs; the Environmental Remediation Program and the Facilities Systems Program. The total transfer from the Sewer Maintenance Fund is \$3.5 million, an increase of \$405,000 (13%) from 2016.

Capital Programs Funded by the Sewer Maintenance Fund

Project	Dept.	Amount
Tree Planting & Production	Forestry	\$1,450,000
EAB Readiness & Response	Forestry	\$1,000,000
Stump Removal	Forestry	\$500,000
Concealed Irrigation	Forestry	\$500,000
Facilities Systems	DPW - ISD	\$75,000
Environmental Remediation	DPW - ISD	\$50,000
		\$3,575,000

Motor Vehicle Registration Fee

In 2008, the City implemented a Motor Vehicle Registration (MVR) fee of \$20 per vehicle (Common Council File Number 080034). The fee was expected to generate \$6.6 million annually in revenue for street repairs. From 2009 through 2015, \$44.5 million in revenue has been received. The 2017 Proposed Budget anticipates receiving \$6.6 million in revenue from the fee. When the fee was implemented, a provision was included that prohibited the fee from being raised until April, 2012. The fee has not been raised since it was implemented. When the fee was created, most of the special assessments related to paving projects were eliminated. This reduced the amount of additional revenue available for paving

projects by approximately half. There are approximately 330,000 vehicles registered in the city. A \$5 increase to the fee would generate nearly \$1.6 million in additional revenue which could be used to address the condition of City streets. Because the special assessments associated with paving projects would not be reduced further, each dollar increase in the fee would allow proportionally more paving-related work to be done. The most recent condition report submitted by the City to the State indicates that while 42% of City-maintained streets are in good condition, nearly 490 miles remain in poor condition.

MVR Revenue Received	
2009	\$6,139,616
2010	\$6,377,466
2011	\$6,248,040
2012	\$6,256,683
2013	\$6,338,316
2014	\$6,446,525
2015	\$6,653,772

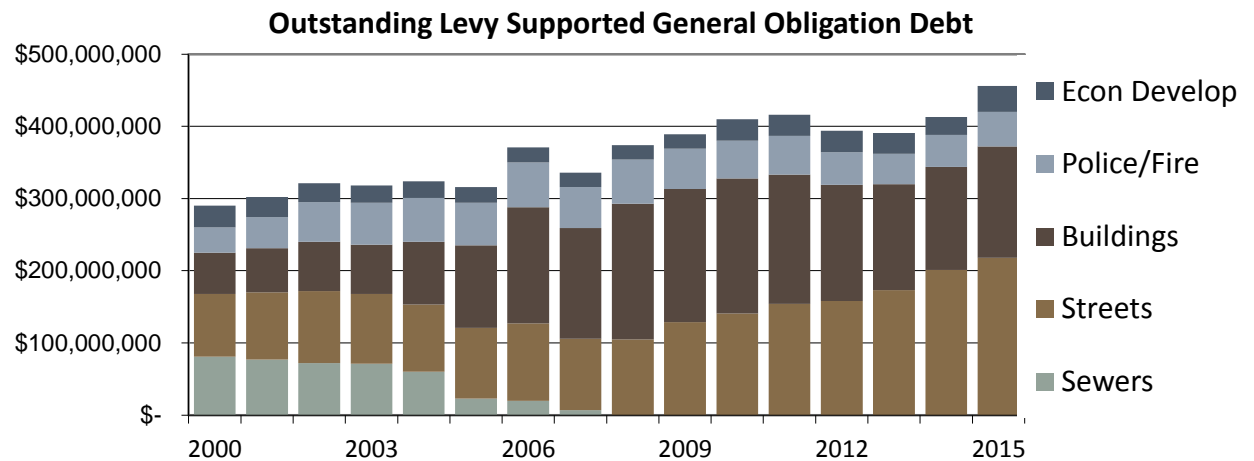
Capital Program Funding Policy

It is generally the City’s policy to finance operations with cash and to finance the City’s portion of capital improvements with general obligation borrowing. As proposed, the City-funded capital program will be financed with \$88.9 million of general obligation debt, a decrease of \$4.9 million (5%) from the 2016 Budget. This amount does not include \$44 million of debt which will be used to fund tax incremental districts. Most of the reduction in general obligation borrowing was related to IT projects and the replacement of branch libraries.

The City maintains an aggressive repayment policy. The “10-Year Debt Payout” measures the percentage of total general obligation debt that will be repaid or retired with the next 10 years. The industry benchmark is 50%. From 2007 through 2015, the City’s 10-Year Debt Payout ranged between 82% and 87%. It is projected to decline to 80% in 2018.

Debt for Enterprise Funds

Additional borrowing will support the capital programs of the Sewer Maintenance Fund (\$38.7 million), the Milwaukee Water Works (\$21.9 million) and the Parking Fund (\$1.7 million). Borrowing for enterprise fund activities is considered self-supporting because debt service is paid using revenues received by the respective funds – not the tax levy. Debt for the enterprise funds can be issued as general obligation bonds or revenue bonds. Revenue bonds are not included when calculating the



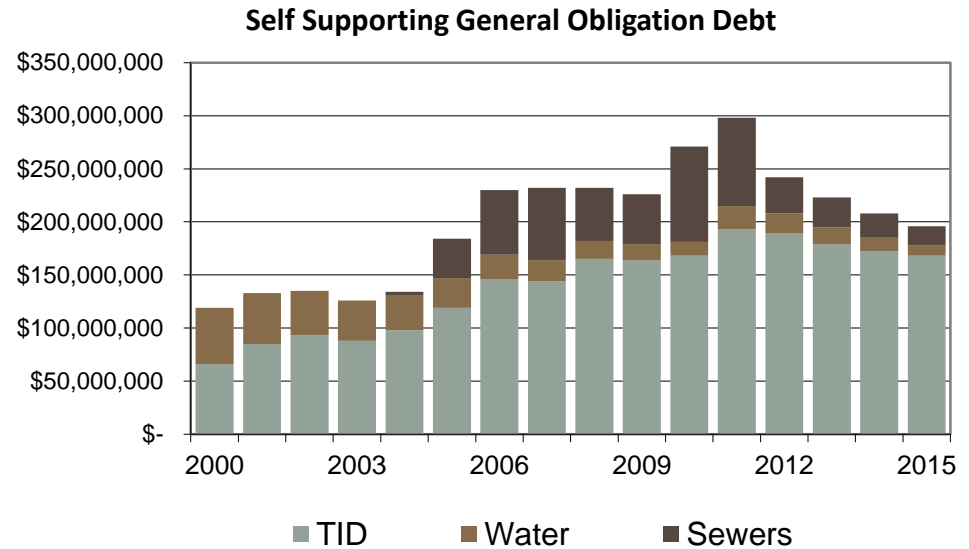
Source: Report of Debt and Debt Service, City of Milwaukee Comptroller

City's use of its debt limit.

Debt Limit & Funding Constraints

The City is facing unique challenges in maintaining its capital program. The value of the City's allocation of Shared Revenue from the State has declined by \$96.6 million since 1995. At the same time, strict limits on levy increases imposed by the State prevent the City from raising additional revenues to pay for services or infrastructure improvements.

The City is also facing a higher utilization rate of its debt limit. The amount of general obligation debt the City may issue is limited by the State Constitution to no more than 5% of the City's equalized value. The Report of Debt and Debt Service issued by the Comptroller in August, 2015, estimated that at the end of 2015, the City will have used approximately 68% of its debt limit. At the end of 2009, debt limit utilization was just over 50%. The City's utilization



of the debt limit as calculated on the preliminary Official Statement for May 2016 was 72%. The total outstanding levy supported general obligation debt for all purposes was \$629 million at the end of 2015.

To address the declining condition of its infrastructure, the City has been issuing slightly more debt than it is retiring. Until 2008, increases in the City's equalized value helped to keep debt limit utilization at an acceptable level. The City of Milwaukee's equalized value for 2015 was \$25.9 billion. Equalized values have stabilized somewhat over the last 5 years, but are still approximately 20% lower than in 2008.

Managing debt utilization is critical to maintaining high bond ratings. As the utilization of the debt limit rises, the City faces the risk of bond rating downgrades which could have a significant, adverse effect on the City's borrowing costs. In April, 2012, Moody's downgraded the City's credit rating from Aa1 with a negative outlook to Aa2 with a stable outlook. The downgrade was primarily driven by concerns about the stability of the City's property tax base and cuts in state shared revenue. The change from a negative outlook to a stable one indicated that

In April, 2014 the Moody's bond rating report stated, "The Aa3 rating on Milwaukee's GO debt reflects the city's weakened socio-economic indices, elevated unemployment rate and trend of tax base declines: additionally, it reflects the interest rate risks and refinancing risks associated with certain of the city's debt instruments."

Moody's did not anticipate dropping the rating further in the near future. In April 2014, Moody's again downgraded the City's bond rating, setting it at Aa3 with a stable outlook.

Enterprise Funds

Capital improvements in the enterprise funds (Sewer Maintenance, Milwaukee Water Works and Parking) are funded by a combination of charges for products and services, fees, and proceeds from borrowing.

Sewer Maintenance Fund

Approximately 86% of the capital program for the Sewer Maintenance Fund (SMF) is funded with debt. The SMF uses a combination of general obligation debt, Clean Water funds from the State, and revenue bonds. In 2017, the SMF anticipates using \$38.7 million in debt financing; \$26 million for sewer relays, \$5 million for the Inflow & Infiltration program, \$1 million for water quality projects and \$1.5 million for flood mitigation. The SMF also anticipates receiving \$1.65 million in grants from MMSD for projects that will reduce the amount of clear water that enters the sewer system through private laterals.

Funding for the Sewer Relief and Relay program has increased significantly in recent years, resulting in a replacement cycle that closely approximates the currently-recommended cycle. In addition to replacing and relining sewer mains, the City is using a more diversified approach to improving the performance of the sewer system. Strategies include reducing the amount of clear water that enters the sewer system, constructing bio-swales to help manage storm water runoff, restoring capacity to various channels and drainage ditches, and including pervious pavement in select street and alley projects.

Milwaukee Water Works

Milwaukee Water Works (MWW), which is traditionally funded with cash, borrowed \$5.3 million in 2013 to offset a revenue shortfall caused by a delay in the settlement of its rate case. MWW was authorized to borrow \$4 million, \$10.7 million and \$11.7 million for its capital program in 2014, 2015 and 2016, respectively. MWW anticipates borrowing \$21.9 million for 2017.

The delay in the settlement of the 2009 rate case depleted the utility's cash reserves. Anticipating the cash flow concerns, MWW began, in 2010, to delay many capital projects and, in 2012, began to finance capital programs with borrowing. It was MWW's intention to make incremental increases to the capital program each year until it returned to historic spending levels. Proposed spending has been accelerated in response to a Public Service Commission ruling which establishes minimum levels of water main replacement.

Parking Fund

Capital improvements for the Parking Fund are relatively modest (\$3.3 million) compared to the Sewer Maintenance Fund and the Milwaukee Water Works, and are typically debt-financed. The largest investments proposed for 2017 are at the MacArthur Square parking structure and the replacement of single-space parking meters.

Project Highlights

The 2017 Proposed Budget continues support for the **Strong Neighborhoods Plan**. This comprehensive, inter-departmental program addresses the issues brought to the forefront by the foreclosure crisis. Capital funding for 2017 will largely support the demolition of both residential and commercial buildings and various loan programs.

There are a number of large building projects in the 2017 Proposed Budget. The **City Hall Foundation** project continues with an additional \$13 million in funding. Further information regarding the City Hall project can be found in Common Council File 141165.

Funding is also included to continue the renovation of the **Police Administration Building (PAB)**. (\$5.5 million). Since 2011, just over \$19 million has been budgeted for the renovation of the PAB. The project will include the offices used by the Municipal Court and the City Attorney. The project is expected to be completed in 2022.

The **Library Facilities Initiative** continues with funding for 4 new mixed-use branch libraries. Construction funding (\$500,000) has been provided to complete the Mill Road and Forest Home libraries. An additional \$1 million has been included for the redevelopment of the Capitol and Martin Luther King libraries.

The City’s business operations increasingly rely on **IT systems**. Their cost and complexity has made the maintenance and replacement of such systems challenging. In the 2016 Budget, eight large IT projects in 4 departments accounted for 8% of the levy supported general obligation debt. In 2017 there is one new large project and two on-going projects that require additional funding for a total of \$3.4 million.

Dept.	Account	2015	2016	2017
DNS	Code Compliance Loans	\$500,000	\$500,000	\$800,000
DNS	Concentrated Blight Elimination	\$1,319,000	\$2,200,000	\$2,100,000
DCD	In rem Property	\$3,250,000	\$1,330,000	\$1,550,000
DCD	Rental Housing Rehab Program	\$1,000,000	\$0	\$0
DCD	STRONG Loans	\$0	\$1,500,000	\$1,167,000
DCD	Housing Infrastructure Preservation	\$450,000	\$450,000	\$450,000
DCD	Commercial in rem	\$500,000	\$250,000	\$250,000
DPW	Vacant Lot Beautification	\$200,000	\$0	\$0
		\$7,219,000	\$6,230,000	\$6,317,000

Core Infrastructure Programs

Core infrastructure generally refers to streets, other street related programs and sewers. For the purposes of evaluating the City’s commitment to the maintenance of its infrastructure, water mains are generally not considered core infrastructure because the Milwaukee Water Works is a utility subject to regulation by the Public Service Commission.

Since 2004, there has been a much stronger commitment to funding core infrastructure. The average annual funding for core infrastructure since 2011 is \$130 million. This amount includes grant and aid funding for streets and bridges. Some core infrastructure programs were reduced in 2016 to allow for the City Hall Foundation project. Funding for most core infrastructure programs returns to near the average in 2017.

Although funding for the Local Bridge program remains lower than in recent years, the total bridge program increases in 2017 by more than 200% because of an increase in grant funding. The sufficiency rating (SR) of the City’s bridges have been increasing. In 2015 over 95% of the rated bridges had an SR greater than 50. The percentage of structurally deficient bridges has been decreasing as well. However, it is still higher than the state and national averages.

City funding for the Local Street program is generally unchanged. However, because Local Road Improvement Funds from the State are only available in even-numbered years, there will be less funding available in 2017 for paving projects. The High Impact Program is again funded at \$8 million.

Large Scale IT Projects				
Project	Dept.	2016	2017	Status
Land Management System (LMS)	DOA-ITMD	\$0	\$0	On-going
Tax Collection Software	DOA-ITMD	\$1,150,000	\$0	On-going
FMIS Upgrade	DOA-ITMD	\$0	\$1,300,000	New
HRMS Upgrade	DOA-ITMD	\$1,000,000		On-going
Assessment Software	Assessor	\$556,000	\$350,000	On-going
Record Management System	Police	\$1,100,000	\$1,715,000	On-going
Upgrade CAD System	Police	\$1,300,000	\$0	On-going
Radio Dispatch Console Upgrades	Police	\$1,900,000	\$0	On-going
Fire Digital Radio System	Fire	\$400,000	\$0	On-going
Fire Record Management System	Fire	\$550,000	\$0	On-going
		\$7,956,000	\$3,365,000	

Special Capital Projects

Grant and Aid, \$8,000,000

This account provides budget authority for unanticipated capital grants that the City receives. Budgeted funding in this account has been at least \$8 million since 2006. In 2014 and 2015 additional authority was added to this account to accommodate grants received.

Municipal Art Fund, \$50,000

This is the City's annual contribution to the Municipal Art Fund, a pool of money set aside for the acquisition of works of art to be incorporated in City buildings and other public facilities. The Milwaukee Arts Board determines how money in the Municipal Art Fund is expended on various works of art for City construction projects. The Municipal Art Fund has received \$25,000 per year (on average) since at least 2000. The Municipal Art Fund is not supported by general obligation debt.

Capital Improvements Committee, \$89,000

This program provides for the salary and fringe benefits for a Fiscal Planning Specialist position. This position is in the City Clerk's Office and serves as staff to the Capital Improvements Committee and provides budget analysis for the Finance and Personnel Committee. In 2017 the committee will be funded with borrowing.

Housing Trust Fund, \$400,000

Created in 2006, this fund primarily supports developers in the acquisition, construction, rehabilitation and modification of affordable and accessible housing for low-income households. It also finances support services that assist low-income households in obtaining and maintaining affordable housing. Priority is given to projects that can leverage investments from other sources. Although other funding sources have been investigated, funding comes primarily from the City tax levy. Funding is used to support 3 main objectives: housing for the homeless, rental housing and homeownership. Funding is unchanged from last year. Since 2006, over \$6.1 million has been budgeted for this program.

Land Management System, \$0

This project was requested by the Department of Neighborhood Services to replace the existing legacy code enforcement Neighborhood Services System (NSS) and the DCD permit and plan tracking system. Because the Land Management System (LMS) is used by multiple departments, it is budgeted as a special capital project. The new system, which will be administered by ITMD, will support land management, plan review and permitting, construction and trades inspections, and code enforcement across departmental lines. The Land Management System received \$2,512,000 in the 2012 Budget. The City issued an RFI for the proposed system in April 2011 and an RFP in spring, 2012. A contract was signed with the vendor (Accela) in June, 2013. The 2015 Budget provided \$850,000 for an additional phase of the Land Management System, which will migrate licensing information from the LIRA system that is currently used by the City Clerk. Expenditures in 2015 were \$594,788.

Capital Budget by Department								
	2011	2012	2013	2014	2015	2016	2017	Change
	Adopted	Adopted	Adopted	Adopted	Adopted	Adopted	Proposed	from 2016
City-Funded								
Special Projects	\$15,135,000	\$11,022,000	\$8,510,000	\$8,710,000	\$9,587,000	\$8,512,000	\$8,539,000	\$27,000
Administration, Dept. of	2,035,000	600,000	1,875,000	1,060,000	3,260,000	4,340,000	3,045,000	(1,295,000)
Assessor					555,000	556,000	350,000	(206,000)
City Attorney				1,758,000		0	0	0
City Development, Dept. of	30,661,257	29,176,000	17,585,000	23,500,000	26,350,000	61,830,000	53,217,000	(8,613,000)
Common Council City Clerk		40,000	117,500	175,000	150,000	225,000	438,000	213,000
Election Commission					1,530,000			0
Fire & Police Commission				150,000				0
Fire Dept.	3,064,000	3,424,000	3,403,000	4,437,000	1,898,000	3,179,000	2,948,000	(231,000)
Health Dept.	110,000	450,000	435,000	425,000	366,000	745,000	731,000	(14,000)
Library	2,526,000	2,577,000	3,743,000	3,383,000	8,750,000	5,800,000	2,844,000	(2,956,000)
Neighborhood Services, Dept. of				2,320,000	2,244,000	2,925,000	2,900,000	(25,000)
Municipal Court				144,000	504,000		384,000	384,000
Police Dept.	4,987,931	1,502,000	7,375,700	9,177,000	8,200,000	9,070,000	7,589,000	(1,481,000)
Port of Milwaukee		225,000	1,075,000	750,000	1,000,000	4,400,000	640,000	(3,760,000)
Public Works, Dept. of	59,443,409	64,440,700	60,061,700	67,395,000	65,559,000	68,022,000	66,804,000	(1,218,000)
Total City-Funded	\$117,962,597	\$113,456,700	\$104,180,900	\$123,384,000	\$129,953,000	\$169,604,000	150,429,000	(19,175,000)
Grant & Aid								
Port of Milwaukee	800,000				800,000	800,000	400,000	(400,000)
Public Works, Dept. of	74,621,230	74,591,800	56,555,000	44,818,000	37,607,907	31,838,000	43,643,000	11,805,000
Total Grant & Aid	\$75,421,230	\$74,591,800	\$56,555,000	\$44,818,000	\$38,407,907	\$32,638,000	44,043,000	11,405,000
City-Funded and Grant & Aid	\$193,383,827	\$188,048,500	\$160,735,900	\$168,202,000	\$168,360,907	\$202,242,000	\$194,472,000	(\$7,770,000)
Enterprise Funds								
Parking	1,175,000	790,000	1,441,000	1,715,000	2,292,000	1,780,000	3,340,000	1,560,000
Sewer Maintenance	39,833,000	43,950,000	44,510,000	44,550,000	44,200,000	44,404,000	38,714,000	(5,690,000)
Water	20,645,000	9,320,000	13,850,000	13,825,000	24,950,000	25,660,000	29,210,000	3,550,000
Total Enterprise Funds	61,653,000	\$54,060,000	\$59,801,000	\$60,090,000	71,442,000	71,844,000	71,264,000	(580,000)
TOTAL CAPITAL PLAN	\$255,036,277	\$242,108,500	\$220,536,900	\$228,292,000	\$239,802,907	\$274,086,000	\$265,736,000	(\$8,350,000)

3 Department of Administration

\$3,045,000

Proposed Capital Funding

\$3,909,640

Requested Capital Funding

\$1,295,000

Decrease from 2016 Budget

-29.8%

Percent Change from 2016 Budget

\$12,441,700

Six-Year Capital Request

Capital Programs and Projects

IT Upgrades/Replacement	\$300,000
Public Facility Communications	\$575,000
Corporate Database Server Upgrade	\$200,000
CSWAN-COMON Upgrade	\$250,000
FMIS Upgrade	\$1,300,000
City Assessor Modernization	\$170,000
Open Data Dashboard & Analytics	\$150,000
Better Buildings Challenge	\$100,000

Unfunded Capital Requests

Budget Module	\$750,000
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Ongoing and Recent Capital Projects

- Treasurer’s Tax Collection System
- Land Management System (LMS)
- Map Milwaukee Upgrade
- DSS eVault Upgrade
- Web Application Server Equipment
- Webcasting
- Workplace Safety & Efficiency (809 Bldg. – 4th floor)

Anticipated Capital Requests

DOA has submitted 18 requests for various future capital projects related to databases, web applications, GIS infrastructure, mobile devices and energy efficiency.

The total 6-year capital request is \$12.4 million. Further information about these requests can be found in Common Council File Number 151692.

The most significant new project for 2017 is an upgrade of the FMIS system. Work continues on the HRMS Upgrade and the land management system (LMS) with funding from prior years. The consolidation of IT services from other departments continues in the operating budget.

