2018



Legislative Reference Bureau



www.milwaukee.gov/lrb

CAPITAL IMPROVEMENTS OVERVIEW



Prepared by: Kathy Brengosz, Fiscal Planning Specialist Budget Hearing: 9:30 am on Friday, October 6, 2017 Last Updated: October 4, 2017

Final Version

Table of Contents

1 Capital Improvements Overview	2
5 City Attorney	14
6 Comptroller	15
7 Treasurer	16
8 City Clerk	17
9 Department of Administration	19
10 Election Commission	24
11 Assessor	25
12 Department of Neighborhood Services	26
13 Department of Employee Relations	
14 Employee Retirement System	29
15 Deferred Compensation	
16 Mayor's Office	
17 Municipal Court	
18 Health Department	
19 Fire Department	
20 Police Department	
21 Fire and Police Commission	
22 DPW- Administration	45
23 DPW- Sanitation	
24 DPW- Fleet	
25 DPW- Forestry	50
26 DPW- Infrastructure	55
27 DPW- Sewers	71
28 DPW- Parking	77
29 DPW- Water	82
30 Library	87
31 Department of City Development	90
34 Port of Milwaukee	97



Capital Funding Distribution

■ Health & Safety ■ Econ Development ■ Gen Govt.

1 Capital Improvements Overview

\$252.9 million. This is a decrease of \$13.9 million (5.2%) from the 2017 Budget. The total capital plan includes capital projects in all departments as well as the enterprise funds; Parking, Sewer and Water. Total capital funding has been somewhat variable, but has been trending upward since at least 2002.

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.



Source: Plan & Executive Budget Summary

2004

Nearly every department saw decreases in its capital budget for 2018. The exceptions were the Library, which saw an increase of nearly \$1.9 million to continue the upgrade and replacement of several branch libraries; a small (\$60,000) increase in the Port of Milwaukee, and an increase of \$3.6 million in the Milwaukee Water Works.

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.

2002

Surf Transportation

%

100

80

60

40

20

0

2000

Phase 1 of the project was included in the 2016 Budget (\$13 million). Funding continued in 2017 at the same level. The 2018 Proposed Budget includes \$9 million. An additional \$27 million is anticipated to be needed over the next three budget years.

Work will continue in 2018 on the Police Administration Building using previously budgeted funding. The Police Department has requested \$36.9 million over the next six years to complete the project. Funding has also been increased slightly in 2018 to continue 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 2018 Proposed Budget is tax-levy-supported debt, \$76.9 million (53.9%). Other sources include the tax levy, \$889,000 (0.6%), cash revenues from various fees, \$18.1 million (12.7%), special assessments, \$2.9 million (2%), and the increments from tax incremental districts, \$44 million (30.8%).

In addition to these sources, the City also receives grant and aid funding from the State, primarily for surface transportation projects. Grant funding in 2018 for capital related projects is expected to be \$35.8 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 fell to 3.3 % between 2006 and 2010. The average since 2011 has been 1.2%.

As the cash in the capital program has decreased, the amount of tax levysupported debt has increased. The percentage of tax-levy-supported debt, however, has varied depending on the level of TID borrowing. Since 2000, TID related borrowing has averaged 23% of the City-funded capital program.



Grant Funding

The most variable portion of the capital program 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 City's 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 the Forestry Section of the Department of Public Works. They include the Tree Planting and Production Program, the Emerald Ash Borer Readiness and Response Program, Concealed Irrigation, Stump Removal and the Hazardous Tree Removal Program. The Sewer Maintenance Fund will also provide funding in 2018 for the Environmental Remediation Program in DPW-ISD. The total transfer from the Sewer Maintenance Fund for capital projects is \$3,425,000 million, a decrease of \$175,000 (4%) from 2017.

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 2016, \$51.2 million in revenue has been received. The 2018 Proposed Budget anticipates receiving \$6.7 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 340,000 vehicles registered



Motor Vehicle Registration Revenue

in the city. A \$5 increase to the fee would generate nearly \$1.7 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.

In 2016, Milwaukee County implemented a \$30 vehicle registration fee. The County Executive has proposed raising the fee to \$60 for 2018.



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



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

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 \$76.9 million of general obligation debt, a decrease of \$12 million (13.5%) from the 2017 Budget. This amount does not include \$44 million of debt which will be used to fund tax incremental districts.

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 2016, the City's 10-Year Debt Payout ranged between 82% and 87%. It is projected to be 84% in 2018.

Additional borrowing in 2018 will support the capital programs of the Sewer Maintenance Fund (\$32.5 million), the Milwaukee Water Works (\$27.3 million) and the Parking Fund (\$3.4 million). Anticipated borrowing for the Water Works and Parking has increased from 2017 by \$5.4 million (25%) and \$1.7 million (100%), respectively.

Borrowing for enterprise fund activities is considered self-supporting because debt service is paid using revenues received by the respective



Outstanding General Obligation Debt

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 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 \$99.3 million since 2003. 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 October, 2017, indicated that at the end of 2016, the City had used approximately 74% 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 October 2017 was 69%. The total outstanding levy supported general obligation debt for all purposes at the

end of 2016 was just over \$1 billion.

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 2017 was \$26.9 billion. Equalized values have stabilized somewhat over the last 5 years, but are still over \$5 billion 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



Change in Equalized Property Value

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

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 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 87% 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 2018, the SMF anticipates using \$32 million in debt financing; \$26 million for sewer relays, \$5 million for the Inflow & Infiltration program, and \$1.5 million for water quality projects. 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

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 18 miles of water mains 2018, 18 miles in 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 approximately 2.5% per year.

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."

The current rating from Fitch and Standard and Poors is AA.

Milwaukee Water Works (MWW), which is traditionally funded with cash, has been funding more of its capital maintenance with debt both to offset a revenue shortfall caused by a delay in the settlement of its rate case and to meet the water main replacement target required by the PSC. MWW anticipates borrowing over \$27 million for 2018.

Parking Fund

Capital improvements for the Parking Fund are relatively modest (\$3.4 million) compared to the Sewer Maintenance Fund and the Milwaukee Water Works, and are typically debt-financed. The largest investments proposed for 2018 are at the MacArthur Square parking structure and the replacement of single-space parking meters.

Di Di

DI

D

D

D0

D

DI



Annual Water Main Breaks

	Strong Neig		ian Capital Fur	iuiiig	
ept.	Account	2015	2016	2017	2018
NS	Code Compliance Loans	\$500,000	\$500,000	\$800,000	\$800,000
NS	Concentrated Blight Elim.	1,319,000	\$2,200,000	\$2,100,000	\$1,200,000
CD	In rem Property	\$3,250,000	\$1,330,000	\$1,550,000	\$600,000
CD	Rental Housing Rehab Prog.	\$1,000,000	\$0	\$0	\$0
CD	STRONG Loans	\$0	\$1,500,000	\$1,167,000	\$1,150,000
CD	Housing Infrastructure Preserv.	\$450,000	\$450,000	\$450,000	\$100,000
CD	Commercial in rem	\$500,000	\$250,000	\$250,000	\$200,000
PW	Vacant Lot Beautification	\$200,000	<u> </u>	<u>\$0</u>	<u> </u>
		\$7,219,000	\$6,230,000	\$6,317,000	\$4,050,000

Noighborhoods Plan Capital Eu

Program Highlights

The Proposed Budget continues support for the **Strong Neighborhoods Plan**.

This comprehensive, interdepartmental program addresses the issues brought to the forefront by the foreclosure crisis. Capital funding for 2018 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 2018 Proposed Budget. The **City Hall Foundation** project continues with an additional \$9 million in funding. Further information regarding the City Hall project can be found in Common Council File 141165. The **Library Facilities Initiative** continues with funding for the development of new mixed-use branch libraries. **Police Administration Building (PAB)** did not receive funding in 2018. Since 2011, \$24.6 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. Work will continue in 2018 with funds budgeted in prior years. The project is expected to be completed in 2023.

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 four departments accounted for 8% of the levy supported general obligation debt. In 2017 there was one new large project and two on-going projects that required additional funding for a total of \$3.4 million. The 911 and Phone System Upgrade is the only new major IT project proposed for 2018.

Large Scale IT Projects						
Project	Dept.	2016	2017	2018	Status	
Land Management System (LMS)	ITMD	\$0	\$0	\$0	On-going	
Tax Collection Software	ITMD	\$1,150,000	\$0	\$0	On-going	
FMIS Upgrade	ITMD	\$0	\$1,300,000	\$0	Scheduled	
HRMS Upgrade	ITMD	\$1,000,000	\$0	\$0	On-going	
Assessment Software	Assessor	\$556,000	\$350,000	\$0	On-going	
Record Management System	Police	\$1,100,000	\$1,715,000	\$500,000	On-going	
911 and Phone System Upgrade	Police	\$0	\$0	\$2,000,000	new	
Upgrade CAD System	Police	\$1,300,000	\$0	\$0	On-going	
Radio Dispatch Console Upgrades	Police	\$1,900,000	\$0	\$0	On-going	
Fire Digital Radio System	Fire	\$400,000	\$0	\$0	On-going	
Fire Record Management System	Fire	\$550,000	\$0	\$0	On-going	
		\$7,956,000	\$3,365,000	\$2,500,000		

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 \$127 million. This amount includes grant and aid funding for streets and bridges. Some core infrastructure programs have been reduced to allow for the City Hall Foundation project. Funding for most core infrastructure programs returned to near the average for 2018.

Total funding for bridges in 2018 is down by \$5.8 million from 2017 largely because of a decrease 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.

Total funding for local roads is similar to 2017. Funding sources for 2018 include the Local Street program, the High Impact program and Local Road Improvement Funds from the State which are only available in even-numbered years



Capital Budget by Department

	2012	2013	2014	2015	2016	2017	2018	Change
	Adopted	Adopted	Adopted	Adopted	Adopted	Budget	Proposed	from 2017
City-Funded								
Special Projects	\$11,022,000	\$8,510,000	\$8,710,000	\$9,587,000	\$8,512,000	\$8,739,000	\$8,514,000	(\$225,000)
Administration, Dept. of	600,000	1,875,000	1,060,000	3,260,000	4,340,000	3,045,000	1,660,000	(1,385,000)
Assessor				555,000	556,000	350,000		(350,000)
City Attorney			1,758,000					
City Development, Dept. of	29,176,000	17,585,000	23,500,000	26,350,000	61,830,000	53,517,000	52,920,000	(597,000)
Common Council City Clerk	40,000	117,500	175,000	150,000	225,000	438,000		(438,000)
Election Commission				1,530,000				
Fire & Police Commission			150,000					
Fire Dept.	3,424,000	3,403,000	4,437,000	1,898,000	3,179,000	2,948,000	1,555,000	(1,393,000)
Health Dept.	450,000	435,000	425,000	366,000	745,000	731,000	660,000	(71,000)
Library	2,577,000	3,743,000	3,383,000	8,750,000	5,800,000	2,844,000	4,695,000	1,851,000
Municipal Court			144,000	504,000		384,000		(384,000)
Neighborhood Services, Dept. of			2,320,000	2,244,000	2,925,000	2,900,000	2,000,000	(900,000)
Police Dept.	1,502,000	7,375,700	9,177,000	8,200,000	9,070,000	7,589,000	7,001,000	(588,000)
Port of Milwaukee	225,000	1,075,000	750,000	1,000,000	4,400,000	640,000	700,000	60,000
Public Works, Dept. of	64,440,700	60,061,700	67,395,000	65,559,000	68,022,000	66,904,000	63,123,000	(3,781,000)
Total City-Funded	\$113,456,700	\$104,180,900	\$123,384,000	\$129,953,000	\$169,604,000	150,029,000	142,828,000	(8,201,000))
Grant & Aid								
Port of Milwaukee				800,000	800,000	400,000	800,000	400,000
Public Works, Dept. of	74,591,800	56,555,000	44,818,000	37,607,907	31,838,000	43,643,000	35,570,000	(8,073,000)
Total Grant & Aid	\$74,591,800	\$56,555,000	\$44,818,000	\$38,407,907	\$32,638,000	44,043,000	36,370,000	(7,673,000)
City-Funded and Grant & Aid	\$188,048,500	\$160,735,900	\$168,202,000	\$168,360,907	\$202,242,000	\$194,072,000	\$179,198,000	(\$14,874,000)
Enterprise Funds								
Parking	790,000	1,441,000	1,715,000	2,292,000	1,780,000	3,340,000	3,3424,500	(84,500)
Sewer Maintenance	43,950,000	44,510,000	44,550,000	44,200,000	44,404,000	38,714,000	37,514,000	(1,200,000)
Water	9,320,000	13,850,000	13,825,000	24,950,000	25,660,000	29,210,000	32,780,000	3,570,000
Total Enterprise Funds	\$54,060,000	\$59,801,000	\$60,090,000	71,442,000	71,844,000	71,264,000	73,718,500	(2,454,500)
TOTAL CAPITAL PLAN	\$242,108,500	\$220,536,900	\$228,292,000	\$239,802,907	\$274,086,000	\$266,836,000	\$252,916,500	(\$18,919,500)

5 City Attorney

\$0 Proposed Capital Funding

\$0

Requested Capital Funding

\$C

Increase from 2017 Budget

0%

Percent Change from 2017 Budget

\$3,500,000

Six-Year Capital Request

Capital Programs and Projects	Ongoing and Recent Capital Projects
There are no proposed capital programs or projects.	City Hall 8 th Floor Remodeling Funding was provided in 2014 to update the mechanical and electrical systems of the 8 th floor.
Unfunded Capital Requests	Anticipated Capital Requests Funding to complete the renovation of 8 th floor of City Hall will need to include additional funds for mechanical systems because the funding for that phase of the project will lapse at the end of 2017.

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.

The funding provided in the 2014 Budget (\$1,758,000) to upgrade the mechanical systems on the 8th floor of City Hall will lapse at end of 2017. 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.

Common Council File Number 160628 was introduced September 1, 2016 to use contingent borrowing to fund the project. The file is in committee.

6 Comptroller

\$0	Capital Programs and Projects	Ongoing and Recent Capital Projects
Ψ·	There are no proposed capital programs or projects.	There are no on-going or recent capital projects.
Proposed Capital Funding		
\$0		
Requested Capital Funding		
\$0	Unfunded Capital Requests	Anticipated Capital Requests
ΨΟ	There are no unfunded capital requests.	There are no out-year capital requests.
Increase from 2017 Budget		
0%		
Percent Change from 2017 Budget		
ድር		
ΦU		
Six-Year Capital Request		

7 Treasurer

Proposed Capital Funding

SO

\$0

Requested Capital Funding

\$C

Increase from 2017 Budget

0%

Percent Change from 2017 Budget

\$C

Six-Year Capital Request

Capital Programs and Projects

There are no new proposed capital programs or projects.