Dept. of Administration

Program	2017 Proposed	2016 Budget	Increase (decrease)	% Chng.	6-year Request
Public Facility Communications	\$575,000	\$575,000	\$0	0%	\$3,700,000
IT Upgrades/ Replacements	\$300,000	\$225,000	\$75,000	33%	\$1,800,000
Corp. Database Server	\$200,000	\$270,000	(\$70,000)	-26%	\$200,000
CSWAN/COMON Upgrade	\$250,000	\$500,000	(\$250,000)	-50%	\$250,000
FMIS Upgrade	\$1,300,000	\$0	\$1,300,000		\$1,300,000
City Assessor Modernization	\$170,000	\$0	\$170,000		\$641,700
Open Data - Dashboard	\$150,000	\$0	\$150,000		\$300,000
Better Buildings Challenge	\$100,000	\$400,000	(\$300,000)		
Tax Collection System	\$0	\$1,150,000	(\$1,150,000)	-100%	\$0
HRMS Upgrade	\$0	\$1,000,000	(\$1,000,000)	-100%	\$0
Kana/Lagan Upgrade	\$0	\$220,000	(\$220,000)	-100%	
Total	\$3,045,000	\$4,340,000	(\$1,295,000)	-30%	

Public Facility Communications, \$575,000

This program provides for the installation and maintenance of the City of Milwaukee Optical Network. The network provides circuits for data, telephone, SCADA, security, building management, fuel management, telemetry and video systems.

The network has been developed to serve other public entities, including UWM, MATC, Marquette University, MIAD, WisDOT, Discovery World, and the Milwaukee Public Museum. Projects are designed to increase system redundancy and to provide diverse routes to critical public safety locations. Average annual funding since 2001 is \$550,000.

Until 2013, this account was administered by the DPW – Administration section.

IT Upgrades/Replacement Program, \$300,000

This program was created in 2012 to fund a variety of small- to mid-sized IT capital projects. Projects consist primarily of updates to existing systems or replacement of systems which are reaching the ends of their useful lives. This program allows greater flexibility to respond to emerging technological issues by re-prioritizing planned projects, and will allow more consistent budgeting. Average annual funding since 2012 is \$290,000. This program is funded with cash. Funding has been requested for 2 projects in 2017.

The first project is the continuation of the Network Switch Upgrade project. This project began in 2015. A majority of the City's network switches are past or near the end of their useful lives. Currently, switches are only replaced when they fail. Funding for switch replacement is dispersed among user departments. This project will

The demand for IT project development, upgrades and support continues to exceed the capacity of the available staffing.

ensure consistent and secure access to the network for all City personnel. Funding in 2015 was used to replace unsupported and failing switches that are more than 14 years old. Funding in 2016 will be used to replace switches that are more than 10 years old and funding in 2017 will be used to replace switches that are over 8 years old.

The second project will replace ITMD's data backup system which is more than 7 years old and unsupported.

Corporate Database Server Upgrade, \$200,000

This 2 year project will update the server that supports the corporate database. The Oracle database server houses critical datasets including the Unified Call Center, City Clerk Licenses and Master Property, as well as data lookups and web applications used by the City web site. Although the goal of ITMD is to consolidate servers and software, this system was not a good candidate for consolidation efforts because it lacks processing power and the SAN disk that are necessary. Funding was requested over 2 years; \$270,000 and \$200,000 for 2016 and 2017, respectively. The corporate database last received funding in 2008 (\$204,900). The project is expected to have a useful life of 7 years. 2016 funding was for salaries, 2017 funding will be used for equipment and software costs.

The City's reliance on IT systems for critical business functions has increased. There is also an increasing trend of inter-departmental activities. It is essential that new IT systems be evaluated and implemented in a City-wide context. In order to ensure consistency and compatibility among the various IT systems that are used by the departments, the City began consolidating IT services in the Dept. of Administration – ITMD in 2013.

The 2017 Proposed Budget includes \$350,000 in the Assessor's capital budget for the third year of a multi-year project to replace the property assessment software. The Assessor's IT functions are being consolidated in DOA –ITMD in 2016.

CSWAN Upgrade, \$250,000

This project to replace Ethernet Routing Switches was funded in 2016 (\$500,000). Additional funding of \$250,000 will be required in 2017 to complete the project. The project was moved to DOA-ITMD from DPW-Admin by the 2013 Budget. Manufacturer support for the switches ended in June of 2016.

FMIS Upgrade, \$1,300,000

This project will guarantee continued support for the City's FMIS system and increase productivity. The PeopleSoft Financial system requires periodic upgrades. This upgrade was first requested in 2011 for funding in 2016. The upgrade was rescheduled to 2017 to allow for the HRMS upgrade to be moved to 2016. The last major upgrade of the FMIS system was funded in 2009 and 2010 (\$1,217,600 and \$598,400, respectively). Expenditures for that upgrade were \$1.48 million.

City Assessor Modernization, \$170,000

This project will make technology upgrades that will allow the City Assessor's Office to comply with the Wisconsin Department of Revenue requirements outlined in the 2012 Property Assessment Manual. It is expected to be a three year project. This project is separate from the project funded in the Assessor's Office to replace the CAMA system.

Open Data Dashboard and Analytics, \$150,000

DOA-ITMD is developing an Open Data portal. The dashboard interfaces and analytics tools will benefit internal users such as the Budget Office, elected officials and department heads. It is expected to be a two-year project.

Better Buildings Challenge, \$100,000

The City is currently participating in the Better Building Challenge, with the goal of cutting energy use in City facilities by 20% by 2020, from a 2009 baseline. This goal was included in the Refresh Milwaukee plan which was approved by the Common Council in Resolution File Number 131035. Projects will be implemented across departments as identified by the interdepartmental Energy Reduction Team chaired by the Environmental Collaboration Office.

Unfunded Requests**Budget Module**

The department requested \$750,000 to implement a PeopleSoft module which would increase the efficiency of the annual City Budget process. It was expected to be a one-year project.

Other Capital Projects**Tax Collection System,**

A total of \$2.3 million dollars was budgeted in 2015 and 2016 to replace the tax collection software system that is used by the City Treasurer. The target deployment is for the 2017 tax year. The current tax collection system was designed in 1982. It became increasingly difficult to recruit new personnel with the skillset required to support this system. Technical support for the base operating system ended on December 31, 2014.

Land Management System

This project was requested by the Department of Neighborhood Services to replace the existing

Energy Efficiency Investments

The City has used various capital accounts to fund energy-efficient improvements. The Energy Challenge Fund, created in 2008 and administered by ECO, received a total of \$1 million in funding. Funding of \$700,000 in the Energy Efficiency and Renewable Energy Initiative account has been used to reduce energy consumption at DPW- managed buildings by over 25%. The department did not request funding for 2016 or 2017.

legacy code enforcement Neighborhood Services System (NSS) and the DCD permit and plan tracking system. Because the LMS is used by multiple departments, it is budgeted as a special capital project. The new system, which will be administered by DOA-ITMD, will support land management, plan review and permitting, construction and trades inspections, and code enforcement across departmental lines.

The Land Management System received \$2.5 million in the 2012 Budget. The City issued an RFI for the proposed system in April, 2011, and an RFP in spring, 2012. A contract was signed with the vendor (Accela) in June, 2013. The 2015 Budget provided \$850,000 for an additional phase of the Land Management System, which will migrate licensing information from the LIRA system that is currently used by the City Clerk.

PeopleSoft HRMS Upgrade

Funding for this project (\$1 million) was provided in the 2016 Budget to take advantage of bi-monthly vendor-supplied tax upgrades. The cost of the tax upgrades, which are critical to proper payroll processing, was expected to increase significantly. The FMIS upgrade, which had been scheduled for 2016, was moved to 2017 to accommodate this project. Annual maintenance payments for this project are included in ITMD's operational budget. The last major upgrades of the HRMS system were funded in 2007 (\$710,000) and 2011 (\$1.47 million). Expenditures for those upgrades were \$709,900 and \$1.11 million.

Unified Call Center (UCC)/Lagan Upgrade

Funding for this project (\$220,000) was provided in the 2016 Budget. The project will make information more accessible to departments and policy makers and will improve the efficiency of responding to service requests. The project will also review current connections to several City of Milwaukee "home grown" back-end systems for appropriate modifications or upgrades. The Unified Call Center last received capital funding in 2010 (\$950,000).

The City should strongly consider a more consolidated approach to the management of City records. The approach should include appropriate oversight and authority. It should also include training for managers and staff regarding their legal responsibilities relative to City records and data.

4 City Attorney

\$0

Proposed Capital Funding

\$3,523,500

Requested Capital Funding

\$0

Increase from 2016 Budget

0%

Percent Change from 2016 Budget

\$3,523,5000

Six-Year Capital Request

Capital Programs and Projects

There are no proposed capital programs or projects.

Ongoing and Recent Capital Projects

There are no on-going or recent capital projects.

Unfunded Capital Requests

City Hall 8th Floor Remodeling - The City Attorney requested \$3.5 million to complete the renovation project.

Anticipated Capital Requests

There are no out-year capital requests.

In 2006, the City Attorney’s Office was moved from the 8th floor of City Hall to accommodate the City Hall Restoration project. The City Attorney currently occupies space on the 7th and 10th floors of the Zeidler Municipal Building (ZMB).

The current location is insufficient in terms of size and design. The space lacks adequate storage and preparation areas for on-going projects and litigation. As a result, the Office of the City Attorney lacks the space, privacy and security recommended for the sensitive and confidential nature of its work. Because of the delay in the 8th floor project, the City Attorney’s Office is actively investigating temporary alternatives.

Funding was provided in 2014 (\$1,758,000) to upgrade the mechanical systems on the 8th floor of City Hall. The 2014 Budget also provided \$150,000 to move the Fire and Police Commission to the space that is currently occupied by the City Attorney on the 10th Floor of the ZMB. If the City Attorney project does not move forward, an alternate location for the Fire and Police Commission will need to be identified.

5 Comptroller

\$0

Proposed Capital Funding

\$0

Requested Capital Funding

\$0

Increase from 2016 Budget

0%

Percent Change from 2016 Budget

\$0

Six-Year Capital Request

Capital Programs and Projects

There are no proposed capital programs or projects.

Ongoing and Recent Capital Projects

There are no on-going or recent capital projects.

Unfunded Capital Requests

There are no unfunded capital requests.

Anticipated Capital Requests

There are no out-year capital requests.

6 Treasurer

\$0

Proposed Capital Funding

\$0

Requested Capital Funding

\$0

Increase from 2016 Budget

0%

Percent Change from 2016 Budget

\$0

Six-Year Capital Request

Capital Programs and Projects

There are no proposed capital programs or projects.

Ongoing and Recent Capital Projects

A multi-year project to replace the tax collection software is currently underway. The project is funded in and being administered by DOA-ITMD.

Unfunded Capital Requests

There are no unfunded capital requests.

Anticipated Capital Requests

There are no out-year capital requests.

The 2017 Proposed Budget includes no funding in the Treasurer’s Office for capital projects. However, funding was provided in 2015 and 2016, (\$1.2 million and \$1.15 million, respectively) in the Dept. of Administration – ITMD for a multi-year project that will replace the Treasurer’s tax collection system. The current tax-collection system was designed in 1982 using the Cobol computing language. It became increasingly difficult to recruit new personnel with the skillset required to support the system. In addition, vendor support for Version 5 of the base operating system ended on December 31, 2014.

In June, 2012, the Legislative Reference Bureau responded to a request from DOA-ITMD to perform a survey of tax-collection software utilized by other U.S. cities and other cities in Wisconsin. The LRB surveyed 14 U.S. cities which were similar in population to Milwaukee and the 10 largest cities in Wisconsin. The results of the survey are on file.

7 Election Commission

<p>\$0</p> <p>Proposed Capital Funding</p>	<p>Capital Programs and Projects</p> <p>There are no proposed capital programs or projects.</p>	<p>Ongoing and Recent Capital Projects</p> <p>Replacement of voting machines (funded in 2015).</p>
<p>\$0</p> <p>Requested Capital Funding</p>	<p>Unfunded Capital Requests</p> <p>There are no unfunded capital requests.</p>	<p>Anticipated Capital Requests</p> <p>There are no out-year capital requests.</p>
<p>\$0</p> <p>Decrease from 2016 Budget</p>	<p>The 2015 Budget provided \$1,530,000 for the purchase of new voting machines. The Commission also purchased programming software for the machines. The Commission estimates that the City has saved \$1.7 million over the last 5 years by programming voting machines in-house. The Commission’s participation in a uniform voting equipment initiative led by Milwaukee County and the Public Policy Forum led to cost savings of approximately \$820,000. Actual expenditures in 2015 were \$460,473.</p>	
<p>0%</p> <p>Percent Change from 2016 Budget</p>	<p>The new machines, which do not have touchscreens, were used for the special election in the 11th Aldermanic District. Overall, the feedback from election workers was positive. Concerns raised during the primary regarding the lack of an audible warning when a ballot is rejected were addressed prior to the next election.</p>	
<p>\$0</p> <p>Six-Year Capital Request</p>	<p>The machines significantly reduced processing time for election results.</p>	

8 Assessor

\$350,000

Proposed Capital Funding

\$349,800

Requested Capital Funding

\$206,000

Decrease from 2016 Budget

-37.1%

Percent Change from 2016 Budget

\$349,800

Six-Year Capital Request

Capital Programs and Projects

Assessment Software	\$350,000
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Ongoing and Recent Capital Projects

The replacement of property assessment software is a multi-year project first funded in 2015.

Unfunded Capital Requests

There are no unfunded capital requests.

Anticipated Capital Requests

The total 6-year request is \$349,800.

The 2017 Proposed Budget continues the replacement of the City’s property assessment software system. The Assessor currently uses an in-house computer system that was designed in the 1980s. Like the system used by the Treasurer, maintenance requires a skillset that is increasingly difficult to find. The new system will provide efficiencies in the Assessor’s office, increase functionality and provide greater accessibility to other City departments, including the Treasurer, the Department of Public Works, and the Department of Neighborhood Services.

The department anticipates that the project will take approximately 18 months to implement. However, the timing of implementation is constrained by the business cycle of the Assessor’s Office. The consolidation of Assessor IT staff into the Dept. of Administration – ITMD is not expected to affect the implementation of this project.

9 City Clerk

\$438,000

Proposed Capital Funding

\$2,353,000

Requested Capital Funding

\$213,000

Increase from 2016 Budget

94.7%

Percent Change from 2016 Budget

\$2,791,000

Six-Year Capital Request

Capital Programs and Projects

LRB Research Office Upgrade	\$438,000
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Ongoing and Recent Capital Projects

Channel 25 Digital Conversion

Funding for the conversion of Channel 25 equipment from analog to digital to meet industry standards was first provided in 2014. 2016 was the final year of funding for this 3-phase project.

Unfunded Capital Requests

City Hall, Rm 205 Renovation	\$1,915,000
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Anticipated Capital Requests

Except for the Capital Improvements Committee, which is funded as a special capital project, there are no out-year capital requests.

The Channel 25 Digital Conversion project began with the conversion of the Master Control area in 2014. The majority of Phase I was completed in December of 2014. After some delays due to equipment delivery issues, the new Master Control equipment went on line in June of 2015. Phase II of the project, the conversion of the City Hall Control Room, took place in August, 2015. Phase III, the conversion and upgrade of the studio and remote production equipment, is being designed. Equipment installation is anticipated in November or December of this year. Both Phase I and Phase II conversions have been completed within budget.

Capital Program Detail – City Clerk

Program	2017 Proposed	2016 Budget	Increase (decrease)	% Chng.	6-year Request
LRB Research Office Upgrade	\$438,000	\$0	\$438,000		\$438,000
Channel 25 Digital Conversion	\$0	\$225,000	(\$225,000)	-100%	\$0
Remodel CH Room 205	\$0	\$0			\$1,915,000
Total	\$438,000	\$225,000	\$213,000	95%	\$2,353,000

Legislative Reference Bureau Office Upgrade \$438,000

This one-year project to upgrade City Hall Room 307 was first requested for inclusion in the 2011 Budget (\$435,000). The space (2,650 SF) was formerly used by the Division of Budget and Management Analysis. Funding was proposed for 2015 and removed by the Council prior to the adoption of the budget.

Unfunded Projects

City Hall Room 205 Renovation

This project would update the electrical and HVAC systems in Room 205 of City Hall. It would also reconfigure office and conference room space and enhance security for reception personnel. The HVAC and electrical systems in Room 205 have not been updated in nearly 40 years and are not in compliance with current building and fire codes. This project was first requested for inclusion in the 2014 Budget.

Recently, there have been a number of departments, including the City Clerk's Office, that have made requests to have their offices remodeled, reconfigured or relocated. At this time, there is no authoritative body that monitors departmental needs and no comprehensive plan to allocate space in the City's facilities. The Capital Improvements Committee has recommended that renovation projects within the City Hall complex be evaluated and undertaken as part of a comprehensive building and space allocation plan.

10 Department of Neighborhood Services

\$2,900,000

Proposed Capital Funding

\$2,000,000

Requested Capital Funding

\$25,000

Decrease from 2016 Budget

-0.9%

Percent Change from 2016 Budget

\$2,000,000

Six-Year Capital Request

Capital Programs and Projects

Concentrated Blight Elimination	\$2,100,000
Code Compliance Program	\$800,000

Ongoing and Recent Capital Projects

Anderson Water Tower Garage Conversion
 Concentrated Blight Elimination
 Code Compliance Program
 Alternate Board Up

Unfunded Capital Requests

There are no unfunded capital requests.

Anticipated Capital Requests

There are no out-year capital requests.

Concentrated Blight Elimination, \$2,100,000

The 2014 Budget created this capital program. Expenditures in 2014 and 2015 were \$1.6 million and \$1.9 million, respectively. Capital funding in this account will be combined with O&M funding in DNS and DPW, CDNG funding and state funds to raze and deconstruct nearly 250 structures, approximately 50 more structures than were anticipated last year.

Although the number of foreclosures has declined, the number of vacant buildings and new raze files being monitored and processed by the department remains high.

Capital Program Detail – Dept. of Neighborhood Services

Program	2017 Proposed	2016 Budget	Increase (decrease)	% Change	6-year Request
Conversion of Anderson Water Tower Garage	\$0	\$225,000	(\$225,000)	-100%	\$0
Concentrated Blight Elimination	\$2,100,000	\$2,200,000	(\$100,000)	-4.5%	\$1,500,000
Code Compliance Program	\$800,000	\$500,000	\$300,000	60%	\$500,000
Total	\$2,900,000	\$2,925,000	(\$25,000)	-0.8%	\$2,000,000

The average cost of a residential demolition is \$15,700. Costs can vary significantly depending on the amount of remediation required for materials such as asbestos and lead. Commercial properties generally have higher demolition costs than residential properties. The department reports demolition and deconstruction activities to the Special Joint Committee on the Redevelopment of Abandoned and Foreclosed Homes. Those reports are available in Common Council File 141695.

Alternatives to Plywood Boarding

Examples of artistic board-ups can be found at the following locations

2600 block of W. State Street
 North Avenue and Sherman Boulevard
 King Drive and Center Street

The department is continuing to monitor the installations. No policy regarding the use of alternate board-up materials has been established. Total capital expenditures in 2014 and 2015 for alternative board-ups were \$31,600.

Strong Neighborhoods Plan Capital Funding Summary

Dept.	Account	Amount
DNS	Code Compliance Loans	\$800,000
DNS	Concentrated Blight Elimination	\$2,100,000
DCD	<i>In rem</i> Property	\$1,550,000
DCD	STRONG Loans	\$1,167,000
DCD	Housing Infrastructure Preservation	\$450,000
DCD	Commercial <i>in rem</i>	<u>\$250,000</u>
		\$6,317,000

Code Compliance Program, \$800,000

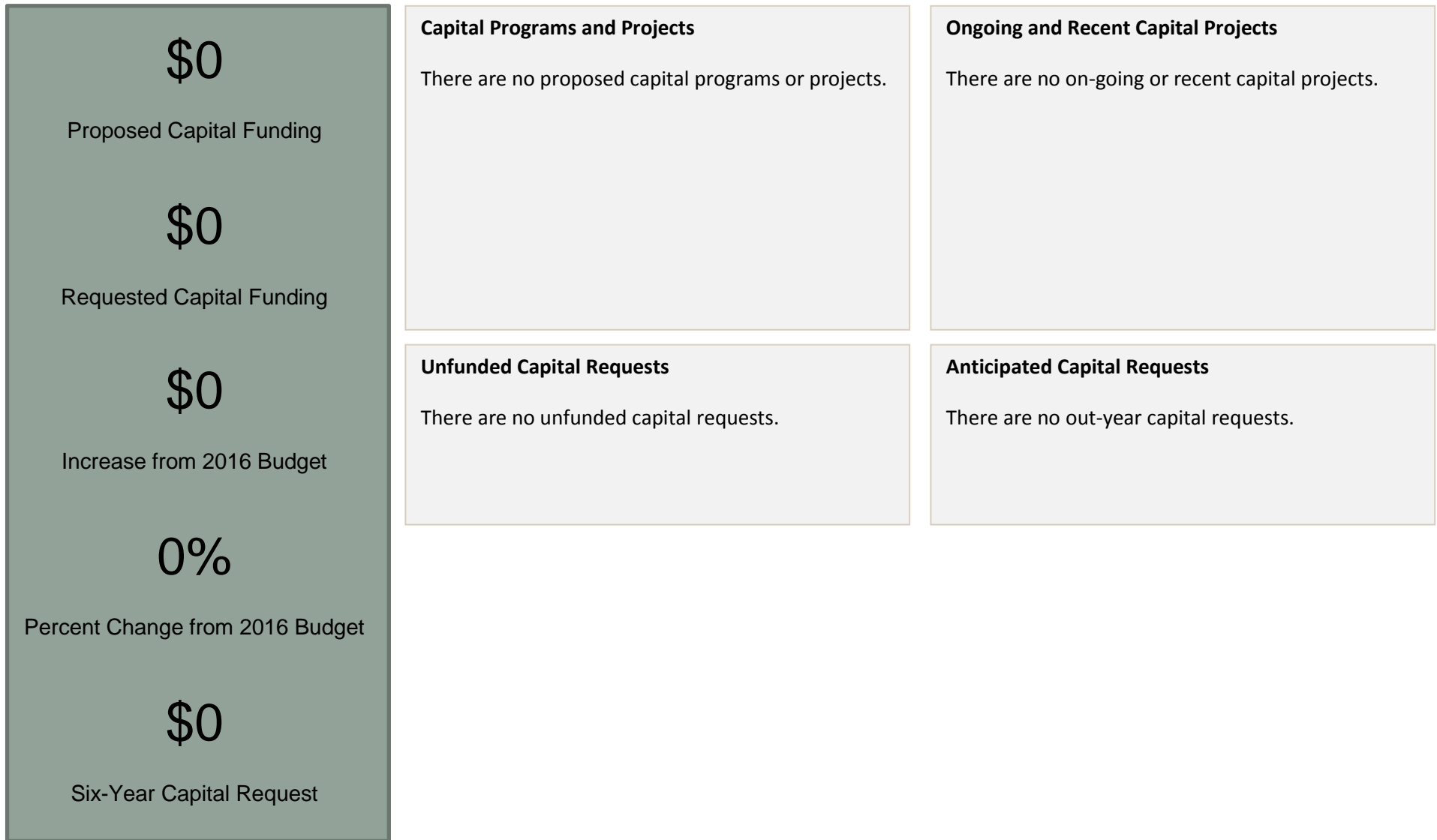
The Code Compliance Loan program was created in the 2014 Budget and funded by a special purpose account. This capital account was created in 2015 to increase the funding available and consolidate the sources of funds for this program.

Other Capital Projects

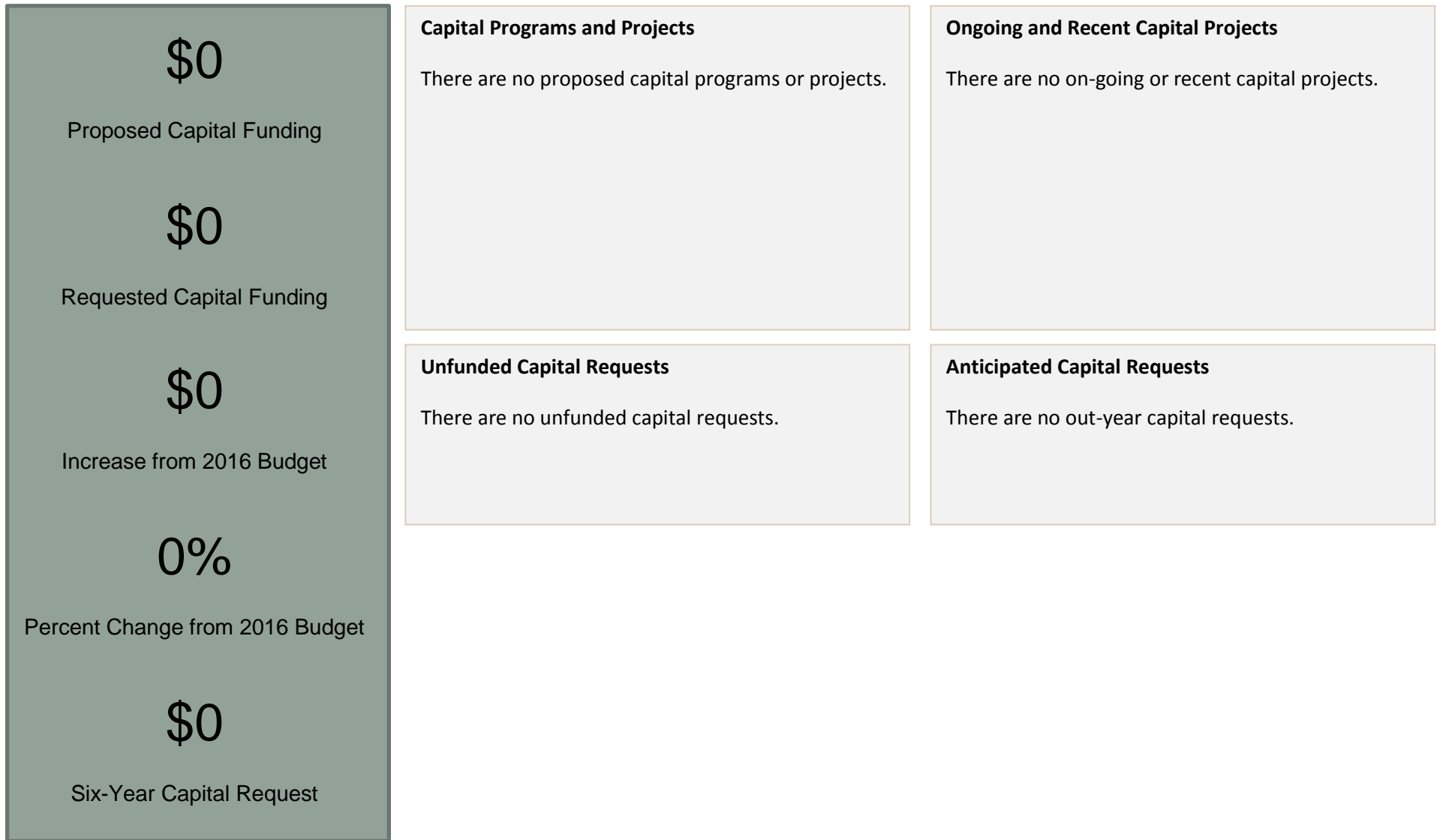
Conversion of the Anderson Water Tower Garage

The 2016 Budget included \$225,000 to complete the remodeling project at the Anderson Municipal Building (6th and Howard) to accommodate additional DNS staff. The 2015 Budget included \$425,000. When the project is complete, approximately 70 employees will have offices in the Anderson Building.

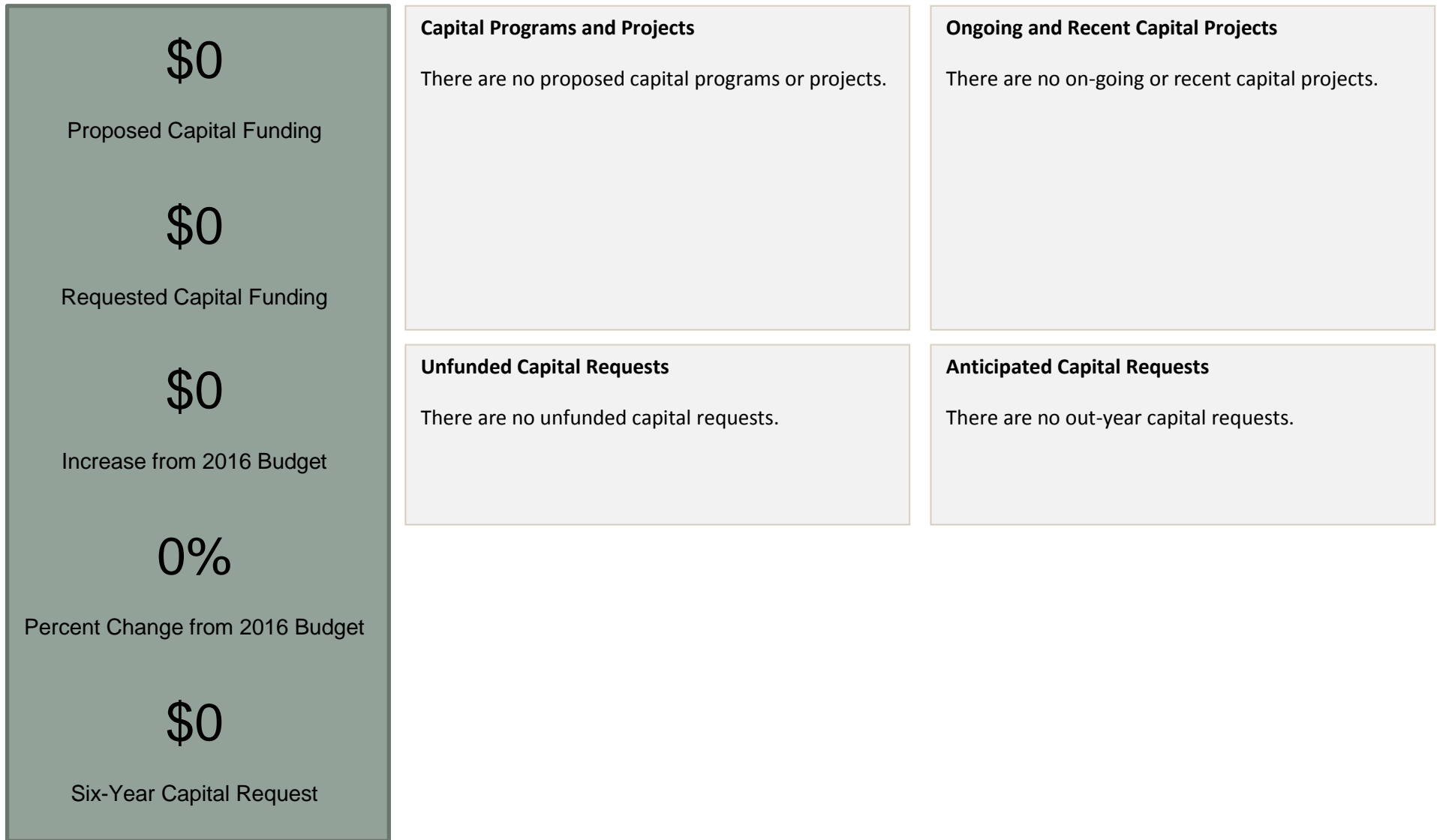
11 Department of Employee Relations



12 Employee Retirement System



13 Deferred Compensation



14 Municipal Court

\$384,000

Proposed Capital Funding

\$384,000

Requested Capital Funding

\$384,000

Increase from 2016 Budget

Percent Change from 2016 Budget

\$439,000

Six-Year Capital Request

Capital Programs and Projects

CATS & Website Upgrade \$384,000

Ongoing and Recent Capital Projects

CATS & Website Upgrade - funding was provided in 2015 (\$504,000) for the first year of this project. The project was delayed because of staff changes.

Virtual Server and SAN Replacement - \$144,000 was budgeted in 2014 to upgrade a virtual server and for SAN replacement. The project is expected to be completed by early January.

Unfunded Capital Requests

There are no unfunded capital requests

Anticipated Capital Requests

Court Remodel/Redesign \$55,000

Funding was requested to hire an architect with expertise in court operations and security as part of the PAB project. The funding will not be needed until 2018

The total 6-year capital request is \$439,000.

Capital funding for the Municipal Court in recent years has been primarily for computer-related upgrades. The focus of the Court's Case Automated Tracking System (CATS) & Website Upgrade will be the transition from a client-server-based architecture to a browser-based platform, similar to FMIS, HRMS and other City systems.

15 Fire Department

\$2,948,000

Proposed Capital Funding

\$4,752,425

Requested Capital Funding

\$231,000

Decrease from 2016 Budget

-7.3%

Percent Change from 2016 Budget

\$23,742,803

Six-Year Capital Request

Capital Programs and Projects

Major Capital Equipment	\$1,680,000
Fire Facilities Maintenance Program	\$700,000
Auxiliary Power Supply	\$85,000
Fire Repair Shop – Facility Upgrade	\$483,000

Ongoing and Recent Capital Projects

Auxiliary Power Supply
 Fire Digital Radio System Upgrade
 Fire Record Management System Replacement
 Regional Video Conferencing (funded in 2014)

Unfunded Capital Requests

Access Card Security System	\$440,000
Fire Facility Condition Reports	\$15,000

Anticipated Capital Requests

The total 6 year capital request is \$23.7 million.

Major Capital Equipment, \$1,680,000

The 2017 Proposed Budget provides funding to replace one engine and 2 medical units.

The average age of the Department’s front-line engines in 2016 will be 7 years. The National Fire Protection Association (NFPA) recommends shifting frontline firefighting apparatus to reserve status after 15 years.

MFD Fleet Vehicles			
	Frontline	Reserve	Total
Engines	33	11	44
Ladder Units	11	9	20
Platforms	2	0	2
Medical Units	14	6	20
Rescue Units	6	1	7
Total	66	27	93

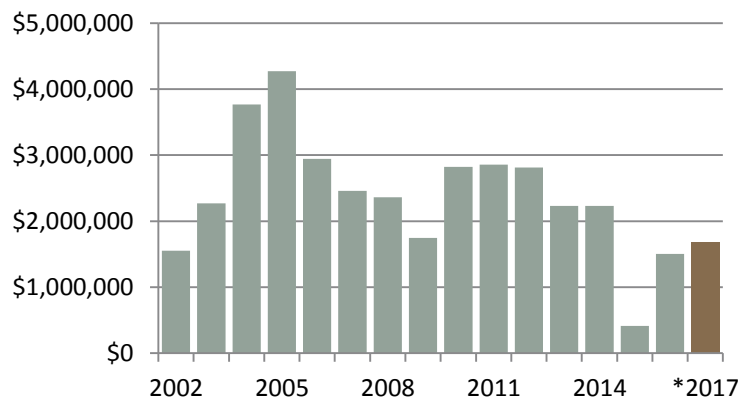
Capital Program Detail – Fire Department

Program	2017 Proposed	2016 Budget	Increase (decrease)	% Chng.	6-year Request
Major Capital Equipment	\$1,680,000	\$1,504,000	\$176,000	12%	\$18,127,870
Fire Facilities Maintenance	\$700,000	\$725,000	(\$25,000)	-3%	\$4,209,213
Auxiliary Power Supply	\$85,000	\$0	\$85,000		\$425,000
Fire Repair Shop – Facility Upgrade	\$483,000	\$0	\$483,000		\$483,120
Fire Digital Radio System	\$0	\$400,000	(\$400,000)	-100%	\$0
Fire Record Management System	\$0	\$550,000	(\$550,000)	-100%	\$0
Total	\$2,948,000	\$3,179,000	(\$231,000)	-7%	\$23,245,203

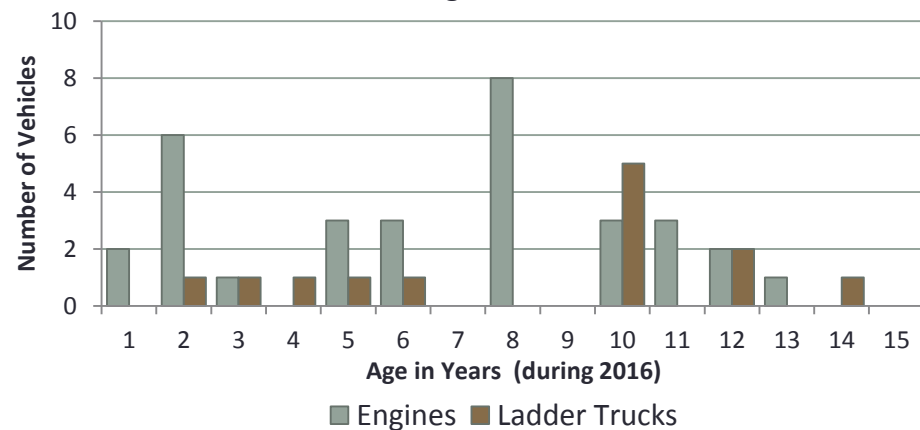
Funding for major capital equipment was reduced in the 2015 Proposed Budget with the intent of using the reduction to partially offset the cost of a new repair garage. The funding for the repair garage was removed by the Council prior to the adoption of the 2015 Budget.

Stable funding for the acquisition of firefighting apparatus allows for a smooth age distribution throughout the fleet. This avoids the need for large capital expenditures in any given year.

Fire - Major Capital - Budgeted Funding



Fleet Age Distribution



Fire Facilities Maintenance, \$700,000

This program funds the repair and maintenance of internal, external and mechanical systems for the Fire Department's 36 engine houses. The average age of the City's firehouses is 60 years. The median age is 52 years. Eight of the fire houses (23%) are over 100 years old.

The largest categories of work requested by the department for 2017 are roofs (\$472,000), tuck-pointing (\$105,000) and window replacement (\$105,000). 2015 expenditures were \$891,110 million.

Auxiliary Power Supply, \$85,000

This project purchases and installs backup generators for Fire Department engine houses. All but 5 stations (Engines 1, 6, 26, 27, and 28) have generators installed. Communications equipment, garage door openers and fueling stations are especially important for the operation of fire houses in the event of a power failure. The generators are customized for each location. Recent funding has allowed for the installation of one or 2 generators each year. The Fire Department utilizes the Department of Public Works to install the generators.

In order to maintain the NFPA recommended replacement cycle for the frontline fleet, the budget should provide enough funding to purchase, on average, 2.2 engines and one ladder unit per year. To maintain a 5-year replacement cycle for medical units, the budget should provide for 3 medical units per year.

Work typically funded by the Fire Facilities Maintenance Program

- HVAC and boiler replacement
- Roof repair and replacement
- Electrical upgrades
- Overhead door replacement
- Window and door replacement
- Environmental remediation
- Concrete repair and replacement
- Flooring
- Paint

Fire Repair Shop – Facility Upgrades, \$483,000

This project will address deferred maintenance at the Fire Department's repair facility. The project is expected to reduce energy cost, increase productivity and significantly reduce out of service time for response vehicles.

Improvements at the facility will include:

- The addition of a women's locker room.
- The construction of an additional restroom.
- Repairs and upgrades to the electrical system.
- Upgrades to the fire apparatus storage facility.
- Window replacement.
- Boiler replacement.
- The installation of wider entry doors.
- The addition of vehicle service doors.

Unfunded Requests

Access Card Security System

This project would have installed a key card access system at the City's fire stations. The current key based system is expensive and cumbersome to maintain. The department requested \$440,000.

Fire Facility Condition Reports

The Fire Department requested funding of \$14,400 to reimburse the Department of Public Works for inspection and other services related to determining and reporting on the condition of Fire Department facilities.

Other Capital Projects

Fire Digital Radio System

The Fire Department and the Police Department both utilize the Open Sky radio system. The consoles for the system need to be replaced because the existing operating system is no longer supported and replacement parts are no longer available. The new equipment is expected to have a useful life of 7 years. This project also includes the purchase of an ISSI gateway, which will provide a direct connection between the City and the County radio systems and support the Fire Department's Shared Services Initiative.

The Fire Department has 18 consoles and the Police Department has 31 consoles. The 2016 Budget included \$400,000 for Fire Department and \$1.9 million for Police Department consoles.

Fire Record Management System

This project will replace the department's fire record management system. The Fire Department is required by the state and federal government to provide reporting that is in compliance with National Fire Incident Reporting System (NIFRS) standards. The department's current system is 11 years old and is becoming increasingly unreliable. The software will need to be configured with MFD specific information, such as incident call types, pre-fire plan information and staffing information. The 2016 Budget provided \$550,000 for this program.

Resource Allocation Study

The department is working with the University of Chicago to conduct an analysis of departmental resources.

A computer model that will evaluate and quantify the net effect of emergency response equipment deployment changes is expected to be available in mid-October, 2015.

An additional phase will develop a model to optimize the location of emergency response equipment. This phase is not expected to be available until sometime in 2016.

16 Police Department

\$7,589,000

Proposed Capital Funding

\$14,454,886

Requested Capital Funding

\$1,481,000

Decrease from 2016 Budget

-16.3%

Percent Change from 2016 Budget

\$52,106,197

Six-Year Capital Request

Capital Programs and Projects

Police Admin Building Remodeling	\$5,500,000
District Repairs	\$280,000
Record Management System (RMS)	\$1,715,000
Uninterruptable Power Supply	\$94,000

Ongoing and Recent Capital Projects

- Police Administration Building Renovation
- Record Management System Replacement
- Uninterruptable Power Supply Upgrade
- 3rd District Parking Deck Repair
- CAD System Upgrade (2016)
- Mobile Data Computer Upgrade (2016)
- Radio Dispatch Console Upgrade (2016)
- 911 Network Upgrade (2016)
- MediaSolv Camera Upgrade (2016)

Unfunded Capital Requests

Mobile Identification System	\$850,000
Digital Asset Mgmt. System Repl.	\$200,000
Police Training Management System	\$250,000
Radio & Communications Upgrade	\$375,000
IT Server and Data Storage Repl.	\$250,000
Video Conferencing Upgrade	\$125,000

Information regarding these requests can be found in Common Council File 151692

The 2017 Proposed Budget contains \$1.7 million of capital funding for IT projects in the Police Department. All unfunded requests for 2017 are related to IT and communication projects.

Anticipated Capital Requests

The only out-year requests are related to the Police Administration building, on-going maintenance at district stations and radio and communication improvements.

The total 6-year request is \$52.1 million.

Capital Program Detail – Police Department

Program	2017 Proposed	2016 Budget	Increase (decrease)	% Chng.	6-year Request
Police Administration Building Remodeling	\$5,500,000	\$2,100,000	\$3,400,000	162%	\$37,576,197
District Station Repairs	\$280,000	\$500,000	(\$220,000)	-44%	\$9,225,000
Radio & Communications Upgrade	\$0	\$440,000	(\$440,000)	-100%	\$750,000
Records Management System	\$1,715,000	\$1,100,000	\$615,000	56%	\$2,500,000
Uninterruptable Power Supply	\$94,000	\$425,000	(\$331,000)	-98%	\$380,000
IT Server & Data Storage Replacement	\$0	\$225,000	(\$225,000)	-100%	\$250,000
Mobile Data Computer Upgrades	\$0	\$758,000	(\$758,000)	-100%	\$0
Upgrade CAD System	\$0	\$1,300,000	(\$1,300,000)	-100%	\$0
Radio Dispatch Consoles	\$0	\$1,900,000	(\$1,900,000)	-100%	\$0
911 Network Upgrade	\$0	\$72,000	(\$72,000)	-100%	\$0
MediaSolv	\$0	\$250,000	(\$250,000)	-100%	\$0
Total	\$7,589,000	\$9,070,000	(\$1,481,000)	-16%	

Police Administration Building Remodeling, \$5,500,000

Since 2011, \$19.1 million has been budgeted for this project. The project was also authorized to receive \$350,000 in contingent borrowing in June, 2012. The estimated cost for the total project is nearly \$59 million, and includes the areas used by the Municipal Court and the Office of the City Attorney.

Construction, which is expected to be completed in 2022, has been phased over multiple years to minimize impacts on annual budgets and MPD operations.

Expenditures for the project in 2013, 2014 and 2015 were \$3,037,126, \$5,684,644, and \$1,973,980, respectively.

Additional information regarding

The Police Administration Building Project is available in Common Council Files 100006 and 111338.

District Station Repairs, \$280,000

This program provides funding for repair and upgrades at the Police Department's District stations as well as the Radio Shop and the Neighborhood Task Force building. This program first received funding in 2012 (\$465,000). In prior years, projects at the district stations were funded with discrete capital accounts or included in the District Station Renovation Program. The department requested \$500,000 for 2017.