Unfunded Capital Requests

There are no unfunded capital requests.

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.

Anticipated Capital Requests

There are no out-year capital requests.

The 2018 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 project is replacing a 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. Vendor support for Version 5 of the base operating system ended on December 31, 2014.

Expenditures in 2016 for the new Tyler Technologies Munis Tax System were \$573,800. The system is expected to go live in November 2017.

8 City Clerk

\$0

Proposed Capital Funding



Requested Capital Funding

\$438,000

Decrease from 2017 Budget

-100%

Percent Change from 2017 Budget



Six-Year Capital Request

Capital Programs and Projects

There are no new proposed capital programs or projects.

Unfunded Capital Requests

City Hall, Rm 205 Renovation\$1,915,000Replacement of Chamber TV Lights\$72,000License Div. Service Counter Reconfig.\$35,000

Ongoing and Recent Capital Projects

LRB Research Office Upgrade (funded in 2017) Channel 25 Digital Conversion (funded 2014-2016)

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 conversion of Channel 25 from an analog signal to digital began in 2014. It involved the replacement of master control equipment, the conversion of the City Hall control room equipment, the conversion and upgrade of studio and remote production equipment. The project was completed in May, 2017

The LRB Office Upgrade was funded in 2017 (\$438,000). The project is currently being designed by the Department of Public Works. Construction is expected to begin in 2018.

The City Clerk requested capital funds to replace the TV lights in the Common Council chambers and to reconfigure the service counter in the License Division (CH Rm 101).

Capital Program Detail – City Clerk

Program	2018 Proposed	2017 Budget	Increase (decrease)	% Chng.	6-year Request
LRB Research Office Upgrade	\$0	\$438,000	(\$438,000)	-100%	\$0
License Division Service Counter Reconfiguration	\$0	\$0			\$35,000
Council Chambers TV Light Replacement	\$0	\$0			\$72,000
Remodel CH Room 205	\$0	\$0	\$0		\$1,915,000
Total	\$0	\$438,000	(\$438,000)	-100%	\$2,022,000

Legislative Reference Bureau Office Upgrade

This one-year project to upgrade City Hall Room 307 was first requested for inclusion in the 2011 Budget. The space was formerly used by the Division of Budget and Management Analysis. The project was funded in 2017 and is currently being designed by the Department of Public Works. Construction is expected to begin in 2018.

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.

Council Chambers TV Light Replacement

The department request \$72,000 to replace the PAR lights in the Common Council Chambers with LED lights. The project would reduce energy consumption by over 80% and reduce heat damage on the ceiling.

License Division Service Counter Reconfiguration.

This project was originally conceived as part of the overall License Division remodel that took place in 2009 and 2010. Due to funding constraints at that time, the currently request portion of the remodeling project was delayed.

The License Division has recently taken on the responsibility of managing and processing the new City ID cards. The project would provide more on-site self-service opportunities for customers and assist the License Division in the timely performance of all its duties.

9 Department of Administration

\$1,660,000

Proposed Capital Funding

\$2,015,000

Requested Capital Funding

\$1,385,000

Decrease from 2017 Budget

-45.5%

Percent Change from 2017 Budget

Six-Year Capital Requ	uest
-----------------------	------

Capital Programs and Projects

Unfunded Capital Requests

GIS Street Data Modernization

Web Security Monitoring

Total	\$1,660,000
Better Buildings Challenge	\$100,000
PeopleSoft PUN Upgrade	\$150,000
ADA Web & Public App Compliance	\$250,000
Open Data Dashboard & Analytics	\$150,000
City Assessor Modernization	\$170,000
Public Facility Communications	\$540,000
IT Upgrades/Replacement	\$300,000

Ongoing and Recent Capital Projects

FMIS Upgrade	(2017)
HRMS Upgrade	(2016)
Treasurer's Tax Collection System	(2015-2016)
CSWAN-COMON Upgrade	(2016-2017)
Corporate Database Server	(2016-2017)
Map Milwaukee Upgrade	(2015)
Land Management System (LMS)	(2012 &2015)

Anticipated Capital Requests

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

DOA ITMD has several large, on-going IT projects including an upgrade of the HRMS system, and the development of new land management, tax collection and property assessment systems. A major upgrade of the FMIS system is planned for 2018. These projects were funded in prior budgets.

\$250,000

\$150,000

Program	2018 Proposed	2017 Budget	Increase (decrease)	% Chng.	6-year Request
Public Facility Communications	\$540,000	\$575,000	(\$35,000)	-6%	
IT Upgrades/ Replacements	\$300,000	\$300,000	\$0	0%	
City Assessor Modernization	\$170,000	\$170,000	\$0	0%	
Open Data – Dashboard and Analytics	\$150,000	\$150,000	\$0	0%	
ADA Web & Public App Compliance	\$250,000	\$0	\$250,000		
PeopleSoft PUN Upgrade	\$150,000	\$0	\$150,000		
Better Buildings Challenge	\$100,000	\$100,000	\$0	0%	
Corp. Database Server	\$0	\$200,000	(\$200,000)	-100%	
CSWAN/COMON Upgrade	\$0	\$250,000	(\$250,000)	-100%	
FMIS Upgrade	\$0	\$1,300,000	(\$1,300,000)	-100%	
Total	\$1,660,000	\$3,045,000	(\$1,385,000)	-45.5%	

Capital Program Detail - Dept. of Administration

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 \$281,000. In 2018, \$100,000 of this program is funded with cash.

Public Facility Communications, \$540,000

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.

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

The City's reliance on IT systems for critical business functions has increased. There is also an increasing trend of interdepartmental activities. lt is essential that IT systems be evaluated and implemented in a City-wide context. In order to ensure consistency and compatibly among departmental IT systems, the City began consolidating IT services in the Dept. of Admin-ITMD in 2013.

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. The project received \$170,000 in 2017.

Open Data Dashboard and Analytics, \$150,000

DOA-ITMD is developing and Open Data portal. The dashboard interfaces and the 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. The project received \$150,000 in 2017. In 2018, the project will be funded with cash from the tax levy.

PeopleSoft Upgrade Manager, 150,000

This is a new capital account for 2018. The Peoplesoft HRMS and FMIS systems require periodic updates. In the past major upgrades would be done to each system

every six or seven years. This program would implement incremental upgrades, likely on an annual basis. The department will evaluate the benefits of moving forward with this approach.

ADA Web and Public App Compliance \$250,000

This project is being undertaken to ensure that the City's website and apps are in compliance with the Americans with Disabilities Act (ADA). This project will be funded with cash from the tax levy.

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. This account received \$100,000 of funding in 2017.

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 has not requested funding for that program since 2016.

Other Capital Projects

Corporate Database Server Upgrade

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. Funding was requested over 2 years; \$270,000 and \$200,000 for 2016 and 2017, respectively. The project was funded as requested. The project is expected to have a useful life of 7 years.

CSWAN Upgrade

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

The 2017 Budget included \$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 were consolidated in DOA –ITMD in 2016.

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.

FMIS Upgrade

This project received \$1,300,000 of funding in 2017 to 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. The upgrade is scheduled for early 2018.

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 project replaces a tax collection system which was designed in 1982. It became increasingly difficult to recruit new personnel with the skillset required to support the system. Technical support for the base operating system ended on December 31, 2014. The system will be deployed for the 2017 tax year.