Police Administration Construction Phasing (as of Sept. 2015)		
Year	Phase	Proposed Work
2012	1	New chase and high-rise upgrades (complete 2013)
2013 -2014	2	5 th Floor remodeling (complete Jan 2015)
2014 -2015	3	4 th Floor remodeling
2016 – 2017	4	3 rd Floor remodeling
2017 -2018	5	2 nd Floor remodeling & Fusion Center
2018 -2019	6	1 st Floor remodeling - Municipal Court
2019 -2020	7	7 th Floor remodeling
2020 -2021	8	Basement & 6 th Floor remodeling
2022	9	MEP upgrade, install return air chase

Uninterruptible Power Supply (UPS), \$94,000

The 2014 Budget provided \$696,000 to replace UPS systems. In 2015, an audit of Police Department technology, network and radio transmitter rooms identified additional UPS and HVAC systems that need to be installed or replaced. Revised project estimates have increased the total project cost from \$696,000 to \$1.5 million. The department will fund system maintenance in its operating budget. An additional \$425,000 was provided in the 2016 Budget. The department requested \$380,000 for 2017. Expenditures in 2014 and 2015 were \$51,470 and \$175,489, respectively.

Radio & Communications Upgrade

Since 2011, this program has been used to improve radio coverage inside buildings and to ensure better radio signal strength in areas throughout the City that are affected by land clutter. Funding in 2017 would have been used to build a radio site at the Oak Creek Water Tower. This program was first funded in 2009. Budgeted funding from 2009 through 2016 has totaled \$1.97 million. Expenditures through the end of 2015 totaled \$1.3 million. **No funding is proposed for 2017 for this program.**

Records Management System, \$1,715,000

Since 2013, this capital account has received \$5 million. In 2013, \$68,300 was expended from the Tiburon Upgrade account for this project. Expenditures in 2014 and 2015 were \$236,205 and \$246,836, respectively.

The department used a request for information (RFI) to allow a more thorough evaluation of options available. The RFI received 15 responses. The City issued an RFP with a submission deadline of December 3, 2013. Four vendors were chosen to make performance demonstrations. The demonstrations were complete in July, 2014. The development of a design and implementation plan will begin as soon as the contract has been awarded. The department anticipates that the project will take 2 to 3 years to implement.

Proposed radio sites

- UWM (2014)
- St. Luke's Hospital (2014)
- District 4 (
- Greenfield Water Tank (2015)
- Bayside/Whitefish Bay Water Tower
- Froedert/Children's Hospital
- Oak Creek Water Tank
- Oak Lane Tower

Other Capital Projects

Mobile Data Computer (MDC) Upgrades

This project received a total of \$1.8 million in 2015 and 2016 to replace 280 mobile data computers (MDCs). In addition to other improvements, the new hardware will allow for the use of magnetic strip readers for driver's license cards. The current computers (CF-30 Toughbook) are no longer supported by Panasonic. The faster processor speed and expanded memory of the new computers (CF-31 Toughbook) are required to upgrade the operating system to Windows 7.

Annual repair costs for the current computers were \$90,000 in 2012 and 2013. The unit price for new MDCs including the laptop and the mount is approximately \$6,250.

MediaSolv Camera Upgrade

This project received \$250,000 in 2016 to upgrade interview room cameras. The current system, which was purchased in 2010, utilizes analog technology. The new system will provide higher quality recordings, indexing and audit features, which will help ensure the integrity of video evidence. The new digital equipment will not require cabling for power and coax cables, making installation more cost-effective than the previous system. This camera upgrade is unrelated to the hard drive failure that occurred in January, 2015.

Upgrade Computer Aided Dispatch (CAD) System,

This project received \$1.3 million in 2016 to upgrade the department's current CAD system, which was installed in 2004 and updated in 2007. The upgrade will include new hardware. The CAD system is a separate system from the department's current record management system (RMS).

Radio Dispatch Consoles

The Police Department and the Fire Department both utilize the Open Sky radio system. The 2016 provided \$1.9 million in 2016 to replace the system consoles. The existing operating system is no longer supported and replacement parts are no longer available. The new equipment is expected to have a useful life of 7 years. This project also includes the purchase of an ISSI gateway to provide a direct connection between the City and County radio systems. There are 31 consoles in the Police Department and 18 consoles in the Fire Department. The 2016 Proposed Budget also includes \$400,000 to replace the Fire Department consoles.

911 Network Upgrade

This project received \$72,000 in 2016 to replace the switches, routers, power supplies and licenses for both the 911 and MPD systems.

3rd District Parking Deck Repair

The entire upper level of the parking structure at the Data/Communications Center has been closed since approximately June 30, 2011.

The 2015 Budget included \$3.6 million of budgetary authority to make repairs, in anticipation of the resolution of litigation relating to the construction of the structure.

Discussions with DPW and the City Attorney relating to this issue are on-going. The litigation is in the pre-trial phase.

17 Fire and Police Commission

<p style="text-align: center;">\$0</p> <p>Proposed Capital Funding</p>	<p>Capital Programs and Projects</p> <p>There are no proposed capital programs or projects.</p>	<p>Ongoing and Recent Capital Projects</p> <p>In 2009, the Commission received \$150,000 to move its offices to the 10th floor of the Zeidler Municipal Building (ZMB). The delay in the remodeling of the 8th floor of City Hall caused the funding to lapse. Funding was renewed in 2014. The project remains on hold.</p>
<p style="text-align: center;">\$0</p> <p>Requested Capital Funding</p>	<p>Unfunded Capital Requests</p> <p>There are no unfunded capital requests.</p>	<p>Anticipated Capital Requests</p> <p>There are no out-year capital requests.</p>
<p style="text-align: center;">\$0</p> <p>Increase from 2016 Budget</p>	<p>The Commission’s current office on the 7th floor of City Hall is just 1,066 square feet and lacks all of the following: lobby, waiting area, file storage space, document copying/assembly area, interview room, meeting/conference room, supply room and employee break room/kitchen. In addition, the current office arrangement requires 5 Commission employees to be housed in another department and necessitates the locking of the Commission’s main door. The relocation to larger offices would correct all of these deficiencies, giving the Commission an adequately-sized office that better serves the needs of both Commission staff and the public.</p>	
<p style="text-align: center;">0%</p> <p>Percent Change from 2016 Budget</p>		
<p style="text-align: center;">\$0</p> <p>Six-Year Capital Request</p>		

18 Mayor's Office

\$0

Proposed Capital Funding

\$0

Requested Capital Funding

\$0

Increase 0 from 2016 Budget

0%

Percent Change from 2016 Budget

\$0

Six-Year Capital Request

Capital Programs and Projects

There are no proposed capital programs or projects.

Ongoing and Recent Capital Projects

There are no on-going or recent capital projects.

Unfunded Capital Requests

There are no unfunded capital requests.

Anticipated Capital Requests

There are no out-year capital requests.

19 Health Department

\$731,000

Proposed Capital Funding

\$497,675

Requested Capital Funding

\$14,000

Decrease from 2016 Budget

-1.9%

Percent Change from 2016 Budget

\$1,813,329

Six-Year Capital Request

Capital Programs and Projects

Health Facilities Capital Projects	\$226,000
Lead Paint Prevention & Abatement	\$340,000
Lab Equipment	\$165,000

Ongoing and Recent Capital Projects

Window replacement at South Side Health Center.
Building automation systems

Unfunded Capital Requests

There are no unfunded capital requests.

Anticipated Capital Requests

The total 6-year request is \$1.8 million.

All out-year requests are related to building and facility maintenance.

The department requested \$498,000 for building improvements at the health centers.

The 2017 Proposed Budget creates a new capital account to fund lab equipment.

Funding continues in 2017 to abate lead paint. The proposed funding is the same as 2016. It is expected to fund one position which will be responsible for managing a home’s abatement process from the initial application to the final clean test. It will also fund remediation work at approximately 50 homes. The department uses the funds to replace windows, paying a flat fee per window. The property owner is responsible for the difference between the City’s contribution and the contractor’s price, as well as any other lead abatement that is required.

20 DPW- Administration

<p style="text-align: center;">\$0</p> <p>Proposed Capital Funding</p>	<p>Capital Programs and Projects</p> <p>There are no proposed capital programs or projects.</p>	<p>Ongoing and Recent Capital Projects</p> <p>Upgrade of the Municipal Phone System (2012)</p> <p>The new system upgraded software and back-end hardware and included enhanced functionality, such as disaster recovery and daylight savings time adjustments. The upgrade did not include the Police or Fire Departments. Expenditures were \$418,150 and \$31,138 in 2012 and 2013, respectively.</p>
<p style="text-align: center;">\$0</p> <p>Requested Capital Funding</p>	<p>Unfunded Capital Requests</p> <p>There are no unfunded capital requests.</p>	<p>Anticipated Capital Requests</p> <p>There are no out-year capital requests.</p>
<p style="text-align: center;">\$0</p> <p>Increase from 2016 Budget</p>	<p>The 2014 Budget moved authority for the Public Safety Communications capital account from the Department of Public Works – Administration section to the Department of Administration - ITMD.</p>	
<p style="text-align: center;">0%</p> <p>Percent Change from 2016 Budget</p>		
<p style="text-align: center;">\$0</p> <p>Six-Year Capital Request</p>		

21 DPW- Sanitation

\$0
Proposed Capital Funding

\$1,375,000
Requested Capital Funding

\$100,000
Decrease from 2016 Budget

-100%
Percent Change from 2016 Budget

\$1,375,000
Six-Year Capital Request

Capital Programs and Projects

Ongoing and Recent Capital Projects

Purchase and Install Brine Makers
Material Recovery Facility – 1313 W. Mount Vernon

Unfunded Capital Requests

Purchase & Install Brine Makers	\$275,000
Industrial Road Facility Relocation	\$1,100,000

Anticipated Capital Requests

The total 6-year capital request is \$1.4 million.

See page 49 for a list of requests for DPW Operations.

Purchase and Install Brine Makers

This project is not funded in 2017. Beginning in 2014, the department began a project to install 3 brine makers at Sanitation yards for use in snow and ice operations. Brine will be transported and stored in holding tanks installed at each of the 6 Sanitation yards. The department requested \$275,000 for 2017. Capital funding of \$275,000 and \$100,000 was provided in 2015 and 2016 respectively. The brine makers are expected to have a useful life of 15 years.

Industrial Road Transfer Station & Self-Help

Direct Supply has an option on the property where the Industrial Road transfer station and Self-Help yard are located. If Direct Supply exercises the option to expand its operation, the City will have 2 years to relocate the facility. The option expires December 13, 2019.

The preliminary cost estimate to relocate the facility is \$13.5 million. The City will be responsible for 50% of the cost. (See CC File 060420) No funding has been budgeted for construction or design of a new Sanitation facility.

In April 2016, a Development Incentive Zone was established that includes the DPW Industrial Road facilities. (See CC File 151670)

In July 2016, the Common Council approved a resolution vacating a portion of N. Industrial Road. (See CC File 160287)

The Cheese Brine Pilot conducted during the winter of 2013-2014 demonstrated that pre-wetting salt with liquid brine is beneficial and should result in an overall reduction in salt usage. Salt that has been pre-wet with brine activates faster, remains in the driving lane better than dry salt and keeps the pavement clear longer. Annual savings related to salt usage are difficult to quantify and may be highly variable. The department continues to investigate opportunities to reduce salt usage, including the addition of various agricultural products to the brine. The brine makers will be able to accommodate such additives. Information about the Cheese Brine Pilot and alternative deicers can be found in Common Council Files 140917 and 130661, respectively.

Environmental Services Facility Modifications

The 2017 Proposed Budget includes no funding for the repair and maintenance of the facilities at the yards used by the Department of Public Works' Operations Division. Since 2001, \$7.35 million in funding has been budgeted. Annual funding for this program varies. Funding was allocated in 2014 to conduct a facility use study.

Routing software is being used to optimize garbage and recycling routes.

Route changes could affect the number of packers in the City's fleet.

22 DPW- Fleet

\$6,385,000

Proposed Capital Funding

\$6,725,000

Requested Capital Funding

\$340,000

Decrease from 2016 Budget

-5.10%

Percent Change from 2016 Budget

\$78,777,000

Six-Year Capital Request

Capital Programs and Projects

Major Capital Equipment	\$6,385,000
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Ongoing and Recent Capital Projects

2-Way Radio Replacement

Unfunded Capital Requests

There are no unfunded capital requests.

Anticipated Capital Requests

The total 6-year capital request is \$78.8 million.

See page 49 for a list of requests for DPW Operations.

Major Capital Equipment, \$6,385,000

This program provides for equipment whose cost exceeds \$50,000 and has a life expectancy of at least 10 years - focusing on equipment replacement for garbage and recycling collection, snow and ice control, and pick-up and dump trucks for use as pool equipment. The 2017 Proposed Budget funds all of the department's requested equipment with the exception of one packer. Actual equipment purchases may be different depending on fleet performance. Average annual funding for this program since 2002 is \$5.9 million.

Description of unit	Current Inventory	Requested Units	Proposed Units	Estimated Unit Cost
Backhoe Loader	9	1	1	\$130,000
Sweeper	26	2	2	\$223,000
Tractors				
Front End Wheel Loader	12	2	2	\$155,000
Light Multi-Purpose	46	4	4	\$110,000
Trucks				
Aerial, 50 Foot, Utility Body	12	1	1	\$180,000
Digger Derrick	4	1	1	\$231,000
Dump, 16 yard, Tri-Axle	25	2	2	\$160,000
Dump, 2 Yard w/ Crane	70	4	4	\$52,000
Dump, 5 Yard	21	2	2	\$120,000
Dump, 5 Yard w/Underbody Plow	108	7	7	\$170,000
Dump, 24 Yard, Chip Body	16	2	2	\$110,000
Packer, 25 Yard, Rear load/Recycle	123	7	6	\$292,000
Log Loader	5	1	1	\$170,000
Platform Compressor	28	3	3	\$82,000
Roll-Off	13	2	2	\$175,000
Total Number of Units		41	40	

The average age of capital equipment is 12.3 years. The optimal average age based on the average useful life of equipment is 6 years. The average age of the capital fleet in 2009 was 9.5 years. The age of the fleet is of concern because older vehicles cost more to operate. They typically require more extensive repairs, experience more down time and are less fuel-efficient than newer vehicles.

The long-term effect of CNG vehicles on maintenance costs and vehicle replacement cycles is unknown. CNG packers are expected to save nearly \$225,000 in fuel costs in 2016, (savings will vary annually), but if they don't last as long as vehicles with diesel engines or if they require significantly more maintenance, those savings will be offset by higher replacement and maintenance costs.

Compressed Natural Gas (CNG)

DPW is continuing to transition its garbage and recycling packers to compressed natural gas engines. DPW has over 50 CNG-powered packers in use. The department has used grants to fund the marginal cost of the CNG engines.

In 2014, DPW projected that each CNG packer would save approximately \$6,500 in fuel costs annually. Price changes for both CNG and diesel have narrowed the cost difference. Projected fuel savings for 2017 are \$2,000 for each CNG packer. If the City has to pay the full cost of a CNG packer (no grant funding), the payback period on fuel related savings would be just under 8 years. CNG now accounts for over 12% of the City's fuel consumption.

Ventilation and code upgrades are required at all repair facilities to accommodate CNG vehicles. DPW has been able to use CMAQ grant money to make many of the necessary upgrades. The grants typically have an 80/20 cost share. Central Garage still requires upgrades. There is no current cost estimate for the upgrades because some of the regulations have changed. Grant funding for CNG upgrades is not as available as it was several years ago.

A CMAQ grant was received in 2014 for a CNG dispensing project which would make the CNG pumps at Ruby Garage available 24/7. The project is nearly complete.

Routing software is being used to optimize garbage and recycling routes. Route changes could affect the number of packers in the City's fleet.

23 DPW- Forestry

\$3,525,000

Proposed Capital Funding

\$3,615,000

Requested Capital Funding

\$395,000

Increase from 2016 Budget

12.6%

Percent Change from 2016 Budget

\$22,115,000

Six-Year Capital Request

Capital Programs and Projects

Boulevard Irrigation and Landscaping	\$500,000
Tree Planting & Production	\$1,450,000
Stump Removal	\$500,000
EAB Readiness & Response	\$1,000,000
Hazardous Tree Removal Program	\$75,000

Ongoing and Recent Capital Projects

All of the capital funding for Forestry is related to on-going programs.

Unfunded Capital Requests

Anticipated Capital Requests

The total 6-year capital request is \$22.1 million.

See page 49 for a list of requests for DPW Operations.

Many of the programs in Forestry are funded by the Sewer Maintenance Fund (SMF).

One of the key issues facing the City with respect to its urban forest is the emerald ash borer. The presence of the emerald ash borer has been confirmed in Milwaukee. If left unmanaged, emerald ash borer will likely kill thousands of trees each year. Forestry has developed and implemented a proactive treatment strategy which is discussed further in the Emerald Ash Borer Readiness and Response section.

Capital Program Detail – DPW Operations (Sanitation, Fleet, Forestry)

Program	2017 Proposed	2016 Budget	Increase (decrease)	% Chng.	6-year Request
Environmental Services Facility Modifications	\$0	\$0	\$0	0%	\$0
Purchase & Install Brine Makers	\$0	\$100,000	(\$100,000)	-100%	\$275,000
Industrial Road Relocation	\$0	\$0	\$0	0%	\$1,100,000
Sub Total – Sanitation	\$0	\$100,000	(\$100,000)	-100%	\$1,375,000
Major Capital Equipment	\$6,385,000	\$6,725,000	(\$340,000)	-5%	\$78,777,000
Sub Total - Fleet	\$6,385,000	\$6,725,000	(\$340,000)	-5%	\$78,777,000
Tree Planting and Production	\$1,450,000	\$1,400,000	\$50,000	4%	\$10,115,000
Concealed Irrigation & General Landscaping	\$500,000	\$250,000	\$250,000	100%	\$3,000,000
Emerald Ash Borer Readiness & Response	\$1,000,000	\$980,000	\$20,000	2%	\$6,000,000
Stump Removal	\$500,000	\$500,000	\$0	0%	\$3,000,000
Hazardous Tree Removal	\$75,000	\$0	\$75,000		\$0
Sub Total – Forestry	\$3,525,000	\$3,130,000	\$395,000	13%	\$22,115,000
Total – DPW Operations	\$9,910,000	\$9,955,000	(\$45,000)	-0.5%	\$102,267,000

Tree Planting and Production, \$1,450,000

This program funds the production and replacement of trees removed in street construction projects, replacement of dead or diseased trees, and the planting of new trees on boulevards. Since 2010, this program has been funded by the Storm Water Management fee. The transfer from the Sewer Maintenance Fund is also used to fund other tree-related activities in Forestry's operating budget.

DPW requested funding for 4,405 trees. The 2017 Proposed Budget provides \$1,450,000 for this program, a decrease of \$165,000 (10.2%) from the requested amount.

Stump Removal, \$500,000

This program is funded by the Storm Water Management Fee.

Historically, the stump removal backlog averages around 400 stumps each year. Beginning in 2010, staffing reductions and vacancies contributed to a significant increase in the backlog. The department estimates that it can remove approximately 2,300 stumps each year. If tree mortality remains relatively constant, the year-end backlog of stumps will increase by over 1,000 each year unless

funding is provided to contract for additional removals. The 2017 Proposed Budget includes \$500,000 for stumping activities, the same amount as in 2016.

Concealed Irrigation and General Landscaping, \$500,000

This program is funded by the Storm Water Management Fee in 2017.

This program replaces infrastructure related to irrigation and landscaped boulevard medians in conjunction with the City's paving program and other construction activities such as the installation of bio-swales. This program was funded as requested.

Tree Planting Request Summary by Request Year

	2017	2016	2015	2014	2013	2012	2011
Dead or Diseased	3,843	4,763	4,472	3,934	3,108	3,845	3,244
Related to Paving	562	610	669	277	506	417	211
Ash Tree Transition Plan ²			9,00 ²				
Sustainable Boulevard Plan			--	--	--	700 ¹	2,450
Unfunded from previous request		806					
Total Requested Trees	4,405	6,179	6,041	4,211	3,704	4,962	5,905

¹ Not funded in the 2012 Budget.

² Not included in the regular Tree Planting and Production capital account and not funded in the 2015 Budget.

Emerald Ash Borer (EAB) Readiness and Response, \$1,000,000

This program is funded by the Storm Water Management Fee.

There are approximately 570,000 ash trees within the City limits. Approximately 32,500 are street trees in the public right-of-way. Since 2009, \$7.4 million has been allocated to inoculate 27,000 ash trees against the emerald ash borer. One half of the City's ash trees, 8" or larger, will be inoculated each year as the City transitions to more disease-resistant species. The department is considering a 3-year inoculation cycle because of labor constraints. As smaller-diameter trees grow into the 8" class, they will be inoculated if they are healthy and not structurally deficient. The department's inventory has approximately 3,500 trees which are under 7" in diameter and could grow into the treatment class.

Emerald Ash Borer continues to spread in Southeast Wisconsin. An active infestation on private property within the City limits was confirmed by the Wisconsin Department of Agriculture, Trade and Consumer Protection in July, 2012. EAB infestations have been identified in several areas across the City. No EAB activity has been detected in treated ash street trees. Forestry has surveyed private trees in the vicinity of known EAB infestations and has notified property owners of trees confirmed or symptomatic for EAB. It is hoped that Milwaukee's aggressive inoculation

program will provide benefits to the larger ash tree population in the region by slowing the spread of the beetle. This is especially important when considering the potential for devastating canopy losses on private property and along Milwaukee's waterways.

Infested trees quickly lose structural integrity and pose a significant risk of personal injury or property damage, necessitating prompt removal. An ordinance change in 2013 allows hazardous tree removal charges to be considered a special assessment. This gives property owners the option of paying the bill in full or spreading any unpaid balance across 6 subsequent property tax bills. Property owners for whom the unexpected removal of ash trees is a financial hardship will benefit from this provision. The contractors who remove the hazardous trees under the new ordinance are paid with funds from the Hazardous Tree Removal capital account.

The foreclosure crisis has increased the number of properties that the City now owns and maintains. The department's inoculation program does not include trees on lots that the City acquires through the *in rem* process.

Hazardous Tree Removal, \$75,000

The 2014 Budget created this capital account. Its purpose is to provide a funding source for the 2013 ordinance change which allows property owners to spread the cost of removing hazardous trees on their properties over 6 property tax bills. The ordinance was generally modeled after paving and sidewalk assessments. However, in the case of hazardous tree removals, the property owner must decide before the work is done if he or she will defer payment. If payment deferral is selected, there is no penalty for early repayment. There was sufficient carryover authority to fund anticipated requests in 2016. As emerald ash borer continues to spread throughout the City, this account is expected to need additional funding. A survey done in the winter of 2015-2016 found that 18% of the $\frac{1}{4}$ sections throughout the City have signs of EAB activity. Approximately 800 trees on 400 properties were identified. The department typically cites just over 400 properties annually for all types of hazardous trees. Citations are expected to increase for 2017, 2018, and 2019 to 2,300, 3,800, and 5,400 properties, respectively. The department will need increased inspection and monitoring capacity.

Although the City has an aggressive inoculation program in place to protect ash trees in the City rights of way, these trees represent only a small portion of the ash trees within the City limits. Because ash trees have high water needs, they tend to be found in parkways and along waterways. Hyperspectral imagery used by the department has identified over 38,000 properties in the City with ash tree canopy.

The location of parcels with ash trees is available on MapMilwaukee

24 DPW- Infrastructure

\$100,537,000

Proposed Capital Funding
(including grant & aid)

\$117,170,845

Requested Capital Funding
(including grant & aid)

\$10,632,000

Increase from 2016 Budget

11.8%

Percent Change from 2016 Budget

\$666,339,086

Six-Year Capital Request

Capital Programs – Core Infrastructure

Major Bridge Program	\$11,281,000
Bridge Program - Local	\$5,475,000
Major Streets	\$38,206,000
Local Streets	\$8,000,000
High Impact Paving	\$8,000,000
Alley Reconstruction	\$600,000
Sidewalk Replacement	\$1,500,000
Street Lighting	\$7,000,000
Traffic Control Facilities	\$2,600,000
Electrical MH Reconstruct	\$800,000

Total \$83,462,000

Capital Programs – Buildings and Facilities

City Hall Foundation	\$13,000,000
Environmental Remediation Program	\$150,000
ADA Compliance Program	\$1,800,000
Facilities Exterior Program	\$600,000
Facilities Systems Program	\$875,000
MKE Plays	\$250,000
Space Planning and Engineering	\$400,000

Total \$17,075,000

Unfunded Capital Requests

North Point Lake Tower	\$340,000
New Street Construction	\$350,000
Underground Conduit	\$750,000

Six-Year Request

Core Infrastructure	\$600.34 million
Buildings & Facilities	\$ 65.99 million
Total	\$666.33 million

Capital Program Detail – DPW Infrastructure Services					
Program	2017 Proposed	2016 Budget	Increase (decrease)	% Chng.	6-year Request
Major Bridges ¹	\$11,281,000	\$1,327,000	\$9,954,000	750%	\$49,928,000
Local Bridges	\$5,475,000	\$4,100,000	\$1,375,000	34%	\$55,100,000
Major Streets ¹	\$38,206,000	\$39,397,000	(\$1,191,000)	-3%	\$247,359,086
Local Streets ²	\$8,000,000	\$7,600,000	\$400,000	5%	\$83,000,000
High Impact Street	\$8,000,000	\$8,000,000	\$0	0%	\$18,000,000
New Streets	\$0	\$0	\$0	0%	\$1,050,000
New Streets - Developer	\$0	\$100,000	(\$100,000)	-100%	\$800,000
Alley Program ²	\$600,000	\$0	\$600,000		\$12,750,000
Sidewalk Program ²	\$1,500,000	\$1,900,000	(\$400,000)	-21%	\$12,000,000
Street Lighting Program	\$7,000,000	\$9,120,000	(\$2,120,000)	-23%	\$73,200,000
Traffic Control Program	\$2,600,000	\$520,000	\$2,080,000	400%	\$18,010,000
Underground Conduit & Manhole Program	\$0	\$736,000	(\$736,000)	-100%	\$20,952,000
Underground Electrical Manhole Reconstruction Program	\$800,000	\$1,225,000	(\$425,000)	-35%	\$8,200,000
Sub Total – Core Infrastructure	\$83,462,000	\$74,025,000	\$9,437,000	13%	\$600,349,086

¹ Includes grant and aid funding; ² Includes special assessment funding.

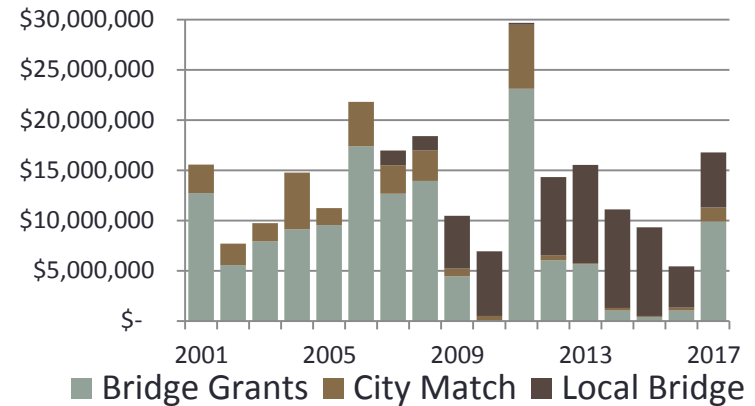
Capital Program Detail – DPW Infrastructure Services (cont'd)					
Program	2017 Proposed	2016 Budget	Increase (decrease)	% Chng.	6-year Request
ADA Compliance program	\$1,800,000	\$200,000	\$1,600,000	800%	\$4,425,000
City Hall Foundation	\$13,000,000	\$13,000,000	\$0	0%	\$42,000,000
Environmental Remediation	\$150,000	\$150,000	\$0	0%	\$1,150,000
Facilities Exterior	\$600,000	\$1,000,000	(\$400,000)	-40%	\$6,850,000
Facilities Systems	\$875,000	\$680,000	\$195,000	29%	\$7,325,000
Space Planning Alterations & Engineering	\$400,000	\$400,000	\$0	0%	\$2,400,000
MKE Plays	\$250,000	\$250,000	\$0	0%	
Hartung Park Landfill Closure	\$0	\$200,000	(\$200,000)	-100%	
Energy Efficiency & Renewable Energy	\$0	\$0	\$0	0%	
Recreational Facilities	\$0	\$0	\$0	0%	\$1,500,000
Northpoint Lake Tower	\$0	\$0	\$0	0%	\$340,000
Mac Arthur Square	\$0	\$0	\$0	0%	\$0
Sub Total – Buildings & Facilities	\$17,075,000	\$15,880,000	\$1,195,000	8%	\$65,990,000
Total – DPW Infrastructure Services	\$100,537,000	\$89,905,000	\$10,632,000	12%	\$666,339,086

Core Infrastructure Programs

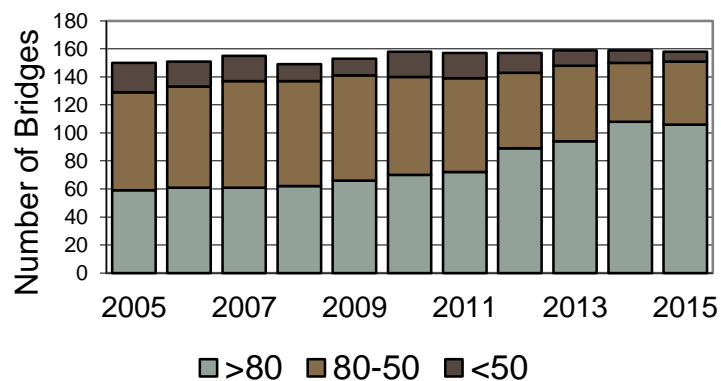
The 2017 Proposed Budget includes \$83.5 million in funding for 10 capital programs relating to bridges, streets, alleys, street lighting, traffic control, underground conduit and electrical manholes, an increase of \$9.4 million (12.8%) from the 2016 Budget. The largest increase is in the Major Bridge Program, which increases by \$9.9 million because of increased grant funding. The small reduction in the Major Street program is related to changes in available grant funding. City funding for the Local Street program and the High Impact Program are essentially unchanged from 2016. However, Local Road Improvement Funds (LRIP) which are available from the State only in even-numbered years will make the total funding available for local street paving projects approximately \$2 million lower than in 2016.

The total capital investment in core infrastructure programs can vary significantly from year to year because of fluctuations in the amount of grant funding available for the Major Bridge and the Major Street programs. Total grant funding for 2017 has increased by \$11.8 million from 2016. Although grant funding decreased every year from 2013 through 2016, the trend in total grant funding since 2000 has been upward.

Bridge Funding - Total Budgeted



Bridge Sufficiency Ratings



Major Bridge Program, \$11,281,000 & Local Bridge Program, \$5,475,000

Major bridges are eligible for federal or state aid. The City’s share of these major bridge projects is normally 20%. Funding for this program is fluid, largely dependent on when projects are scheduled in the grantor funding cycle. Anticipated grant funding for bridges in 2017 is \$9.9, an increase of \$8.8 million (850%) from 2016.

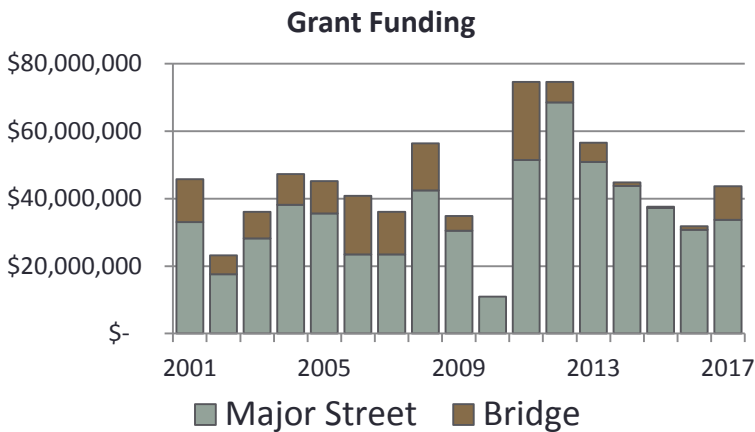
Structures within the Local Bridge Program are essentially all those bridges that are not eligible for federal and/or state aid or where federal and state aid is not available. The Local Bridge Program now includes high-cost movable bridges, which receive a lower priority for WisDOT aid due to funding constraints at the state. The Local Bridge Program also funds maintenance work, structural repairs, painting, mechanical upgrades, inspection and engineering for the City’s entire bridge system.

The City’s investment in its bridge infrastructure has improved the condition of the system. In the late 1980s, 51 bridges had a sufficiency rating of less than 50; at the end of 2015, there were 8. This represents approximately 5% of the City’s bridges. The percentage of bridges in Milwaukee that are classified as structurally deficient is greater than the state-wide average.

Although the City’s efforts have improved bridge condition, the system overall continues to age, with many bridges being at or near the ends of their projected useful lives. Unless structural changes in transportation funding are made at the state level, grant and aid funding will likely remain difficult to obtain, and this program will require significant local funding.

Major Street Program, \$38,206,000

Arterials and collectors are eligible for county, state and federal funding and are part of the City’s Major Street Program. This capital account generally funds the match for state and federal grants. Funding programs include the State Transportation, Connecting Highways, State Trunk Highways, County Trunk Highways, Highway Safety Improvement and Local Road Improvement programs.

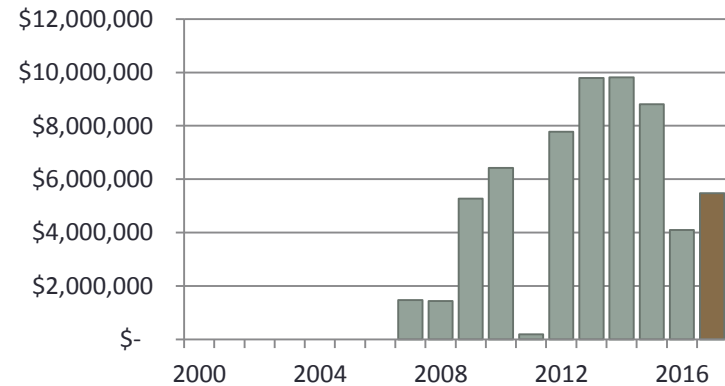


Funding for the Major Street program is highly variable because it is dependent on receiving state and federal aid. Uncertainties in funding for the transportation bill at the federal level make it especially difficult to project funding levels for this program in future years.

Local Street Program, \$8,000,000

Beginning 2009, the City began to devote more resources to local street paving. Between 2011 and 2014, funding in the Local Street Program averaged just over \$14 million. During the 2015 Budget process, the department proposed a new short-term strategy for making improvements to the City’s streets which would divert a portion of Local Street funding over 3 years to execute high-impact projects. After 3 years, the department would return to a traditional reconstruction strategy.

Local Bridge - Budgeted Funding



The construction methods used in the High Impact program on arterial streets will be used on some local streets as well. Using the High Impact approach on local streets will allow the department to maximize the number of streets that can be improved and will help address the backlog of streets that are in poor condition.

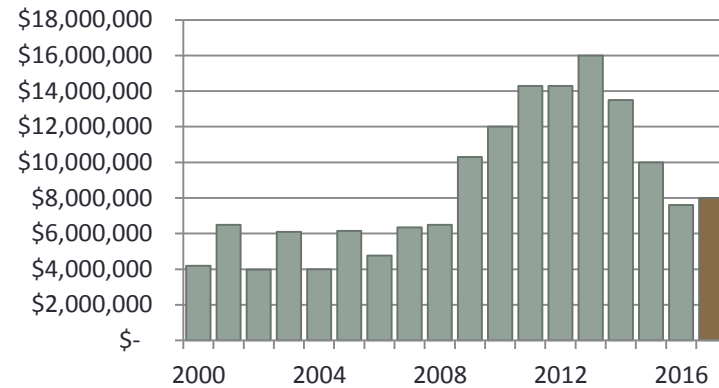
Total funding available for making pavement improvements remains comparatively high. However, inadequate investment in street infrastructure in the 1990s and into the mid-2000s has resulted in a large backlog paving projects. The City has made some progress with its recent investments; the most recent condition report submitted by the City to State indicates that 42% of City-maintained streets are in good condition. However, nearly 490 miles of pavement remain in poor condition.

The Common Council passed an ordinance (File Number 080034) which adjusted the recovery ratios for certain assessable improvements. The ordinance also established a Motor Vehicle Registration (MVR) Fee to generate revenues that are used to defray City costs for transportation-related improvements.

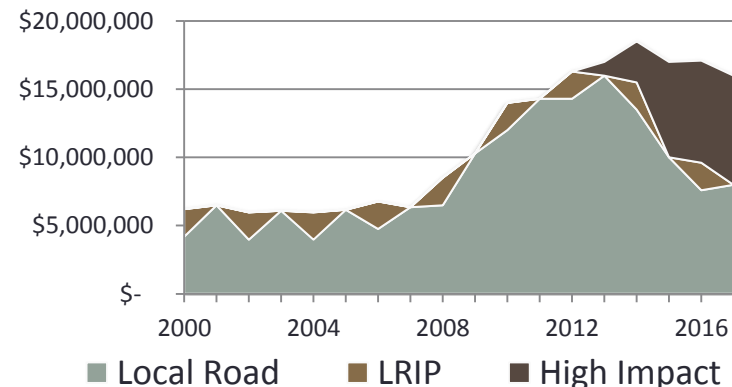
The registration fee is \$20 per vehicle. The 2017 Proposed Budget includes \$6.6 million in revenues from the fee, which will be allocated to the General Fund to pay for street-related capital programs. By ordinance, a minimum of 10% of the MVR fee receipts must be allocated to street-maintenance activities. DPW has allocated approximately \$1 million of the total budget for the local road program in 2017 for capital maintenance.

The MVR fee has not been increased since it was first implemented. When the fee was created, most of the special assessments related to paving projects were eliminated. This reduced the amount of additional revenue available for paving projects by approximately half. There are approximately 330,000 vehicles registered in the city. A \$5 increase to the fee would generate nearly \$1.6 million in additional revenue which could be used to address the condition of City streets. Because the special assessments associated with paving projects would not be reduced further, each dollar increase in the fee would allow proportionally more paving-related work to be done.

Local Streets - Budgeted Funding



Funding Available for Local Streets



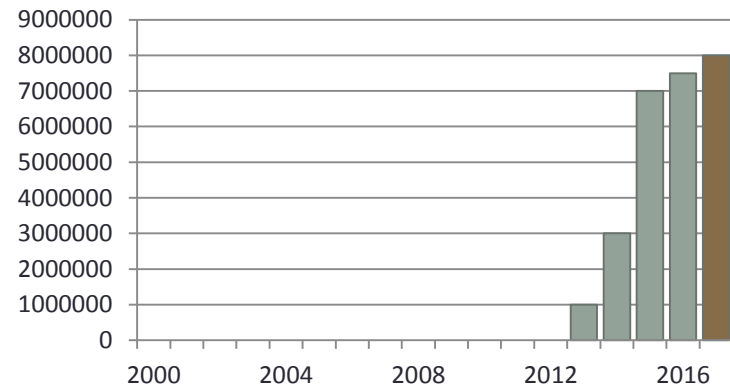
As infrastructure maintenance, repair, and reconstruction needs continue to rise, consideration should be given to other means of increasing revenues or cutting costs. Consideration should also be given to the appropriate level of funding and cost recovery. Any policy must take into consideration property owner expectations as well as the amount of funding available and the relative importance of other capital projects and programs.

High Impact Street Paving Program, \$8,000,000

The High Impact Street Paving Program was first included in the 2013 Budget. Streets in this program are improved using an asphalt overlay. There are no assessments, and projects can be estimated and bid in a short amount of time. Because there is no curb removal, the projects have a minimal impact on street-lighting and traffic-control facilities. Projects are typically constructed in a few days, minimizing impacts on businesses and traffic patterns. It is likely that future High Impact project will require the modification of pedestrian curb ramps to ensure that they are in compliance with the Americans with Disabilities Act.

During the 2015 Budget process, the department proposed a new short-term strategy for making improvements to the City’s streets which calls for completing a much larger number of projects over 3 years while scaling back traditional reconstruction projects.

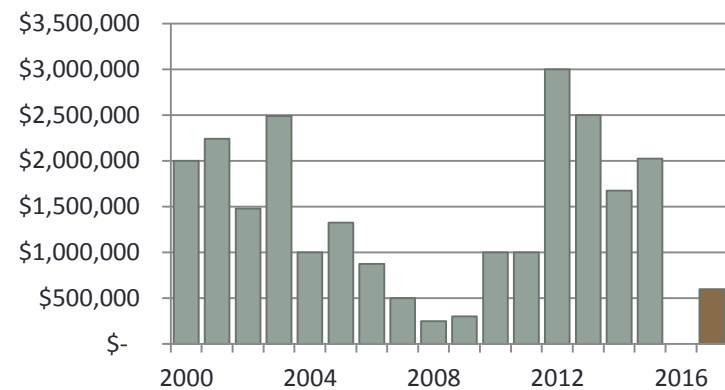
High Impact Streets - Budgeted Funding



New Street Construction – Developer-Funded

This program provides for the construction of streets required to serve platted subdivisions and planned developments with funding provided by the developer. This fund is also used for street paving projects that are partially in adjacent communities. Projects will typically be constructed and then billed to the participating community. No funding is proposed for 2017.

Alley Reconstruction- Budgeted Funding



Alley Program, \$600,000

The City’s alley network is comprised of approximately 4,000 alleys totaling 400 miles in length. DPW generally considers the useful life of an alley to be 50 years. Between 2000 and 2005, based on funds budgeted for the alley program, approximately 2 miles of alleys were replaced each year,

The key challenge in providing capital funding for DPW-ISD is the inter-relatedness of the programs. Increases in the paving program drive increases in workload for other programs, such as traffic control and underground conduit. If additional funding is not provided for those programs, backlogs or inefficient use of resources may result.

resulting in a replacement cycle of nearly 200 years. The current cost of constructing alleys averages \$700,000 per mile. Maintaining a 50-year replacement cycle will take approximately \$2.5 million per year.

Until 2009, the cost of paving alleys was recovered through a special assessment at a rate of 90%. With the passage of the Motor Vehicle Registration Fee, the recovery rate was reduced to 60%. This reduced property-owner resistance to alley-paving projects, but also increased the amount of City funding required. The recovery rate was further reduced to 30% in 2012. The current assessment rate is \$19 per frontage foot.

Policy decisions regarding the appropriate level of funding and cost recovery must take into consideration property owner expectations as well as the amount of funding available and the relative importance of other capital projects and programs. Alleys do not form the same type of transportation network that streets do, but in many neighborhoods, they serve the important function of facilitating the removal of garbage by sanitation crews.

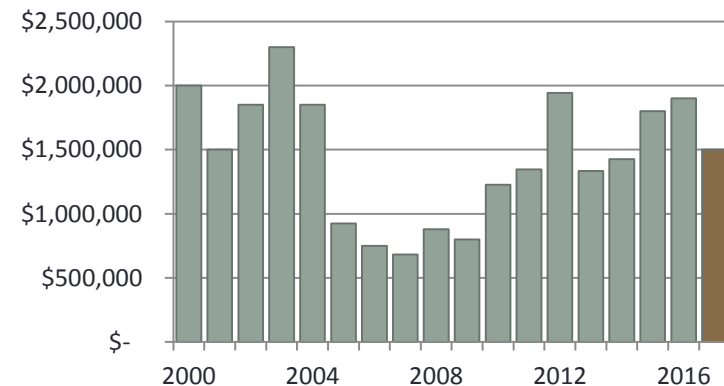
Sidewalk Replacement Program, \$1,500,000

The purpose of the sidewalk-replacement program is to eliminate cracked, spalled and out-of-grade sidewalk in the public way. In 2007, a detailed field sidewalk survey was completed which represented 5% of all sidewalks in random streets throughout the city. This survey indicated that as much as 18% of the 68 million square feet of sidewalk in the city may be defective. This program has been used to maintain the City’s sidewalk system since 1963.

DPW’s goal is to maintain an annual program of between 300,000 and 350,000 square feet of sidewalk replacements. Although significant increases have been made in this program in the last 5 years, the investment trend in sidewalks since 2000 has been downward.