Land Management System

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 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 system was rolled out in February 2016 for some sections of the Department of Public Works. The Department of Neighborhood Services was launched in October 2016.

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. Health Department inspections will also be included in Phase II.

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. Expenditures in 2016 were \$749,000.

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).

10 Election Commission

\$0 Proposed Capital Funding

\$0

Requested Capital Funding

\$C

Increase from 2017 Budget

0%

Percent Change from 2017 Budget



Six-Year Capital Request

Capital Programs and Projects	Ongoing and Recent Capital Projects
There are no proposed capital programs or projects.	Replacement of voting machines (funded in 2015).
Unfunded Capital Requests	Anticipated Capital Requests
There are no unfunded capital requests.	There are no out-year capital requests.

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.

The new machines, which do not have touchscreens, were first 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.

The machines have significantly reduced processing time for election results.

11 Assessor

\$0 Proposed Capital Funding

\$0

Requested Capital Funding

\$350,000

Decrease from 2017 Budget

-100%

Percent Change from 2017 Budget



Six-Year Capital Request

Capital Programs and Projects

There are no proposed capital programs or projects.

Unfunded Capital Requests

There are no unfunded capital requests.

Ongoing and Recent Capital Projects

The replacement of property assessment software is a multi-year project first funded in 2015. The project has received a total of \$1.5 million in capital funding.

Anticipated Capital Requests

There are no out-year capital requests.

The City Assessor used an in-house computer system which was designed in the 1980s. Like the system used by the Treasurer, maintenance required a skillset that was 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 anticipated that the project would 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.

Expenditures for the project in 2015 and 2016were \$29,960 and \$304,352 , respectively

12 Department of Neighborhood Services

\$2,000,000

Proposed Capital Funding

\$2,491,000

Requested Capital Funding

\$900,000

Decrease from 2017 Budget

-31%

Percent Change from 2017 Budget

\$14,491,000

Six-Year Capital Request

Capital	Programs	and	Projects
---------	----------	-----	----------

Concentrated Blight Elimination	
Code Compliance Program	
Total	

Unfunded Capital Requests

Cashier Safety & Security Enhancements \$91,000

Ongoing and Recent Capital Projects

Concentrated Blight Elimination (On-going)Code Compliance Program(On-going)Alternate Board Up(funded in 2014)Anderson Tower Garage Conversion (2015 & 2016)

Anticipated Capital Requests

The total 6 year capital request is \$14.5 million for the continuation of the Concentrated Blight Elimination and Code Compliance programs.

Concentrated Blight Elimination (Demolition), \$1,200,000

\$1,200,000

\$800,000

\$2,000,000

The 2014 Budget created this capital program as part of the STRONG Neighborhoods initiative. Expenditures in 2014, 2015, and 2016 were \$1.6 million, \$1.9 million, and \$2.0 million, respectively. Capital funding in this account will be combined with O&M funding in DNS and DPW, CDBG funding and state funds to raze and deconstruct approximately 150 structures, about 25 more structures than were anticipated last year. This account will fund 3 positions

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. Funding proposed for 2018 will not address the backlog of buildings with raze orders, including an increasing inventory of larger commercial buildings.

Capital Program De	ail – Dept.	of Neighborhoo	d Services
---------------------------	-------------	----------------	------------

Program	2018 Proposed	2017 Budget	Increase (decrease)	% Change	6-year Request
Concentrated Blight Elimination	\$1,200,000	\$2,100,000	(\$900,000)	-43%	\$9,600,000
Code Compliance Program	\$800,000	\$800,000	\$0	0%	\$4,800,000
Cashier Safety & Security Enhancements	\$0	\$0	\$0		\$91,000
Total	\$2,000,000	\$2,900,000	(\$900,000)	-31%	\$14,491,000

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. Reports detailing 2016 and 2017 activities are available in Common Council Files 151362 and 161359.

Code Compliance Program, \$800,000

The Code Compliance Loan program was created in the 2014 Budget as part of the STRONG Neighborhoods initiative 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 the program. The Code Compliance Loan Program provides deferred payment loans of up to \$15,000 per property to correct outstanding building code violations.

The department is recommending a change to the eligibility requirement which would instead the total household income from 50% of the CMI to 80% of the CMI. This program will fund 2 positions, an inspector and a coordinator.

Code Compliance Loans				
Metric	2016	2017*	2018*	
# of Properties	35	27	54	
Average Project Cost	\$12,600	\$12,600	\$12,600	
Average Household Income	\$17,600			
Average years in House	19			
*Anticipated				

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. The project has been completed. Expenditures in 2015 and 2016 were \$63,000 and \$587,000, respectively.

13 Department of Employee Relations

\$0	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.
Proposed Capital Funding		
\$0 Requested Capital Funding		
\$0	Unfunded Capital Requests	Anticipated Capital Requests
Increase from 2017 Budget	There are no unfunded capital requests.	There are no out-year capital requests.
0%		
Percent Change from 2017 Budget		
\$0		
Six-Year Capital Request		

14 Employee Retirement System

\$0 Proposed Capital Funding	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.
\$0 Requested Capital Funding		
\$0 Increase from 2017 Budget	Unfunded Capital Requests There are no unfunded capital requests.	Anticipated Capital Requests There are no out-year capital requests.
0% Percent Change from 2017 Budget		
\$0 Six-Year Capital Request		

15 Deferred Compensation

\$0 Proposed Capital Funding	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.
\$0 Requested Capital Funding		
\$0 Increase from 2017 Budget	Unfunded Capital Requests There are no unfunded capital requests.	Anticipated Capital Requests There are no out-year capital requests.
0% Percent Change from 2017 Budget		
\$0 Six-Year Capital Request		

16 Mayor's Office

\$0 Proposed Capital Funding	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.
\$0		
Requested Capital Funding		
\$0	Unfunded Capital Requests There are no unfunded capital requests.	Anticipated Capital Requests There are no out-year capital requests.
Increase from 2017 Budget		
0%		
Percent Change from 2017 Budget		
\$0		
Six-Year Capital Request		

17 Municipal Court

\$0 Proposed Capital Funding

\$0

Requested Capital Funding

\$C

Increase from 2017 Budget

0%

Percent Change from 2017 Budget



Six-Year Capital Request

Capital Programs and Projects	Ongoing and Recent Capital Projects
There are no proposed capital programs or projects.	CATS & Website Upgrade - funding was provided in 2015 (\$504,000) and 2017 (\$384,000) for this project.
	Virtual Server and SAN Replacement - \$144,000 was budgeted in 2014 to upgrade a virtual server and for SAN replacement.
Unfunded Capital Requests	Anticipated Capital Requests
There are no unfunded capital requests	There are no out-year capital requests.

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 is the transition from a client-server-based architecture to a browser-based platform, similar to FMIS, HRMS and other City systems.

18 Health Department

\$660,000

Proposed Capital Funding

\$675,168

Requested Capital Funding

\$71,000

Decrease from 2017 Budget

-9.7%

Percent Change from 2017 Budget

\$4,182,954

Six-Year Capital Request

Capital	Programs and Pro	ojects
---------	-------------------------	--------

Health Facilities Capital Projects\$155,000Lead Paint Prevention & Abatement\$340,000Lab Equipment\$165,000

Unfunded Capital Requests

There are no unfunded capital requests.

Ongoing and Recent Capital Projects

Window replacement at South Side Health Center. Building automation systems

Anticipated Capital Requests

The total 6-year request is \$4.2 million.