This Sidewalk Replacement account funds both the area-wide program and the scattered-site replacement program. DPW typically allocates approximately \$200,000 each year for the scattered-site program. This

Sidewalk Replacement - Budgeted Funding



level of funding allows the City to complete work at approximately 100 properties each year. In October, 2011, there was a backlog of 520 properties in the scattered-site program. The backlog has persisted, and the last reported estimated wait to have sidewalk replaced through the Scattered Site Program was approximately 3 years.

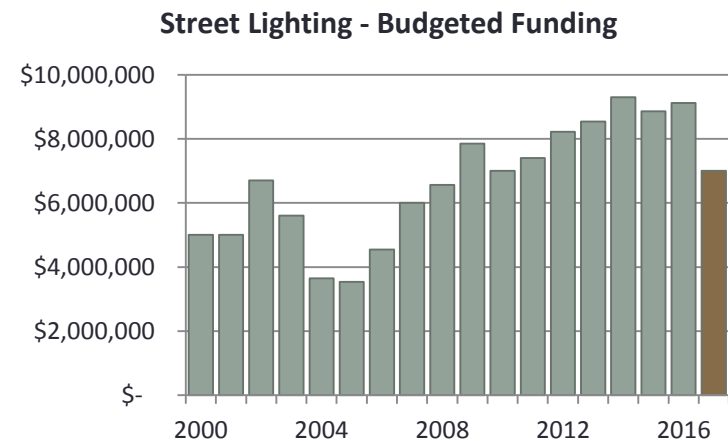
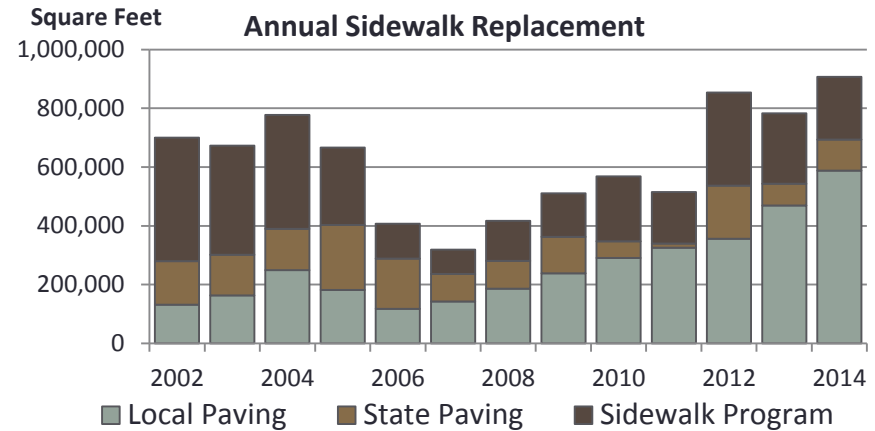
Additional sidewalks routinely get replaced in conjunction with local and major street improvement projects. Paving projects done on local streets have contributed a greater percentage to the overall walk replacement rate in recent years.

Street Lighting Program, \$7,000,000

This program is used to replace deteriorated poles, defective cable, outdated circuitry, aging electrical substations and other lighting equipment, and to modernize the street-lighting control system. The City currently maintains nearly 68,000 street lights and over 8,800 alley lights. Approximately half of the department’s requested budget for street-lighting in 2017 is related to the paving program.

The City’s street-light system is a combination of series and multiple circuitries. The series circuitry, which is the older technology, represents approximately 39% of the system, and is becoming increasingly unreliable. It is also more difficult to repair, requiring more time, specialized knowledge and unique parts which are becoming more difficult to obtain. The City began transitioning to multiple circuits in the 1950’s. The department intends to allocate \$1 million towards the series circuit conversion project in 2017. One of the main challenges with the conversion project is that series circuits cannot be replaced one block at a time. Each series circuit, which consists of multiple blocks, must be replaced in its entirety.

After several years of testing, the department has identified an LED street light instrument that meets the City’s specifications for light dispersion, color temperature and maintenance. LED lights are being added in the series conversion project. The initial cost of LED instruments



is higher than high-pressure sodium, but LED Instruments have a longer life expectancy, use less energy and do not typically experience sudden failure.

“Replacement of Control” continues as part of the City’s Street Lighting Control System Improvement Project. This improvement provides backup in the event of a communications system failure, allows monitoring of street-lighting operation, provides intrusion alarms and provides diagnostics to identify and assist with troubleshooting in response to street-lighting system problems. DPW began to replace the controllers in 2006. It was originally a 4-year project. Funding cuts and resource diversions that were required because of ARRA-funded paving projects and the increase in the local paving program have delayed the completion of this project.

Traffic Control, \$2,600,000

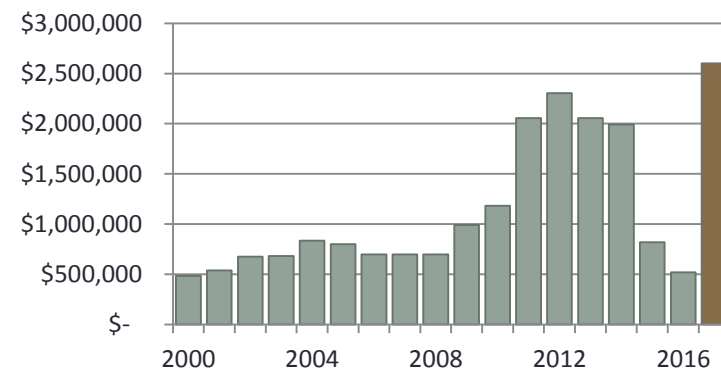
This program provides for the upgrade, replacement and installation of traffic-control devices as needed to accommodate traffic pattern changes, provide conformity with national standards, comply with City ordinances, and use technological advances to improve traffic flow. Traffic control devices are installed and maintained to conform to the federal Manual on Uniform Traffic Control Devices (MUTCD).

Typically, about 25% of the traffic-control program is paving-related. The new High Impact paving program, which targets high-traffic volume streets, has not had a significant impact on the installation of traffic control devices.

In December, 2009, the Federal Highway Administration issued a final rule adopting changes to the 2003 MUTCD. The changes mandated upgrades and improvements to traffic control signs, signals and pavement-marking systems in the city. A MUTCD revision in May, 2012, removed all fully-defined compliance dates for meeting sign retro-reflectivity requirements and required a management plan to maintain sign retro-reflectivity. DPW adopted a Traffic Sign Retro-reflectivity Policy on November 29, 2011. DPW anticipates meeting the retro-reflectivity standards in 2017 or 2018.

The FHWA and the Department of Justice are considering proposed “Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way”. Key elements of the guidelines which could affect the City include the installation of audible pedestrian signals at all signalized intersections when the controller is changed or software is modified; the installation of signalization on all legs of multi-lane roundabouts; and new requirements for pedestrian clearance times.

Traffic Control - Budgeted Funding



Underground Conduit & Manhole Program, \$0

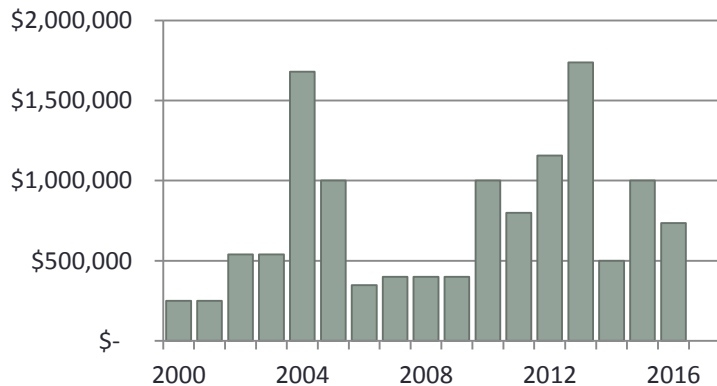
The installation of a permanent underground electrical conduit and manhole system provides secure weatherproof public safety cable and circuit networks for multiple City agencies. The system ensures a reliable route for City communication cables to be installed into all existing and proposed City buildings, provides a reliable route for traffic control at signalized intersections and is used for street-lighting cable circuits. Typically, 100% of the underground conduit and manhole program is driven by the paving program. This program is not funded in 2017.

Underground Electrical Manhole Reconstruction Program, \$800,000

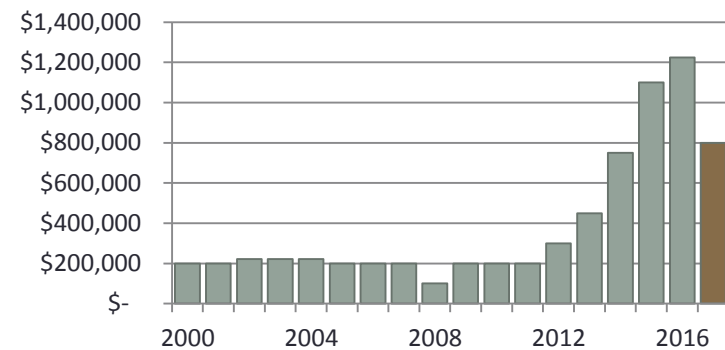
This program funds the reconstruction of existing manholes that provide access to the networks for communications, traffic control and street lighting cable circuits. There are approximately 7,550 active manholes in the system.

In 2013 the department began a systematic inspection program for its electrical manholes. Approximately 4,300 manholes have been inspected. Results from the 2016 inspection are not complete. As of December 2015, 320 manholes have been identified that need major repairs or replacement, 95 manholes require deck roof replacement and 690 manholes require chimney or corbel repair. The extent of the repairs required is expected to increase as the manhole inspection program continues. In 2014, 4 positions within DPW were reclassified to create a crew that will perform repairs on electrical and communications manholes. This is expected to result in significant savings.

Underground Conduit - Budgeted Funding



Electrical MH Reconstruction - Budgeted Funding



Building & Facility Programs

The Proposed Budget includes 7 capital improvement items for City building and facilities programs totaling \$17.1 million, an increase of \$1.2 million (7.5%) from the 2016 Budget. The increase is primarily related to the ADA Compliance Program.

Most building and facility capital programs are financed with general obligation borrowing; however a small portion of the capital program has been financed with the tax levy or other revenues. The 2017 Proposed Budget includes funding from the Sewer Maintenance Fund in the Environmental Remediation program (\$50,000) and the Facilities Systems program (\$75,000). The remainder of DPW Buildings and Facility's capital programs are financed in 2017 with debt.

City Hall Foundation & Hollow Walk, \$13,000,000

Significant repair and restoration work is needed to address age-related deterioration of key elements of City Hall, including wood foundation piles, pile caps, below-grade hollow sidewalk walls, and structural concrete beams and sidewalk. Funding for this multi-year project has been deemed critical to the long-term stability of the structure. Capital funding began in 2008 with \$1.2 million for professional design services. The project was placed on hold on March 1, 2011 by Common Council File Number 101367. In July 2012, the Common Council authorized DPW to move forward with Task I of the project. (Common Council File Number 120362) The design/build team investigated the wood piles, the water recharge and hollow sidewalk systems and prepared a preliminary engineering report of its findings. The project has been designed in phases. Phase 1 was funded in 2016 (\$13 million) and included the stabilization of the northeast corner of the building and the relocation of the basement mechanical room. Funding in 2017 will allow the work to continue on the north end of the building. Expenditures in 2015 were \$1.13 million.

ADA Compliance Program, \$1,800,000

This on-going program provides funding for building alteration projects to comply with the Americans with Disabilities Act Accessibility Guidelines, respond to new and updated regulations, and improve access to City facilities for the disabled. Alteration projects provide access to building entrances, restrooms, public telephones, drinking fountains, lobbies, meeting rooms and office space in the City Hall complex as well as outlying City facilities and playgrounds. Since 2000, \$4.17 million has been budgeted for this program. The 6-year capital request is \$4.25 million. Funding proposed for 2017 is an increase of \$1.6 million (800%) from the 2016 Budget.

In the spring of 2011, the City participated in the U.S. Department of Justice's (DOJ) Project Civic Access program. Through this program, the DOJ works cooperatively with state and local governments to ensure that they are in compliance with the Americans with Disabilities Act. Staff from the DOJ inspected a sampling of City facilities and issued a report of their findings, which was received in the spring of 2015.

The Common Council authorized a settlement agreement with the U.S. Department of Justice in March, 2016 (See Common council File 151685) The settlement outlines the corrective actions required by the City and compliance timelines. In addition to addressing the deficiencies identified in the 2011 inspection, the City must survey the remaining City facilities for potential violations. The total cost of complying with the settlement agreement is unknown.

Environmental Remediation Program, \$150,000

The goal of this on-going program is to provide a safe environment for the public and for City employees. Activities include asbestos removal and lead abatement in City-owned buildings; the monitoring of closed landfills and contaminated sites; repairs to petroleum storage tanks; and upgrades and repairs to storm water management systems and equipment. Since 2000, \$5.95 million has been budgeted for this program. The 6-year capital request is \$1.15 million. The 2017 Proposed Budget includes \$50,000 of revenue from the Sewer Maintenance Fund.

Facilities Exterior, \$600,000

This on-going program maintains City facilities in a water-tight, energy-efficient and safe condition. Typical activities include roof repairs, tuck pointing, caulking and sealing, window, entry door and overhead door replacement, yard and lot paving, exterior lighting improvements, foundations, and other miscellaneous facility exterior maintenance items.

Funding proposed for 2017 is a decrease of \$400,000 million (40%) from the 2016 Budget. Since 2000, \$15.5 million has been budgeted for this program. The 6-year capital request is \$6.85 million, a substantial decrease from previous capital requests. Funding for 2016 and 2017 has been reduced in part to accommodate funding for the City Hall Foundation project.

Facilities Systems Program, \$875,000

This on-going program is used to sustain the operating systems of approximately 95 City-owned buildings. Operating systems include heating, ventilating and air-conditioning, plumbing, fire protection, electrical distribution, lighting, chillers, boilers, computerized facility management, security and life safety. Programming decisions are made using the Facilities Condition Information System, which provides condition data on City buildings.

The 2017 Proposed Budget includes \$875,000 an increase of \$195,000 (29%) from the 2016 Budget. Since 2000, \$32.8 million has been budgeted for this program. The 6-year capital request is \$7.3 million, a significant decrease from previous requests. Funding for 2016 was reduced in part to accommodate funding for the City Hall Foundation project. Funding proposed for 2017 includes \$75,000 of revenue from the Sewer Maintenance Fund.

In its review of recent capital requests, the Capital Improvements Committee noted a lack of coordination regarding the use of space at City facilities. There are a number of departments that have made requests to have offices remodeled, reconfigured or relocated. At this time there is no authoritative body that monitors departmental needs and no comprehensive plan to allocate space in the City's facilities. The Committee suggested that it would be beneficial to have a plan which would allow individual requests and proposals to be evaluated within a framework of the overall needs of the City.

Space Planning Alterations and Engineering, \$400,000

This program provides funds for architectural and engineering services related to office space studies, including the preparation of preliminary plans and cost estimates for proposed projects, and unscheduled interior office alterations for City departments. It also provides funding for the inspection of the City buildings which are the responsibility of DPW and the maintenance of condition data for those buildings.

Funding proposed for 2017 unchanged from the 2016 Budget. Since 2000, \$3 million has been budgeted for this program. The 6-year capital request is \$2.4 million. This program has been funded with cash, but in 2017 it is financed with general obligation debt.

MKE Plays, \$250,000

The 2016 Proposed Budget created this account to fund a community based playground rebuilding initiative. The program will leverage private investment to increase rebuilding capacity. No additional funding is provided in existing Recreational Facilities, Playground Challenge Fund, or ADA Compliance capital accounts. The City recently completed its Comprehensive Outdoor Recreation Plan for 2016-2021. The plan can be found in Common Council File 160675.

Unfunded Capital Requests**North Point Lake Tower**

Not funded in 2017

DPW assessed the condition of the North Point Lake Tower structure in 2013 and determined that repairs were necessary. This 2-year project was first funded in 2015 (\$340,000). Additional funding of \$400,000 was requested for 2016 and again in 2017. No additional funding has been provided.

25 DPW- Sewers

\$38,714,000

Proposed Capital Funding

\$41,714,000

Requested Capital Funding

\$5,690,000

Decrease from 2016 Budget

-12.8%

Percent Change from 2016 Budget

\$244,553,000

Six-Year Capital Request

Capital Programs and Projects

Sewer Relief & Relay Program	\$28,000,000
Water Quality Projects (TMDL)	\$1,664,000
Pump Facility Projects	\$700,000
I&I Reduction Projects	\$6,650,000
Flood Mitigation Program	\$1,500,000
River Channel Maintenance	\$200,000

Ongoing and Recent Capital Projects

Private Property Lateral Lining Demonstrations

Unfunded Capital Requests

There are no unfunded capital requests.

Anticipated Capital Requests

The total 6-year request is \$244.6 million.

Capital funding for the Sewer Maintenance Fund decreased by \$5.7 million (12.8%) from 2016. The reduction is almost entirely in the Sewer Relief & Relay Program (\$2.6 million) and the Flood Mitigation Program (\$3.2 million).

The department is continuing to employ a more comprehensive and diversified approach to improving the performance of the sewer system. Strategies include reducing the amount of clear water that enters the sewer system, constructing bio-swales to help manage storm water runoff and restoring capacity to various channels and drainage ditches.

Capital Program Detail – DPW Sewers

Program	2017 Proposed	2016 Budget	Increase (decrease)	% Chng.	6-year Request
Sewer Relief & Relay Program	\$28,000,000	\$30,600,000	(\$2,600,000)	-9%	\$193,000,000
Water Quality for TMDLs	\$1,664,000	\$1,774,000	(\$110,000)	-6%	\$8,053,000
Pump Facility Projects	\$700,000	\$700,000	\$0	0%	\$4,200,000
I&I Reduction Projects	\$6,650,000	\$6,600,000	\$50,000	1%	\$36,600,000
Flood Mitigation	\$1,500,000	\$4,730,000	(\$3,230,000)	-68%	\$1,500,000
River Channel Maintenance	\$200,000	\$0	\$200,000		\$1,200,000
Total	\$38,714,000	\$44,404,000	(\$5,690,000)	-13%	\$244,553,000

The City anticipates issuing \$33.5 million of debt to support improvements to the sewer system; \$26 million for the sewer main program, \$5 million for the I&I program, \$1 million for water quality projects and \$1.5 million for flood mitigation. If revenue bonds are issued, a portion of the funds must be held in reserve and may not be used to finance construction. The reserve requirement is usually 10%. If general obligation bonds are used, more sewers can be constructed with the budgeted amount, but concerns about the City’s statutory

debt limit may constrain the amount of debt the City can issue.

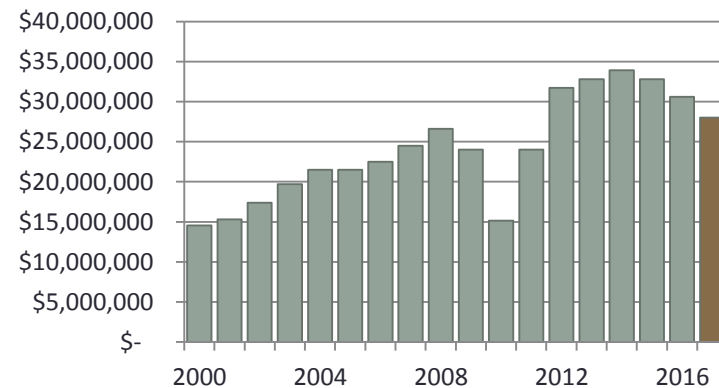
The remainder of the capital program will be funded with revenues collected from the Sewer Maintenance and the Storm Water Management fees. The City also anticipates receiving \$1.65 million in grant funding from MMSD for the private-property I&I program.

Sewer Relief and Relay Program, \$28,000,000

This on-going program provides funding for the replacement and rehabilitation of the City’s sanitary, storm and combined sewer mains and other miscellaneous repairs. The replacement cycle based on current funding is shorter than the industry recommended 90 years. The replacement cycle in 2010 was approximately 160 years.

Although funding has been trending upward, gains in the replacement cycle have largely been the result of the increased number of sewer lining projects. Improvements in construction technology have allowed the City to make greater use of sewer liners. This eliminates the need to excavate

Sewer Mains - Budgeted Funding



the roadway to install new sewer pipe and allows the department to improve more miles of sewer with the same amount of funding. The number of miles improved each year will vary depending on the diameter of the sewer pipe that is being improved.

Pump Facility Projects, \$700,000

Funding for this program provides for the inspection, rehabilitation and replacement of sanitary pump facilities. This program was funded as requested by the department. A backlog of projects in this program has been addressed, allowing annual funding to be reduced.

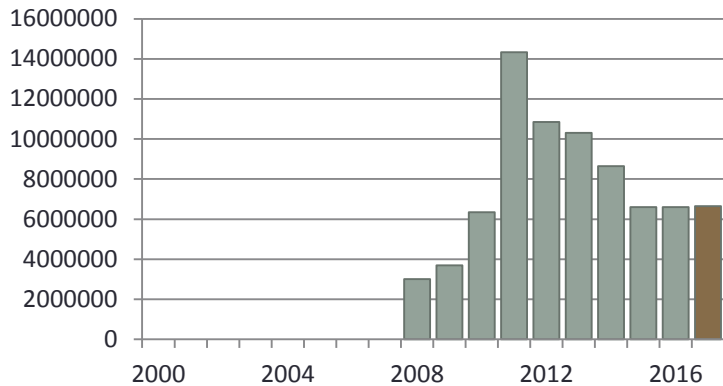
The City owns and maintains 7 sanitary lift stations and 83 sanitary bypass pump stations. These pumps reduce the risk of sewage backing up into homes and businesses. Pumps are located in areas that historically had sewer backup occurrences during periods of heavy rain.

There are currently over 200 miles of sewers that are more than 90 years old. DPW estimates that even at the current level of funding, which exceeds the recommended 90-year replacement cycle, there will be nearly 250 miles of sewer mains that have exceeded their useful lives by 2020.

This is in part because the department uses the condition of a sewer, in addition to other metrics, to determine whether replacement is warranted. A sewer constructed more recently may be in poorer condition than an older sewer and would be replaced sooner.

Sewers may also be replaced sooner than would generally be warranted by their age or condition if they are in a street that is scheduled for repaving. As the amount of funding allocated for street repaving increases to address the poor condition of the local roads, paving-related sewer replacements will become a higher percentage of the overall sewer program. Other factors may also divert funding from the oldest mains in the system. The older mains are generally performing well but may pose a higher risk of failure as they continue to age significantly past their expected useful life.