Funding continues in 2018 to abate lead paint. The proposed funding is the same as 2016 and 2017. 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.

Funding in 2018 for Health Facilities Capital Projects will provide for maintenance at Southside and Keenan Health Centers and a ventilation system for the lab.

19 Fire Department

\$1,555,000

Proposed Capital Funding

\$1,585,000

Requested Capital Funding

\$1,393,000

Decrease from 2017 Budget

-47%

Percent Change from 2017 Budget

\$25,515,056

Six-Year Capital Request

cupital riograms and riojects		ongoi
Major Capital Equipment Fire Facilities Maintenance Program Extrication Equipment Total	\$1,106,000 \$349,000 <u>\$100,000</u> \$1,555,000	Auxilia Fire Re Fire D Fire Re Region
Unfunded Capital Requests		Antici
Access Card Security System	\$30,000	The to

Capital Programs and Projects

Ongoing and Recent Capital Projects

Auxiliary Power Supply	(On-going)
Fire Repair Shop – Facility Upgrade	(2017)
Fire Digital Radio System Upgrade	(2016)
Fire Record Management System	(2016)
Regional Video Conferencing	(2014)

ipated Capital Requests

otal 6 year capital request is \$25.5 million.

Major Capital Equipment, \$1,106,000 Funding in 2018 will replace 1 ladder truck and 1 medical unit.

The 2018 Proposed Budget assumes that 3 pieces of heavy equipment will be decommissioned and 2 apparatus will be browned out.

Capital Program Detail – Fire Department

Program	2018 Proposed	2017 Budget	Increase (decrease)	% Chng.	6-year Request
Major Capital Equipment	\$1,106,000	\$1,680,000	(\$574,000)	-34%	\$20,099,642
Fire Facilities Maintenance	\$349,000	\$700,000	(\$351,000)	-50%	\$3,360,354
Extrication Equipment	\$100,000		\$100,000		\$200,000
Auxiliary Power Supply	\$0	\$85,000	(\$85,000)	-100%	\$255,000
Fire Repair Shop – Facility Upgrade	\$0	\$483,000	(\$483,000)	-100%	\$0
Access Card Security System	\$0	\$0	\$0	0%	\$200,000
Total	\$1,555,000	\$2,948,000	(\$1,393,000)	-47%	\$24,114,996

Fire Facilities Maintenance, \$349,000

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 63 years. The median age is 55 years. Eight of the fire houses (23%) are over 100 years old.

The department's goal, in 2018, is to have a fire engine at every active fire station. This is expected to result in the closing or re-purposing of 6 fire stations. The average age of the 6 buildings is 81 years. The department will re-evaluate the



capital maintenance needs of the buildings that remain in its inventory.

Four of the buildings being considered for closure have basements under the apparatus parking floor. These basements have been of concern to the department for a number of years because they were not designed for the size and weight of the equipment currently used by the Fire Department. Shoring was installed 5 years ago in the basement of Station #6 (Franklin & Brady), to support the equipment parked there. The department has requested \$900,000 in capital funding to replace the apparatus floor.



Major Capital Equipment, \$1,106,000

Funding proposed for 2018 will replace 1 ladder truck and 1 medical unit.

The average age of the department's front line engines in 2017 will be approximately 8 years. The National Fire Protection Association (NFPA) recommends shifting frontline firefighting apparatus to reserve status after 15 years. The proposed reduction in the size of the front line fire equipment fleet will make it easier to keep the age of active equipment within the NFPA recommendations.

	Current Fleet			2018 - Proposed			
Equipment	Frontline	Reserve	Total	Frontline	Reserve	Total	
Engines	31	11	42	30	10	40	
Ladder Units	13	5	18	9	5	14	
Platforms	2	0	2	2	0	2	
Medical Units	14	6	20	14	6	20	
Rescue Units	6	1	7	6	1	7	
Total	66	23	89	61	22	83	

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. 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.
Unfunded Requests

Access Card Security System

This project was first requested for 2017. The 2018 request was for only a portion of the project. The 6 year request was \$200,000. The overall cost of the project may change if stations are closed. 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 in 2017.

Other Capital Projects

Fire Repair Shop - Facility Upgrades

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. The project was funded in 2017 (\$483,000).

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.

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



Auxiliary Power Supply

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. \$85,000 was included in the 2017 Budget. Expenditures in 2016 were \$2,600

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.

20 Police Department

\$7,001,000

Proposed Capital Funding

\$19,239,000

Requested Capital Funding

\$588,000

Decrease from 2017 Budget

-8%

Percent Change from 2017 Budget

\$76,778,311

Six-Year Capital Request

District Repairs Record Management System (RMS)	\$470,000 \$500,000
911 and Phone System Upgrade	\$2,000,000
MediaSolv Camera System Expansion	150,000
Police Vehicles	<u>\$3,881,000</u>
Total	\$7,001,000

Unfunded Capital Requests

Capital Programs and Projects

Police Admin Building Remodeling	\$6,977,000
Non-Priority District Repairs	\$411,000
Radio & Communications Upgrade	\$375,000
Upgrade CAD System	\$2,500,000
Mobile Identification System	\$850,000
Police Training Management System	\$250,000
Video Conferencing Upgrade	\$125,000
Total	\$12,238,000

Ongoing and Recent Capital Projects

Police Administration Building Renovation	
Record Management System	
Uninterruptable Power Supply	
CAD System Upgrade (2	2016)
Mobile Data Computer Upgrade (2	2016)
Radio Dispatch Console Upgrade (2	2016)
911 Network Upgrade (2	2016)
MediaSolv Camera Upgrade (2	2016)
3rd District Parking Deck Repair(2)	2015)

Anticipated Capital Requests

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

The total 6-year request is \$76.8 million.

The 2018 Proposed Budget creates a new capital account for the purchase of police vehicles.

No funding is proposed for the Police Administration Building project.

Capital Program	Detail - Police	e Department
------------------------	-----------------	--------------

Program	2018 Proposed	2017 Budget	Increase (decrease)	% Chng.	6-year Request
Police Administration Building Remodeling	\$0	\$5,500,000	(\$5,500,000)	-100%	\$36,891,311
Records Management System	\$500,000	\$1,715,000	(\$1,215,000)	68%	\$500,000
District Station Repairs	\$470,000	\$280,000	\$190,000	68%	\$4,470,000
Police Vehicles	\$3,881,000	\$0	\$3,881,000		\$24,881,000
911 & Phone System Upgrade	\$2,000,000	\$0	\$2,000,000		\$2,500,000
MediaSolv Camera Expansion	\$150,000	\$0	\$150,000		\$150,000
Uninterruptable Power Supply	\$0	\$94,000	(\$94,000)	-100%	\$0
Total	\$7,001,000	\$7,589,000	(\$588,000)	-8%	\$69,392,311

Records Management System, \$500,000

Since 2013, this capital account has received \$6.7 million. In 2013, \$68,300 was expended from the Tiburon Upgrade account for this project.

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.

Police Vehicles, \$3,881,000

The 2018 Proposed Budget creates a new capital account for the purchase of police vehicles. Funding would provide for 50 patrol cars (\$67,500 each), 5 prisoner conveyance vehicles (\$77,200 each), 10 motorcycles (\$12,000 each). The total 6 year request for police vehicles is \$24,881,000.

The Police Department has approximately 890 vehicles. Of those, approximately 80 have over 150,000 miles. The national standard for squad car replacement is 4 years based on two or three shift use. To adhere to the national standard, the department should be replacing nearly 225 patrol vehicles each year. From 2013 through 2016 the adopted budgets provided funding for between 22 and 25 vehicles. Each year between 10 and 15 squads are sold whole or for parts because they are beyond economical repair.

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. Expenditures in 2016 were \$2.3 million.

District Station Repairs, \$470,000

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 \$720,000 for 2018.

911 & Phone System Upgrade, \$2,000,000

The 2018 Proposed Budget creates a new capital account to fund the replacement of the ATT Sentinel 911 and Avaya phone systems. Computer support for the operating system platform has been discontinued by Microsoft. The systems were last upgraded in 2010.

MediaSolv Camera Expansion, \$150,000

The 2018 Proposed Budget creates a new capital account to fund the expansion of the MediaSolv camera system. The interview room camera system was upgraded to digital in 2016. Funding in 2018 will expand the system to 5 additional interview rooms.

Unfunded Requests

Police Administration Building Remodeling

Since 2011, \$24.6 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 \$61.5 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 2023, has been phased over multiple years. Expenditures from 2011 through the end of 2016 have totaled \$18.3 million.

Although no funding is provided in 2018, construction of the 3rd floor will continue with funds authorized in previous years.

No funding is proposed for 2018 for this program. Additional information regarding The Police Administration Building Project is available in Common Council Files 100006 and 111338.

PAB Expenditures		
2011	\$520,541	
2012	\$2,450,702	
2013	\$3,037,126	
2014	\$5,684,644	
2015	\$1,973,980	
2016	\$4,636,760	

Non-Priority District Repairs

The department requested\$ 411,000 for repairs and upgrades at district stations that are not considered critical. **No funding is proposed for 2018 for this program.**

Radio & Communications Upgrade

This program was first funded in 2009. Since 2011, it 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.

Budgeted funding from 2009 through 2016 has totaled \$1.97 million. No funding was provided in 2017. Expenditures through the end of 2016 totaled \$1.5 million.Funding in 2018 would have been used to build a radio site at the Oak Creek Water Tower. No funding is proposed for 2018 for this program.

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). The department requested an additional \$2.5 million for 2018. There were no expenditures from this capital account in 2016. **No funding is proposed for 2018 for this program.**

Video Conferencing Upgrade,

The department requested \$125,000 for 2018 to upgrade its existing video conferencing system. No funding is proposed for 2018 for this program.

Police Administration Construction Phasing (proposed)		
Year	Phase	Proposed Work
2012	1	New chase and high-rise upgrades
2013 -2014	2	5 th Floor remodeling
2014 -2015	3	4 th Floor remodeling
2017 – 2018	4	3 rd Floor remodeling
2018 -2019	5	2 nd Floor remodeling & Fusion Center
2019 -2020	6	1 st Floor remodeling - Municipal Court
2020 -2021	7	7 th Floor remodeling
2021 -2022	8	Basement & 6 th Floor remodeling
2023	9	MEP upgrade, install return air chase

Other Capital Projects

Uninterruptible Power Supply (UPS),

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 and \$94,000 was provided in 2016 and 2017, respectively.

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 was 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. Expenditures in 2016 were \$249,071.

Radio Dispatch Consoles

The Police Department and the Fire Department both utilize the Open Sky radio system. The 2016 Budget provided \$1.9 million 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.

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. \$72,000 was expended in 2016.

21 Fire and Police Commission

\$0 Proposed Capital Funding

\$250,000

Requested Capital Funding

\$C

Increase from 2017 Budget

0%

Percent Change from 2017 Budget

\$250,000

Six-Year Capital Request

Capital Programs and Projects

There are no proposed capital programs or projects.

.

Unfunded Capital Requests

There are no unfunded capital requests.

Ongoing and Recent Capital Projects

In 2009, the Commission received \$150,000 to move its offices to the 10th floor of the Zeidler Municipal Building (ZMB); into the space currently occupied by the City Attorney. The project remains on hold.

Anticipated Capital Requests

There are no out-year capital requests.

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.

Funding for this project was originally budgeted in 2009. The delay of the 8th floor renovation for the City Attorney caused the funding to lapse. The funding was restored in 2014. The project has remained on hold and the funding will once again lapse at the end of 2017.

22 DPW- Administration

\$0 Proposed Capital Funding	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.
\$0 Requested Capital Funding		
\$0 Increase from 2017 Budget	Unfunded Capital Requests There are no unfunded capital requests.	Anticipated Capital Requests There are no out-year capital requests.
0% Percent Change from 2017 Budget	The 2014 Budget moved authority for the Public Department of Public Works – Administration section t	
\$0 Six-Year Capital Request		

23 DPW- Sanitation

\$0

Proposed Capital Funding

\$656,581

Requested Capital Funding

\$0

Decrease from 2017 Budget

0%

Percent Change from 2017 Budget

\$4,712,483

Six-Year Capital Request

Capital Programs and Projects		Ongoing and Recent Capital Projects
There are no proposed capital pro	ograms or projects.	Purchase and Install Brine Makers Material Recovery Facility – 1313 W. Mount Vernon
Unfunded Capital Requests		Anticipated Capital Requests
MRF Equipment Repair	\$656,581	The total 6-year capital request is \$4.7 million.
		See page 51 for a list of requests for DPW Operations.

The Material Recovery Facility on 13th and Mt. Vernon is operated under an intergovernmental cooperation agreement between the City of Milwaukee and Waukesha County. The agreement requires the establishment of an equipment repair fund. No capital funding was provided in 2018.

Purchase and Install Brine Makers

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. 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. Expenditures in 2016

The Ch

were \$251,284

The Cheese Brine Pilot conducted during the winter of 2013-2014 demonstrated that pre-wetting salt with liquid brine is beneficial and Routing software is being used to optimize garbage and recycling routes.

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

should result in an overall reduction in salt usage. Salt that has been prewet 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 2018 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.

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)

24 DPW- Fleet

\$6,300,000

Proposed Capital Funding

\$13,045,000

Requested Capital Funding

(\$85,000)

Decrease from 2017 Budget

-1%

Percent Change from 2017 Budget

\$86,795,000

Six-Year Capital Request

Capital Programs and Projects		Ongoing and Recent Capital Projects	
Major Capital Equipment	\$6,300,000	2-Way Radio Replacement (2011 & 2012)	
Unfunded Capital Requests		Anticipated Capital Requests	
There are no unfunded capital rec	quests.	The total 6-year capital request is \$86.8 million.	
		See page 51 for a list of requests for DPW Operations.	

Major Capital Equipment, \$6,300,000

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 2018 Proposed Budget funds all of the department's requested equipment. Actual equipment purchases may be different depending on fleet performance. Average annual funding for this program since 2002 is \$5.9 million.

Funding is essentially unchanged from 2017.

Description of unit	Current	Requested	Proposed
Description of unit	Inventory	Units	Units
Sweeper	33	2	2
Tractors			
Front End Wheel Loader	15	2	2
Light Multi-Purpose	46	2	2
Skid-Steer, 64 HP, 200 LB	32	3	3
Trucks			
Aerial, 36 Foot, Step Van Body	8	1	1
Aerial, 50 Foot, Chip Box	16	1	1
Dump, 2 Yard w/ Compressor	11	2	2
Dump, 5 Yard	22	1	1
Dump, 5 Yard w/Underbody Plow	138	7	7
Packer, 25 Yard, Rear load/Recycle	174	5	5
Pickup, Utility-Sign Service	27	1	1
Log Loader	5	1	1
Platform Compressor	28	4	4
Road Patcher	4	1	1
Roll-Off	13	2	2
Tilt Grapple Saw w/ Loader Body	0	1	1
Total Number of Units		36	36

The average age of capital equipment is 12.4 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.