Inflow & Infiltration - Budgeted Funding



been budgeted. Expenditures for 2015 totaled \$471,500.

The City’s lift stations pump sanitary flow from low areas into gravity sanitary sewers so the flow can reach MMSD’s collection and treatment system. The sanitary bypass pump stations are covered under the Sanitary Bypass permit issued by the DNR. If the bypass pumps operate during large rain events, DNR has not objected to their use. If the bypass pumps operate during dry weather, or during small rain events, the DNR will work with the City to establish a course of action to prevent these types of operations. The 2005 stipulation with the Wisconsin Department of Justice allows for the DNR to assess a fine for the operation of bypass pumps during small events or dry weather.

The DNR has established new sanitary sewer overflow rules. There are no specific guidelines for sanitary bypass pumps. It is DPW’s understanding that the revised rules will not eliminate the use of sanitary bypass pumps as long as the municipality is maintaining its system and addressing infiltration and inflow problems.

Funding for this program began in 2008. Since that time, \$5.35 million has

Pilot & Demonstration Projects

Cooper Park	Lateral Lining	2012
Clemens School Area	Lateral Lining	2013
Cooper Park	Foundation Drain Disconnect	2014
City- owned homes	Various	2011

Information about these City I&I projects, as well as I&I projects in other communities, is available on the MMSD website (basementconnection.mmsd.com).

Infiltration and Inflow (I&I) Reduction Projects, \$6,650,000

Infiltration and Inflow is the entering of storm water or groundwater into municipal wastewater systems. The extraneous water enters the sanitary sewer system through cracked pipes (mains and laterals), leaking manholes, and downspouts, sump pumps and foundation drains that are connected directly to the sanitary sewer system. When too much excess water enters the system, sewage may back up into buildings, overflow from manholes or bypass treatment facilities. In 2005, the Milwaukee County Circuit Court stipulated a variety of actions that the City must take to eliminate sanitary sewer overflows. These actions included identifying and correcting leaks in selected sewer basins.

Funding for this program began in 2008. Since that time, \$70.4 million in funding has been budgeted, including \$13.1 million in grant funding. Anticipated grant funding for 2017 is \$1.65 million, the same amount as in the 2015 and 2016 Budgets. All work on private property done to date has been paid for with grant funding from MMSD. There is no provision in the 2017 Proposed Budget to assess property owners for work done in conjunction with this program.

Total Maximum Daily Load Regulations

New water quality standards being developed by MMSD and the DNR may change how the City implements water-quality projects.

The Wisconsin Department of Natural Resources' regulation in ch. 151, Wis. Adm. Code, required the City to reduce the amount of Total Suspended Solids (TSS) in runoff by 40%. To meet the compliance deadline, the City worked with the DNR to be given credit for the TSS removed by the treatment of storm water in the combined sewer area. With the allowance of this credit, the City attained the 40% compliance rate.

The state's new Total Maximum Daily Load (TMDL) requirements will place limits on phosphorus and bacteria, in addition to total suspended solids. Meeting anticipated bacteria requirements in particular could be very challenging, and may require significant work in the future to modify storm sewer outfalls. It is expected the City will have 3 full permit cycles (5 years each) to meet the new requirements. The 2017 capital budget included \$1.7 million for the installation of various water quality projects.

Water Quality for Total Maximum Daily Loads (TMDL), \$1,674,000

This program has provided funding to construct various Best Management Practices (BMPs), such as green streets, rain gardens, wet detention ponds, bio-infiltration areas, and end-of-pipe treatments to reduce the amount of Total Suspended Solids (TSS) that enter waterways. The DNR now takes a broader, more comprehensive approach to water quality, focusing on bacteria and total phosphorus as well as total suspended solids. It is anticipated that complying with the bacteria loads will be the most challenging aspect of the new standards. Between 2009 and 2016, the City has allocated over \$9.6 million for water quality projects.

Flood Mitigation, \$1,500,000

This account was created in 2015 to implement the findings of a flood mitigation study in the Dineen Park Neighborhood (69th & Vienna). The memorandum of understanding between the City of Milwaukee, Milwaukee County and MMSD for the construction of a storm water detention pond can be found in Common Council File Number 121683.

The 2016 Budget included funding for a second flood mitigation project in Copernicus Park (20th & Grange). The 2017 Proposed Budget provides funding for the completion of this project.

River Channel Maintenance, \$200,000

This capital program was created in 2012 to provide funding for the restoration of the channels and drainage ditches which carry storm water to local waterways during rain events. Over time, sediment and vegetation can reduce their capacity and intensify the effects of excessive rainfall. As part of a broader strategy for managing storm water run-off and preventing flooding, the City will be reviewing

these channels and restoring their capacity as necessary. This account is not intended for routine maintenance or mowing activities. Budgeted funding was \$400,000 in 2012, \$160,000 in 2013, and \$200,000 in 2014 and 2015.

26 DPW- Parking

\$3,340,000

Proposed Capital Funding

\$6,026,000

Requested Capital Funding

\$1,560,000

Increase from 2016 Budget

87.6%

Percent Change from 2016 Budget

\$14,867,000

Six-Year Capital Request

Capital Programs and Projects

Parking Facility Maintenance	\$100,000
MacArthur Square Structure	\$1,610,000
2 nd & Plankinton Structure	\$500,000
Single-space Credit Card Meters	\$1,000,000
Repave Tow Lots and Surface Lots	\$130,000

Unfunded Capital Requests

License Plate Recognition System	\$586,000
Revenue Control & Access Equipment	\$2,000,000

Ongoing and Recent Capital Projects

License Plate Recognition System – The department was able to use operating funds to expand the license plate recognition system. Funding in 2017 would allow the department to fully equip the remainder of its vehicle and expand enforcement to include time violations.

Anticipated Capital Requests

Multi-space Meter Replacement \$2.6 million (2019).

The total 6-year capital request is \$14.9 million.

The department is designing a comprehensive parking strategy using new technology to improve parking operations. The goal is to increase customer satisfaction, ease of use and compliance. Approximately 15% of the department’s 6-year capital request is for on and off street revenue collection equipment.

Capital Program Detail – DPW Parking

Program	2017 Proposed	2016 Budget	Increase (decrease)	% Chng.	6-year Request
Parking Facilities Maintenance	\$100,000	\$100,000	\$0	0%	\$1,200,000
Tow Lot / Surface Lot Paving	\$130,000	\$200,000	(\$70,000)	-35%	\$250,000
Revenue Control and Access Equipment	\$0	\$50,000	(\$50,000)	-100%	\$2,000,000
Single Space Credit Card Mechanisms	\$1,000,000	\$650,000	\$350,000	54%	\$2,225,000
MacArthur Square	\$1,610,000	\$30,000	\$1,580,000	5,267%	\$6,565,000
1000 N Water Street	\$0	\$150,000	(\$150,000)	-100%	\$1,009,000
Milwaukee/Michigan Structure	\$0	\$550,000	(\$550,000)	-100%	\$232,000
4th & Highland Structure	\$0	\$50,000	(\$50,000)	-100%	\$0
2nd & Plankinton Structure	\$500,000	\$0	\$500,000		\$800,000
License Plate Recognition	\$0	\$0	\$0	0%	\$586,000
Total	\$3,340,000	\$1,780,000	\$1,560,000	88%	\$14,867,000

Parking Facilities Maintenance, \$100,000

This on-going program is used to provide necessary repairs of structural, mechanical and electrical deficiencies of a non-emergency nature. Funding is also used to correct unplanned deficiencies identified by violation reports issued by building code inspectors that are time-sensitive in nature. Typical funding is approximately \$200,000 each year.

Repave Tow Lot and Surface Lots, \$130,000

This capital account was created in 2014 to repave the Tow Lot and other surface parking lots that the City owns. The Tow Lot is being paved in phases to minimize operational disruptions. Funding in 2016 was used for the final phase of the Tow Lot. This program received \$55,000, \$40,000 and \$200,000 of funding in 2014, 2015 and 2016, respectively.

Single-space Credit Card Meter Mechanisms, \$1,000,000

2017 will be the third year of funding for a project to install single-space credit card parking meters in the downtown area and the Third Ward where there are fewer than 6 contiguous parking spaces and parking rates are at least \$1 per hour. The department has been testing models in the field for over a year to evaluate their effectiveness. The department is also evaluating whether the LUKE multi-space meters can be replaced with single space credit card meters.

MacArthur Square Parking Structure Repairs, \$1,610,000

Funding was provided in 2016 to make concrete repairs and paint the east and west sides of the lower level. Funding is proposed for 2017 to make concrete repairs related to the WisDOT tunnel project. In addition to the funding proposed for 2017, the department anticipates needing \$4.95 million over the next 6 years for various repairs and maintenance.

Unfunded Capital Requests

License Plate Recognition System

This project received no capital funding in 2016 or 2017.

This project initially received \$721,000 in the 2013 Budget to install license plate recognition (LPR) cameras on approximately half of the department's parking enforcement jeeps. The technology can confirm the purchase of a night parking permit, identify vehicles that have been reported stolen and recognize vehicles with outstanding violations. The project has eliminated the costs related to printing and selling parking permits. The estimated payback period for this project is between 5 and 6 years. The sale of virtual parking permits for 2014 began in December, 2013. The department has seen an increase in the number of permits purchased, an increase in on-line purchases, increased sales of annual permits and a decrease in voided citations related to lost or stolen permits.

The department has developed a policy that governs access to the license plate database, record retrieval and record requests. License plate data will be stored on a server maintained by the Department of Administration-ITMD for 7 years. The database will store a photo of the license plate and the date, time and location of the photo. Vehicle registration information will not be stored in the database. The data will be made available to the Police Department upon request.

Replace Revenue and Access Control Equipment

No funding has been proposed for 2017. The department requested \$2 million to begin replacing parking structure revenue and access control equipment. Most of the equipment was installed in 2004 and has a useful life of 9-11 years. Funding in 2016 was provided to hire a consultant to write the specifications for the project. New features could include on-screen customer assistance, license plate recognition, sensors and cameras, barcode readers and mobile technology integration. The software will also allow for analytic data processing.

The purchase of sophisticated license plate reader (LPR) systems, which are made up of high-speed cameras that capture a photograph of each license plate combined with software that analyzes the photo to identify the license plate number, could have implications for privacy and First Amendment rights.

Many systems are configured to store the photograph and the license plate number, as well as the date, time and location. Key concerns are unauthorized access to data, undefined data-retention periods and widespread data-sharing. The broader policy question of increased parking enforcement and issues of fairness should also be addressed.

Fourth & Highland Parking Structure Repairs

This parking structure will be replaced in conjunction with the new arena project. No additional capital funding is expected to be required.

Other Capital Programs**1000 N. Water Street Parking Structure Repairs**

Funding was provided in 2016 to replace elevator cabling. In addition to the funding that was provided in the 2016 Budget, the department anticipates needing just over \$1 million over the next 6 years for various repairs and maintenance. Work is tentatively scheduled for 2020 and 2021.

Milwaukee/Michigan Parking Structure Repairs

Funding was provided in 2016 to replace the waterproof membrane on levels 1 through 4, paint pavement markings and apply sealer to the ramps. In addition to the funding provided in 2016, the department anticipates needing \$232,000 over the next 6 years for various repairs and maintenance. Work is tentatively scheduled for 2021.

27 DPW- Water

\$29,210,000

Proposed Capital Funding

\$29,210,000

Requested Capital Funding

\$2,382,000

Increase from 2016 Budget

8.9%

Percent Change from 2016 Budget

\$246,540,000

Six-Year Capital Request

Capital Programs and Projects

Distribution System	\$22,750,000
Developer Agreement	\$5,000
Assessable Water Main	\$5,000
Linnwood Building Improvements	\$750,000
Linnwood Treatment Improvements	\$500,000
Howard Building Improvements	\$150,000
Howard Treatment Improvements	\$450,000
Pump Facilities Improvements	\$125,000
Storage Facilities Improvements	\$2,300,000
Meter Shop Improvements	\$175,000

Unfunded Capital Requests

There are no unfunded capital requests.

The Milwaukee Water Works (MWW) has developed a capital plan that will address Public Service Commission (PSC) concerns about water main replacement. MWW will replace 15 miles of water mains 2017, 18 miles in the years 2018 – 2019, and 20 miles in 2020. MWW is evaluating the best way to address the replacement of lead service lines while maintaining the required level of water main replacement. Water usage continues to decline at a rate of 2.5% per year.

Ongoing and Recent Capital Projects

Backup Power Generation

Anticipated Capital Requests

Using information from 2017 projects, the department will develop a new capital request for 2018 and beyond that addresses water main replacements with lead service lines.

Capital Program Detail – DPW Water

Program	2017 Proposed	2016 Budget	Increase (decrease)	% Chng.	6-year Request
Water Main Program	\$22,760,000	\$19,510,000	\$3,250,000	17%	\$167,190,000
Linnwood Building Improvements	\$750,000	\$425,000	\$325,000	76%	\$4,375,000
Linnwood Treatment Improvements	\$500,000	\$775,000	(\$275,000)	-35%	\$31,105,000
Howard Building Improvements	\$150,000	\$0	\$150,000		\$1,645,000
Treatment Improvements	\$450,000	\$750,000	(\$300,000)	-40%	\$3,450,000
Pump Facilities Improvements	\$125,000	\$200,000	(\$75,000)	-38%	\$20,675,000
Storage Facilities Improvements	\$2,300,000	\$2,000,000	\$300,000	15%	\$5,500,000
Meter Shop Improvements	\$175,000	\$0	\$175,000	%	\$600,000
Capital Project Contingencies	\$2,000,000	\$2,000,000	\$0	0%	\$12,000,000
Total	\$29,210,000	\$25,660,000	\$3,550,000	14%	\$246,540,000

Water Main Program, \$22,750,000

As required by the PSC, MWW anticipates replacing 15 miles of water mains in 2017. The plan for meeting the PSC’s replacement requirements was submitted in September, 2014.

With the exception of the years 2011-2013, when funding was severely cut back due to revenue constraints, funding has been steadily increasing since at least 2000.

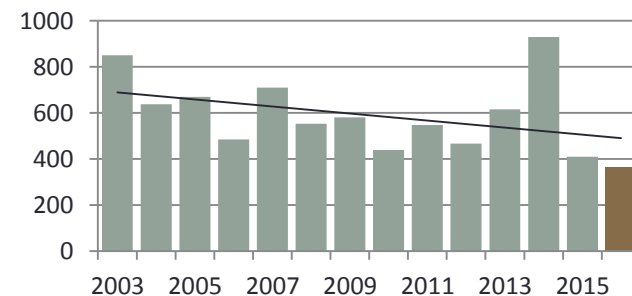
MWW continues to expend the majority of its water main replacement funding on water mains that were constructed between 1946 and 1963. These

water mains represent the majority of water main breaks in the system.

In order to meet the needs of the increased water main program, MWW used consultants to design some of the 2016 water main projects. MWW will monitor the contracts to determine the most cost-effective strategy for survey and design work.

The number of water main breaks in 2015 returned to a more typical level after a large spike in 2014, which was driven by an exceptionally cold winter and a leak at the Texas Avenue pumping station. The total number of water main breaks in 2016 is projected to be lower than in 2015. Although the number of main breaks can be highly variable from year to year, the number of main breaks per 100 miles of main has been trending downward for at least 20 years.

Annual Water Main Breaks
(projected for 2016)



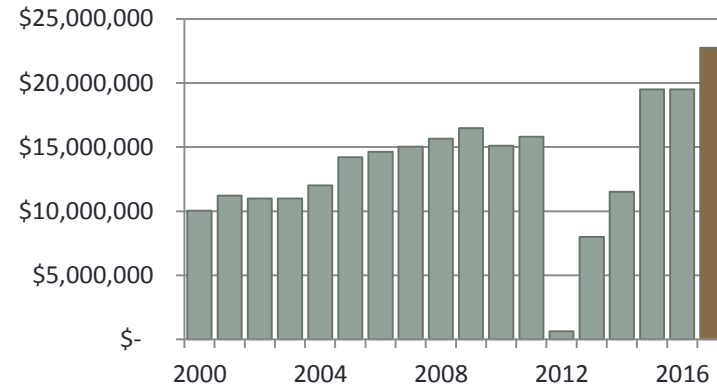
Linnwood Plant Building Improvements, \$750,000

Since 2001, this program has received \$10.4 million in funding. Funding has been highly variable. Funding in 2013 (\$150,000) was provided to install skylight filters that will reduce algae growth on treatment filters. The department anticipates requesting additional funding each year from 2018 through 2022. Expenditures in 2015 were \$470,000.

Linnwood Plant Treatment Improvements, \$500,000

Since 2001, \$11.1 million has been budgeted for this program. Funding was provided in 2013 to assess and mitigate deficiencies of various steel pipelines associated with the water treatment process. Funding for 2016 has been used for a variety of projects, including the continuation of the motor control replacement project, continued dielectric refurbishment and an analysis of the plant residual handling system. The department anticipates requesting additional funding each year from 2018 through 2022. Expenditures in 2015 were \$54,900.

Water Mains - Budgeted Funding



The ability of the Water Works to effectively maintain its infrastructure, which includes water mains, treatment plants and pumping facilities, is directly tied to the development of a rate structure that will generate enough revenue to allow investment in the utility’s assets. It is also tied to the utility’s ability to successfully get its rate structure approved by the Public Service Commission.

Howard Plant Building Improvements, \$150,000

Since 2001, this program has received \$4.1 million in funding. The department anticipates requesting additional funding each year from 2018 through 2022. Expenditures in 2015 were 756,900.

Howard Plant Treatment Improvements, \$450,000

Howard Avenue is a newer treatment plant and has not needed extensive upgrades in recent years. Annual funding for this program typically has not exceeded \$500,000. Since 2001, this program has received \$4.1 million in funding. \$100,000 was budgeted for this program in 2013 to replace the effluent valves that control the flow of water through the plant’s eight filters. Funding in 2014 was allocated to replace dielectric tubes in one of the plant’s ozone generators. The project is expected to add between 5 and 10 years to the life of the generator.

The department anticipates requesting additional funding almost every year from 2018 through 2022.

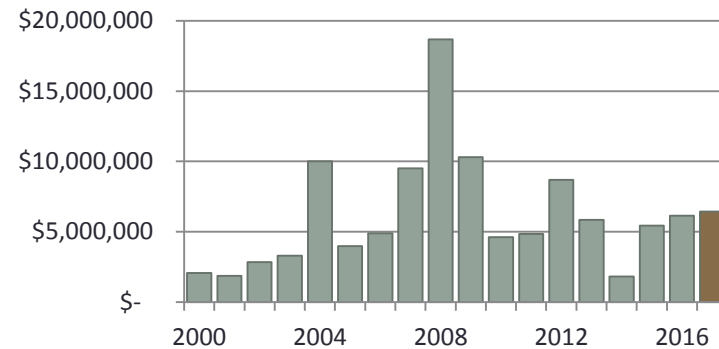
Pump Facilities Improvements, \$125,000

This program provides funding to upgrade or replace various aspects of the pumping facilities that aid in the efficient distribution of water throughout the system. Since 2001, this program has received \$23.3 million in funding. Annual funding is highly variable.

In 2012, \$2,250,000 was budgeted for this program to perform a physical inspection of the treated water tunnel between the Linnwood Plant and the Riverside pumping station. The last complete inspection of this 7,200-foot tunnel was in 1986.

The department anticipates requesting additional funding each year from 2018 through 2022. The 6-year capital request is \$20.7 million. Expenditures in 2015 were \$2.4 million.

**Non-Water Main Improvements
Budgeted Funding**



Storage Facilities Improvements, \$2,300,000

This program provides funding for the evaluation, elimination or enhancement of the system’s water storage capacity. Since 2001, this program has received \$16.7 million in funding. \$200,000 was budgeted for this program in 2012. Funding in 2013 (\$1,400,000) was provided to replace the roof over the Linnwood South Clearwell. No funding was provided in the 2014 Budget. Funding in 2015 and 2016 was used to paint the Lincoln water tanks. The department anticipates requesting additional funding 2018 and 2019. The 6-year capital request is \$5.5 million. Expenditures in 2015 were \$2.9 million.

Meter Shop Improvements, \$175,000

This program provides funding for improvements to the operations associated with the Milwaukee Water Works Business Section’s Water Meter Services. This program first received funding in 2004. Since that time, \$2.7 million has been budgeted. The recent requests for this program have been intermittent. No funding was provided in 2012, 2013 or 2016. Funding of \$700,000 was allocated to this program in 2014 and 2015. No additional capital funding was requested after 2018. Expenditures in 2015 were 130,500.

The PSC’s recent requirement that MWW install a minimum amount of water main each year presents financing challenges. Increasing the replacement of water mains to the level required by the PSC will be challenging for MWW both operationally and financially.

28 Department of City Development

\$53,217,000

Proposed Capital Funding

\$48,700,000

Requested Capital Funding

\$8,613,000

Decrease from 2016 Budget

-13.9%

Percent Change from 2016 Budget

\$293,200,000

Six-Year Capital Request

Capital Programs and Projects

Tax Incremental Districts	\$47,500,000
Business Improvement Districts	\$150,000
Advanced Planning Fund	\$150,000
Housing Infrastructure Preservation	\$450,000
<i>in rem</i> Property	\$1,550,000
Commercial <i>in rem</i> Property	\$250,000
STRONG Homes Loan Program	\$1,167,000
Commercial Investment Program	\$1,100,000
Brownfields	\$500,000
Century City Site Improvements	\$400,000

Unfunded Capital Requests

There are no unfunded capital requests.

Ongoing and Recent Capital Projects

Rental Housing Rehab Program (2015)
 Art & Resource Buildings (2016)
 Vacant Lot Loan Program (2016)

Anticipated Capital Requests

The 6 year request is \$293.2 million

The annual capital budget for DCD is highly variable primarily because of changes in borrowing authorizations for tax incremental districts (TID). A significant portion of the non-TID-related capital funding supports the Strong Neighborhoods Plan.

The 2017 Proposed Budget creates one new capital account for improvements at Century City. The account is funded with \$400,000.