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 2018 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.

The fuel savings are somewhat offset by higher maintenance costs associated with CNG vehicles. The vehicles are subject to stringent CNG tank inspections and subsequent maintenance. The department continues to monitor costs and evaluate the overall performance of the CNG vehicles.

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.

25 DPW- Forestry

\$3,375,000

Proposed Capital Funding

\$3,776,225

Requested Capital Funding

\$150,000

Decrease from 2017 Budget

-4%

Percent Change from 2017 Budget



Six-Year Capital Request

Total	\$3,375,000
Hazardous Tree Removal Program	\$75,000
EAB Readiness & Response	\$1,000,000
Stump Removal	\$500,000
Tree Planting & Production	\$1,450,000
Boulevard Irrigation and Landscaping	\$350,000

Unfunded Capital Requests

Capital Programs and Projects

There are no unfunded capital requests.

Ongoing and Recent Capital Projects

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

Anticipated Capital Requests

The total 6-year capital request is \$23.5million.

See page 51 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.

Funding is essentially unchanged from 2017.

Program	2018 Proposed	2017 Budget	Increase (decrease)	% Chng.	6-year Request
Environmental Services Facility Modifications	\$0	\$0	\$0	0%	\$0
Purchase & Install Brine Makers	\$0	\$0	\$0	0%	\$0
Industrial Road Relocation	\$0	\$0	\$0	0%	\$0
MRF Equipment Repair	\$0	\$0	\$0	0%	\$4,712,483
Sub Total – Sanitation	\$0	\$0	\$0	0%	\$4,712,483
Major Capital Equipment	\$6,300,000	\$6,385,000	(\$85,000)	-1%	\$86,795,000
Sub Total - Fleet	\$6,300,000	\$6,385,000	(\$85,000)	-1%	\$86,795,000
Concealed Irrigation & General Landscaping	\$350,000	\$500,000	(\$150,000)	-30%	\$3,000,000
Tree Planting and Production	\$1,450,000	\$1,450,000	\$0	0%	\$9,590,000
Emerald Ash Borer Readiness & Response	\$1,000,000	\$1,000,000	\$0	0%	\$6,000,000
Stump Removal	\$500,000	\$500,000	\$0	0%	\$2,300,000
Hazardous Tree Removal	\$75,000	\$75,000	\$0	0%	\$2,598,352
Sub Total – Forestry	\$3,375,000	\$3,525,000	(\$150,000)	-4%	\$23,488,352
Total – DPW Operations	\$9,675,000	\$9,910,000	(\$235,000)	-2%	\$114,995,835

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

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 4,284 trees. The 2018 Proposed Budget provides \$1,450,000 for this program, a decrease of \$140,000 (9%) from the requested amount.

Stump Removal, \$500,000

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. The department generates approximately 3,600 new stumps each year. . The 2018 Proposed Budget includes \$500,000 for stumping activities, the same amount as in 2017. This program is funded by the Storm Water Management Fee.

Concealed Irrigation and General Landscaping, \$350,000

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. This program is funded by the Storm Water Management Fee in 2018.

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 31,500 are street trees in the public right-of-way. Since



2009, nearly \$8 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.

	2018	2017	2016	2015	2014	2013	2012	2011
Dead or Diseased	3,794	3,843	4,763	4,472	3,934	3,108	3,845	3,244
Related to Paving	490	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	4,284	4,405	6,179	6,041	4,211	3,704	4,962	5,905

Tree Planting Request Summary by Request Year

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 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 ¼ sections throughout the City have signs of EAB activity. Approximately 800 trees on 400 properties were identified.

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

The department typically cites just over 400 properties annually for all types of hazardous trees. Citations are expected to increase to almost 5,000 in 2020 before returning to more historic levels. The department will need increased inspection and monitoring capacity.

The department currently has the capacity to oversee hazard tree code enforcement activities on approximately 650 properties annually. The average per property cost for tree removal is \$666, although, the cost may vary considerably depending on the size, quantity and location of infested trees.

26 DPW- Infrastructure

\$89,018,000

Proposed Capital Funding (including grant & aid)

\$88,698,068

Requested Capital Funding (including grant & aid)

\$12,119,000

Decrease from 2017 Budget

-32%

Percent Change from 2017 Budget

\$618,909,451

Six-Year Capital Request

Capital Programs – Core Infrastructure		Capital Programs – Buildings and Fac	ilities
Major Bridge Program Bridge Program - Local Major Streets Local Streets High Impact Paving New Street Construction Alley Reconstruction Sidewalk Replacement Street Lighting Traffic Control Facilities Underground Conduit Electrical MH Reconstruct Lead Service Line Replacement	\$5,938,000 \$5,900,000 \$36,305,000 \$6,700,000 \$7,400,000 \$400,000 \$900,000 \$1,500,000 \$1,500,000 \$2,200,000 \$600,000 \$400,000 \$2,500,000	City Hall Foundation Environmental Remediation Program ADA Compliance Program Facilities Exterior Program Facilities Systems Program Space Planning and Engineering MKE Plays North Point Lake Tower Total	\$9,000,000 \$150,000 \$2,000,000 \$600,000 \$825,000 \$400,000 \$250,000 \$50,000 \$13,275,000
Total	\$75,743,000		
Unfunded Capital Requests		Six-Year Request	
There are no unfunded capital request	s.	Buildings & Facilities \$59	.8 million <u>1 million</u> .9 million

Program	2018 Proposed	2017 Budget	Increase (decrease)	% Chng.	6-year Request
Major Bridges ¹	\$5,938,000	\$11,281,000	(\$5,343,000)	-47%	\$31,463,000
Local Bridges	\$5,900,000	\$5,475,000	\$425,000	8%	\$49,625,000
Major Streets ¹	\$36,305,000	\$38,206,000	(\$1,901,000)	-5%	\$243,016,451
Local Streets ²	\$6,700,000	\$8,000,000	(\$1,300,000)	-16%	\$92,200,000
High Impact Street	\$7,400,000	\$8,000,000	(\$600,000)	-8%	\$16,200,000
New Streets - Developer	\$400,000	\$0	\$400,000		\$800,000
Alley Program ²	\$900,000	\$600,000	\$300,000	50%	\$10,000,000
Sidewalk Program ²	\$1,500,000	\$1,500,000	\$0	0%	\$11,150,000
Street Lighting Program	\$5,000,000	\$7,000,000	(\$2,000,000)	-29%	\$67,000,000
Traffic Control Program	\$2,200,000	\$2,600,000	(\$400,000)	-15%	\$20,400,000
Underground Conduit & Manhole Program	\$600,000	\$0	\$600,000		\$12,900,000
Underground Electrical Manhole Reconstruction Program	\$400,000	\$800,000	(\$400,000)	-50%	\$5,100,000
Lead Service Line Replacement	\$2,500,000	\$600,000	\$1,900,000	317%	
Sub Total – Core Infrastructure	\$75,743,000	\$84,062,000	(\$8,319,000)	-10%	\$559,854,451