Capital Program Detail – Dept. of City Development

Program	2017 Proposed	2016 Budget	Increase (decrease)	% Chng.	6-year Request
Tax Incremental Districts	\$47,500,000	\$56,900,000	(\$9,400,000)	-17%	\$261,000,000
Advanced Planning Fund	\$150,000	\$150,000	\$0	0%	\$900,000
Housing Infrastructure Preservation Fund	\$450,000	\$450,000	\$0	0%	\$2,700,000
In Rem Property Program	\$1,550,000	\$1,330,000	\$220,000	17%	\$9,050,000
Commercial In Rem Property Program	\$250,000	\$250,000	\$0	0%	\$2,750,000
STRONG Homes Loan Program	\$1,167,000	\$1,500,000	(\$333,000)	-22%	\$6,000,000
Commercial Investment Program	\$1,100,000	\$500,000	\$600,000	120%	\$6,000,000
Brownfield Program	\$500,000	\$500,000	\$0	0%	\$3,000,000
Business Improvement Districts	\$150,000	\$0	\$150,000		\$1,800,000
Century City Site Improvements	\$400,000	\$0	\$400,000		
Art & Resource Buildings	\$0	\$100,000	(\$100,000)	-100%	
Vacant Lot Loan Program	\$0	\$150,000	(\$150,000)	-100%	
Neighborhood Commercial District Street Improvement Fund	\$0	\$0	\$0	0%	
Healthy Neighborhoods Initiative	\$0	\$0	\$0	0%	
Rental Housing Rehab	\$0	\$0	\$0	0%	
Total	\$53,217,000	\$61,830,000	(\$8,613,000)	-14%	\$293,200,000

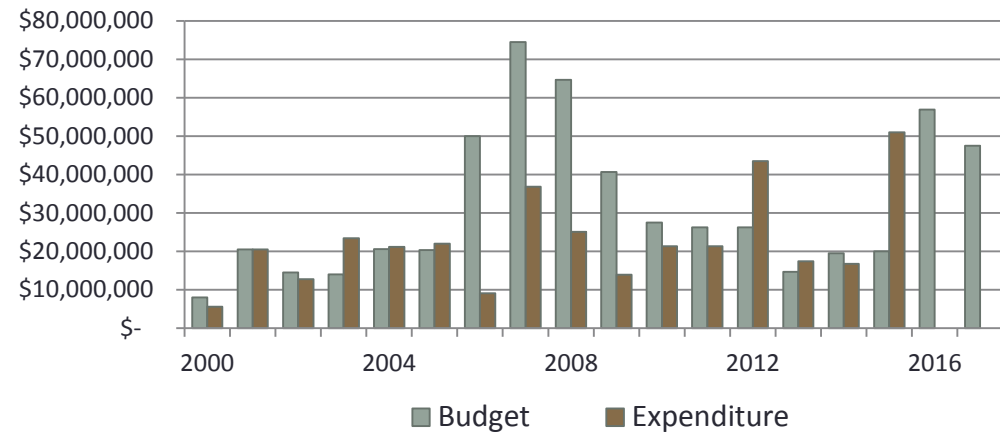
Tax Incremental Districts (TID), \$47,500,000

This program allows the City to create and fund new tax incremental districts or additional projects in existing districts.

Since 2000, \$534.1 million has been budgeted for tax incremental districts. Funding has been highly variable, ranging from \$8 million to \$74.5 million. Expenditures through the end of 2015 have totaled \$362 million, for an average of \$22.67 million per year.

A recent ordinance change allows the life of tax incremental districts to be extended by one year to benefit affordable housing in the City and to improve the City’s housing stock. The district must have already paid off all of its project costs, including any project costs relating to an amendment to the district’s project plan to fund street paving costs.

Tax Incremental District Funding



Recently Created Tax Incremental Districts

File #	Location
140200	#80 - Posner Building
141267	#81 - South 1 st Street & West Greenfield
141263	#82 - East Michigan Street
150184	#83 - Broadway and East Michigan
150383	#84 - West McKinley & West Juneau
150654	#85 - South 6 th Street & West National

Advanced Planning Fund, \$150,000

This program provides funding for various DCD studies, including market analyses for local business corridors, feasibility studies for new developments, land use planning studies, comprehensive plan updates and redevelopment plans for specific neighborhoods.

Funding for this program has been relatively stable since 2000, averaging \$157,000 per year. This program is not supported by debt, so there is no carryover borrowing authority.

Housing Infrastructure Preservation Fund (HIP), \$450,000

This fund was established by the Common Council in 2010 to provide funds for restoring, rehabilitating or mothballing City-owned properties that have been deemed historic or too valuable to the character of the surrounding neighborhood to

demolish, but are unlikely to be restored by private purchasers. Since 2010, this program has received \$3.2 million. Expenditures through 2015 totaled \$3.1 million.

***In Rem* Property Program, \$1,550,000**

This program was created by the 2011 Budget to fund minor capital repairs (e.g., new roofs, water heaters, etc.) to properties obtained by the City through foreclosure, with the goal of making these properties more marketable for prompt sales. To support the Strong Neighborhoods Plan, the 2014 Budget altered the focus of this capital account to fund 3 primary activities: support for the City’s lease-to-own program, homebuyer assistance loans and rental rehabilitation loans. In 2016, funding for Strong Home Loans was moved to a separate capital account.

A portion of this program (\$350,000) will be funded with revenue from tax incremental districts. Since 2011, a total of \$6.8 million has been provided. Expenditures through the end of 2015 were \$3.1 million.

Programs supported by the *In Rem* Property Program account include the Challenge Grant, the ACTS Housing Partnership, the Rent to Own program and Home Buyer Assistance.

Houses authorized to receive more than \$100,000 in HIP Funds

Address	CC File
2425 W. McKinley Blvd	140219
964-66 N. 35 th Street	140872
2402 N. Sherman Blvd	150250
2330 W. McKinley Blvd	160300

Strong Neighborhoods Plan Capital Funding Summary

Dept.	Account	Amount
DNS	Code Compliance Loans	\$800,000
DNS	Concentrated Blight Elimination	\$2,100,000
DCD	<i>In rem</i> Property	\$1,550,000
DCD	STRONG Loans	\$1,167,000
DCD	Housing Infrastructure Preservation	\$450,000
DCD	Commercial <i>in rem</i>	\$250,000
		\$6,317,000

Strong Homes Loan Program, \$1,167,000

The Strong Homes Loan Program provides assistance to owner-occupants of 1-4 family properties throughout the City on a first-come, first-served basis to promote the retention of homeownership. Strong Loans will help fill gaps which aren’t being addressed because of the imitations of existing programs, such as income restrictions, rehabilitation requirements, and geographic restrictions. A portion of this program (\$167,000) will be funded with revenue from tax incremental districts.

Rental Housing Rehabilitation Program

By Common Council budget amendment, funding of \$1,000,000 was provided in the 2015 Budget for the Rental Housing Rehabilitation Program. The program will provide support to private landlords for the purpose of providing quality rental opportunities. No additional funding has been provided for this program.

Commercial *in rem* Property Program, \$250,000

This capital account was created in 2015. This account will fund marketing efforts for City owned commercial properties. Funding will be used to pay for marketing as well as repairs and renovation loans. As of the capital request date in March, the City owned 150 foreclosed, improved commercial properties. Over 80% of the properties have been acquired since 2010. There were no expenditures from this account in 2015.

Commercial Investment Program, \$1,100,000

(Formerly the Façade Program) This is an on-going program created by the 2012 Budget. Since 2012, this program has received \$1.75 million in funding. Prior to 2012, façade projects were funded by the Development Fund capital account. Expenditures in 2015 were \$800,500.

This program will fund a variety of programs including façade and signage grants, white box grants and Retail Investment Fund (RIF) grants. Façade grant recipients may seek payment of the City's grant only upon completion of the approved project. The White Box grant program was previously funded by the Development Fund.

Business Improvement Districts (BID), \$150,000

The 2017 Proposed Budget provides \$150,000 which is used to fund loans to BIDs for streetscaping and other infrastructure projects. The funds are normally matched with other funding sources. Loans made from this fund are repaid through annual BID assessments. Actual expenditures from this account since 2007 have been highly variable. There were no expenditures from this account in 2015.

Brownfield Program, \$500,000

This is an on-going program created by the 2012 Budget to provide matching funds for grants awarded for the remediation of contaminated sites that are privately owned. Prior to 2012, funding for these types of projects came from the Development Fund capital account. This program was funded as requested. Expenditures in 2015 were \$270,400.

Century City Site Improvements, \$400,000

This is a new capital account for 2017. The account is funded with cash. The Mayor announced that Talgo will be returning to Century City to rebuild rail cars for the Los Angeles County Metropolitan Transportation Authority.

The Special Joint Committee on the Redevelopment of Abandoned and Foreclosed Homes has been monitoring the use of funds from various accounts.

Reports and other information compiled by the committee are available in Common Council Files.

2011 - 110809

2012 - 111347

2013 - 121405

2014 - 131272

2015 - 141695

2016 - 151362

Other Programs

Neighborhood Commercial District Street Improvement Fund

The 2017 Proposed Budget provides no funding for this program which assists neighborhood commercial streetscaping efforts by providing matching dollars for funds from other internal and external sources. Other funding sources may include the City of Milwaukee BID Fund, Congestion Mitigation and Air Quality Improvement Program (CMAQ) grants, state grants and private loans.

Funding for this program had been relatively stable, and since 2000 has averaged just over \$500,000 annually. Average expenditures from 2007 through 2010 were \$497,000. The recession had an adverse impact on local business activity, causing actual expenditures from this account to decline. Expenditures in 2015 were \$31,900.

Healthy Neighborhoods Initiative (HNI)

This program provided matching funds for privately-raised funds used to make small-scale improvements in designated Healthy Neighborhoods. The purpose of the HNI is to encourage homeowner investment and aesthetic improvements in strong urban neighborhoods. The goal is to achieve positive outcomes in four areas: image, market, physical condition and neighborhood management.

The Healthy Neighborhoods Initiative was launched in 2007. It is supported by the Greater Milwaukee Foundation and the City. This program is no longer funded through the capital budget, a special fund in the O&M budget was created in 2016.

31 Port of Milwaukee

\$640,000
Proposed Capital Funding

\$900,000
Requested Capital Funding
(excluding grant funding)

\$4,160,000
Decrease from 2016 Budget

-80%
Percent Change from 2016 Budget

\$10,520,000
Six-Year Capital Request

Capital Programs and Projects

Rail Track & Service Upgrades	\$500,000
Pier Berth and Channel Improvements	\$100,000
Pavement Surfacing	\$40,000

Ongoing and Recent Capital Projects

Upgrades to railroad tracks.	
Heavy Lift Crane (2016)	\$4,000,000

Unfunded Capital Requests

Dockwall Rehabilitation	\$200,000
Demolish/Rehab Leasehold Facilities	\$50,000

Anticipated Capital Requests

The Port has submitted 11 capital requests for various capital projects related to equipment, dock maintenance, dredging and energy efficiency. The total 6-year request is \$10.5million. Further information about these requests can be found in Common Council File 151692.

Much of the Port's capital budget is used to match grant funding. Grants are available from various agencies to improve Port facilities, improve security at the Port and reduce energy consumption. Annual grant funding amounts can be highly variable.

In addition to capital funding, the 2017 Proposed Budget provides \$1.4 million tax-levy-supported special funds that can be used to maintain infrastructure. This is an increase of \$864,000 (157%) from 2016. Actual expenditures in 2015 from infrastructure-related special funds were \$362,116.

Capital Program Detail – Port of Milwaukee

Program	2017 Proposed	2016 Budget	Increase (decrease)	% Chng.	6-year Request
Heavy Lift Crane	\$0	\$4,000,000	(\$4,000,000)	-100%	\$5,000,000
Rail, Track & Service Upgrades	\$500,000	\$400,000	\$100,000	25%	\$700,000
Roadway Paving/Pvmt Surfacing	\$40,000	\$0	\$40,000		\$500,000
Pier, Berth & Channel Improvements	\$100,000	\$0	\$100,000		\$900,000
Total	\$640,000	\$4,400,000	(\$3,760,000)	-85%	

Rail, Track & Service Upgrades, \$500,000

This program provides funding to upgrade the Port’s 17 miles of rail track. The Port began a railroad-crossing replacement program in 2013. The Port is also developing a 5-year program to upgrade track from 90 lb. rails to 110 lb. or 115 lb. rails. The contractor will focus first on replacing the lead track, then on street crossings. Street crossing work will be coordinated with paving work.

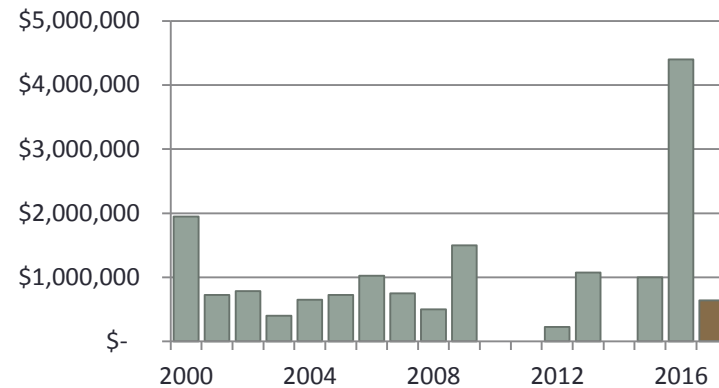
Pier, Berth and Channel Improvements, \$100,000

This program makes improvements to the mooring basin, the City’s heavy lift dock and the outer harbor. It is funded in part through the Wisconsin Department of Transportation’s Bureau of Railroads and Harbors grant program. Approximately 80% of the cost of these improvements will be paid by the grant. This capital fund provides the City’s 20% match of the grant funding. No new Harbor Assistance grants were received in 2013, 2014 or 2015.

Roadway Paving, \$40,000

This program provides funding for the maintenance of roadways on Jones Island and the south Harbor Tract. These roadways are not maintained by DPW on a regular basis. Because they are not public thoroughfares, they are not eligible to be paid for with funds from the wheel tax.

Port - Budgeted Capital Funding



Unfunded Capital Requests

Dockwall Rehabilitation

The purpose of this program is to avert costly emergency repairs and to maintain the dockwall in appropriate condition for cargo operations. No funding is proposed for this program in 2017. Many of the Port's dock walls are old, but still serviceable. Rehabilitation projects are prioritized by business needs and revenue generation potential. Loss of revenue to the City may result if the dockwalls are not kept in a safe and useable condition. The Port also receives O&M funding through a special fund to maintain its dockwalls. Approximately 250 feet of dockwall at Terminal 1 and 75 feet of dockwall in the mooring basin were repaired in 2014. The cost for both projects was approximately \$95,000. Additional dockwalls in the mooring basin and Terminal 2 were repaired in 2015.

Demolish/Rehabilitate Expired Leasehold Equipment

The 2017 Proposed Budget provides no funding for this program, which funds work to make Port-owned properties more marketable to prospective tenants when the leases of existing tenants expire. Although no capital funding is provided, \$744,000 is proposed for the Leasehold Demolition Special Fund.

Port of Milwaukee Special Funds								
	2010 <i>Actual</i>	2011 <i>Actual</i>	2012 <i>Actual</i>	2013 <i>Actual</i>	2014 <i>Actual</i>	2015 <i>Actual</i>	2016 <i>Budget</i>	2017 <i>Proposed</i>
Major Maintenance – Terminals & Piers	\$95,000	\$110,072	\$101,240	\$56,053	\$172,118	\$77,486	\$80,000	\$80,000
Major Rehab & Upgrades – Equipment	43,615	71,856	51,725	89,633	58,730	143,690	50,000	185,000
Environmental Cleanup Fund	70,000	37,646	37,419	48,217		22,538	100,000	100,000
Harbor Maintenance Dredging	46,500							
Equipment Rehab & Upgrade	51,540	113,932	74,753	157,663	108,405	91,186	75,000	210,000
Dockwall & Breakwater Rehabilitation	31,978	29,221		61,146	44,213	25,154	50,000	50,000
Energy Efficiency Upgrade	52,000	31,338	22,265		50,000		20,000	20,000
Leasehold Demolition	2,223	12,701			24,500	2,062	150,000	744,000
Sewer System Upgrade	1,041	24,198	35,437	5,6510	75,043		25,000	25,000
Harbor Security	19,664		46,859					
Total *	\$413,561	\$430,964	\$369,698	\$469,222	\$500,000	\$362,116	\$550,000	\$1,414,000
<i>*This table excludes Summerfest related special funds</i>								

The Port recently conducted a survey that identifies the existing location of the docklines. The dockline becomes the ordinary high water mark that riparian owners can build to without a permit. Over the years some owners have built beyond the established dockline. This survey will allow the Council to re-establish the dockline based on current conditions. The revised dockline lines could affect property sizes and assessments in locations where property owners have built beyond the ordinary high water mark or have built without a permit.

Other Capital Projects

Heavy-Lift Crane

The purchase of a new heavy-lift crane had been in the City's capital plan since at least 2009. The 2016 Budget funded the crane (\$4 million) with revenue, not general obligation debt. The Port purchased a crawler crane similar to its Manitowoc 4100. The new crane replaced a Lima Crawler that was purchased in 1971.

32 Library

\$2,844,000

Proposed Capital Funding

\$5,780,000

Requested Capital Funding

\$2,956,000

Decrease from 2016 Budget

-51.0%

Percent Change from 2016 Budget

\$23,135,050

Six-Year Capital Request

Capital Programs and Projects

Central Library Improvements	\$894,000
Neighborhood Library Improvements	\$350,000
Branch Library - New Construction	\$1,600,000

Ongoing and Recent Capital Projects

Villard Square – opened in 2011
 East Library – opened in 2014
 Express @ Silver Spring - opened in 2014
 Tippecanoe – renovated in 2015-2016

Unfunded Capital Requests

There are no unfunded capital requests.

Anticipated Capital Requests

The total 6-year request is \$23.1 million.

The library system has significant amounts of deferred maintenance at neighborhood libraries, 4 of which have been rated by MPL as being in “poor” or “very poor” condition. Three branches are considered to be in “moderate” condition. The branches in good condition are Bay View, Washington Park, Villard Square, the new East Library and Tippecanoe..

Much of the deferred maintenance will be addressed by the construction of 4 new mixed-use libraries to replace the Mill Road, Forest Home, Capitol and M.L. King libraries.

Program	2017 Proposed	2016 Budget	Increase (decrease)	% Chng.	6-year Request
Central Library Improvements Fund	\$894,000	\$1,000,000	(\$106,000)	-11%	\$9,995,050
Branch Library – New Construction	\$1,600,000	\$4,800,000	(\$3,200,000)	-67%	\$9,800,000
Neighborhood Library Improvements Fund	\$350,000	\$0	\$350,000		\$3,340,000
Total	\$2,844,000	\$5,800,000	(\$2,956,000)	-51%	\$23,135,050

Central Library Improvements Fund, \$894,000

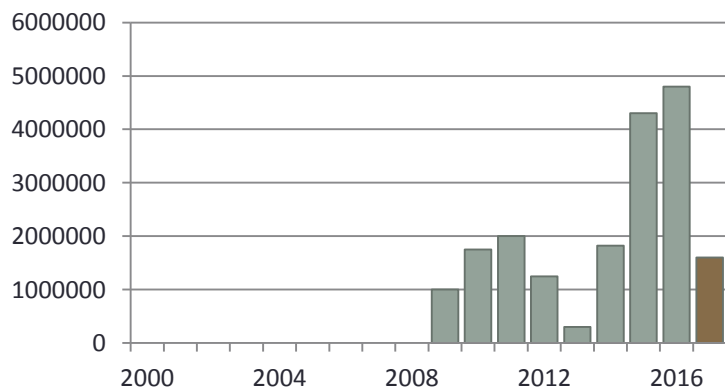
Since 2000, the City has invested over \$20.5 million in capital improvements at the Central Library (including the RFID project).

Improvements for the Central Library have been budgeted in a general Central Library Improvements account since 2010. The general account funds 3 programs. The Central Library Interior segment provides funding for the restoration, preservation

and renovation of the interior. Work includes repairs to mosaic tile and scagliola in the rotunda, renovation, upgrades and modernization, as well as general repair and maintenance. The Central Library Exterior segment provides funding for the maintenance and repair of exterior elements, including limestone block and balusters, Chicago brick, marble block, windows, lighting and roofs. The Central Library Mechanical Improvements segment provides funding for equipment and systems (HVAC, electrical, building controls, fire safety, security and elevators).

The Library requested \$3.3 million for 2017, \$2.5 million of which was for the replacement of three air handling units. Funding proposed for 2017 will provide for on-going repairs of mosaic tile and scagliola, improvements to a staff area, roof replacement, exterior masonry repairs, and planning for the air handler replacement project. Information regarding proposed improvements at the Central Library can be found in Common Council File 151692.

Library Construction - Budgeted Funding



Branch Library, New construction, \$1,600,000

In 2010, the Library Board recommended that a new configuration of library facilities be planned, built and opened over the next 10 years. The Library’s configuration at the time consisted of the Central Library and 12 neighborhood (branch) libraries. The proposed configuration included different types of libraries including area, neighborhood, mixed-use, express center and vending.

The City is moving forward with a facilities initiative that maintains branch libraries. It is a multi-year plan that has been funded in various capital accounts, including Villard Square, the Library Facilities Initiative, Branch

Library New Construction and the Neighborhood Library Improvements Fund.

The City has successfully partnered on 2 mixed-use libraries, Villard Square and East Library. Funding in 2017 will be used to complete construction of 2 mixed-use libraries to replace the Forest Home and Mill Road Libraries (\$500,000). It will also be used for the development of 2 additional mixed-use libraries to replace the Capitol Drive and M.L. King Libraries (\$1.0 million). The 2017 Proposed Budget continues funding for a project manager to oversee the development of the 4 new libraries. It is anticipated that funding will be needed for approximately 6 years. The position will be 90% capital-funded.

The Forest Home Library is being replaced with a facility at 906-10 W. Mitchell Street. Construction is expected to be complete in 2017. The Mill Road Library will be replaced with a facility at 7717 W. Good Hope Road. Locations have not been chosen for the Martin Luther King and Capitol Drive Libraries. Construction of all four branches is expected to be complete by 2020.

Neighborhood Library Improvements Fund, \$350,000

With the exception of funding in 2013 and 2015 for the renovation of Tippecanoe, this capital account has been largely unfunded since 2009. The most critical pieces of deferred maintenance at branch libraries will be addressed by the development of 4 mixed-use branch libraries to replace Mill Road, Capitol, Forest Home, and M.L. King libraries. The Library requested \$900,000 to replace the HVAC system at the Center Street library. The proposed funding is intended for a space needs study at Center Street.

Neighborhood Library Improvements Budgeted Funding