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

Capital Program Detail – DPW Infrastructure Services (cont'd)							
Program	2018 Proposed	2017 Budget	Increase (decrease)	% Chng.	6-year Request		
City Hall Foundation	\$9,000,000	\$13,000,000	(\$4,000,000)	-31%	\$32,000,000		
ADA Compliance program	\$2,000,000	\$1,800,000	\$200,000	11%	\$3,700,000		
Environmental Remediation	\$150,000	\$150,000	\$0	0%	\$1,300,000		
Facilities Exterior	\$600,000	\$600,000	\$0	0%	\$7,350,000		
Facilities Systems	\$825,000	\$875,000	(\$50,000)	-6%	\$8,425,000		
Space Planning Alterations& Engineering	\$400,000	\$400,000	\$0	0%	\$2,900,000		
MKE Plays	\$250,000	\$250,000	\$0	0%	\$0		
Recreational Facilities	\$0	\$0	\$0	0%	\$3,000,000		
Northpoint Lake Tower	\$50,000	\$0	\$50,000		\$380,000		
Energy Efficiency & Renewable Energy	\$0	\$0	\$0	0%			
Hartung Park Landfill Closure	\$0	\$0	\$0	0%			
Sub Total – Buildings & Facilities	\$13,275,000	\$17,075,000	(\$3,800,000)	-22%	\$59,055,000		
Total – DPW Infrastructure Services	\$89,018,000	\$101,137,000	(\$12,119,000)	-32%	\$618,909,451		

Core Infrastructure Programs

The 2018 Proposed Budget includes \$75.7 million in funding for capital programs relating to bridges, streets, alleys, street lighting, traffic control, underground conduit and electrical manholes, a decrease of \$8.3 million (10%) from the 2017 Budget.

The largest decrease is in the Major Bridge Program, where grant funding is \$5.3 million less than in 2017. Grant funding in the Major Street program is also less than in 2017, by nearly \$2 million.

Combined City funding for the Local Street program and the High Impact Program is nearly \$2 million less than in 2017. However, Local Road Improvement Funds (LRIP) which are available from the State in evennumbered years will make the total funding available for local street paving projects approximately the same as 2017.



The total capital investment in core infrastructure programs can vary significantly from year to year because of fluctuations in the amount of grant and aid funding available for the Major Bridge and the Major Street programs. Total grant funding for 2018 is \$8.1 million less than in 2017. Although grant funding decreased every year from 2013 through 2016, the trend in total grant funding since 2000 has been upward. There has been a significant shift away from bridge grants. Between 2001 and 2011, on average, nearly 25% of the grant and aid funding the City received each year was for bridges. Since 2012, the average share of grant and aid funding for bridges has fallen to just 9%.

The 2018 Proposed Budget adds a new capital program "Lead Service Line Replacement". The account will provide a funding mechanism for the replacement of lead water service laterals. The replacement of the service laterals will take place under contracts administered by the Milwaukee Water Works.

Major Bridge Program, \$5,938,000 & Local Bridge Program, \$5,900,000

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. Grant funding for bridges has decreased significantly in recent years. Between 2001 and 2011, the average annual bridge aid was just over \$11.6 million. Since 2012, average annual bridge aid has fallen to \$4.2 million

Anticipated grant funding for bridges in 2018 is \$5.4 million, a decrease of \$4.5 million (45%) from 2017.

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 2016, there were 6. This represents 3.8% of the City's rated bridges.

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. The percentage of bridges in Milwaukee that are classified as structurally deficient is greater than the state-wide average. Unless structural changes in transportation funding are made at the state level, grant and aid funding will likely remain difficult to obtain, and the Local Bridge program will require significant local funding.

Bridge Sufficiency Ratings





\$30,000,000

\$25,000,000

\$20,000,000

\$15,000,000

\$10,000,000

\$5,000,000

\$-

2001

2005

2009

■ Bridge Grants ■ City Match ■ Local Bridge

2013

2017



Major Street Program, \$36,305,000

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.

In even-numbered years, Local Road Improvement Program (LRIP) funds are

available from the state. These funds appear in the Budget in the Major Street Program, but they are available to improve locals. LRIP funds are expected to total approximately \$2 million in 2018.

Local Street Program, \$6,700,000

Beginning in 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. The 2018 Proposed Budget contains a significant amount of funding in the High Impact program.

When it was first implemented, the High Impact program was used almost exclusively on arterial and collector streets. In 2018, the construction methods used in the High Impact program on arterial streets will be used on



Local Streets - Budgeted Funding

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 Common Council passed an ordinance (Common Council 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 2018 Proposed Budget includes \$6.7 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 2018 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 340,000 vehicles registered in the City. A \$5 increase to the fee would generate nearly \$1.7 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. In 2016, Milwaukee County approved a \$30 vehicle registration fee



High Impact Streets - Budgeted Funding

which was implemented in 2017. The County Executive has proposed raising the fee to \$60 for 2018.

High Impact Street Paving Program, \$7,400,000

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 almost 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. In accordance with the settlement agreement that the City signed with the United States Department of Justice, pedestrain ramps on High Impact projects will be modified 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 scaling back traditional reconstruction projects and completing a much larger number of overlay projects. The approach was expected to last for 3 years. The 2018 Proposed Budget still contains a significant amount of funding for this program.

When it was implemented, the High Impact approach was used almost exclusively on arterials and collectors. The department has begun using the approach on local streets as well. The department has received positive feedback from property and business owners where High Impact projects have been completed. The department has included bike lanes on several High Impact projects.

New Street Construction – Developer-Funded, \$400,000

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.

Alley Program, \$900,000

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.



Alley Reconstruction- Budgeted Funding constructing alleys averages \$700,000 per mile. Maintaining a 50-year replacement cycle will take approximately \$2.5 million per year. The department is installing more permable pavements in alleys. The marginal cost of the permeable is offset by grant funding.

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. On November 22, 2016, Common Council File 160916 increased the recovery rate to 50%. The alley assessment rate for 2017 is \$45 per frontage foot.

resulting in a replacement cycle of nearly 200 years. The current cost of

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.



Sidewalk Replacement - Budgeted Funding

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 level of funding allows the City to complete work at approximately 100 properties each year.

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, \$5,000,000

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. Historically, about half of the department's requested budget for street-lighting 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 33% 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. 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.

In 2018, the department will focus more on capital projects which will reduce the number of outages and failures, and remove the overhead lighting associated with paving projects in a more timely manner.

"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 streetlighting 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 - Budgeted Funding

Traffic Control, \$2,200,000

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 for yellow, red and white signs in 2018 or 2019.

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.

The department typically installs about 2 new traffic signals each year. The department is using different types of non-intrusive detection at intersections. The newer technologies do not require cuts in the pavement are better able to properly detect motorcycles and bicycles to ensure that the signals operate properly.

Underground Conduit & Manhole Program, \$600,000

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



Underground Conduit - Budgeted Funding

Electrical MH Reconstruction -Budgeted Funding



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 did not receive any funding in 2017. Between 2011 and 2016, this program received \$990,000 in funding on average.

Underground Electrical Manhole Reconstruction Program, \$400,000

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. As of December 2015, 320 manholes had 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.

Lead Service Line Replacements, \$2,500,000

This is a new capital account for 2018. The account will provide a funding mechanism for the replacement the lead water services. Work will be done by contractors. The contracts will be administered by the Milwaukee Water Works.

Building & Facility Programs

The Proposed Budget includes 8 capital improvement items for City building and facilities programs totaling \$13.3 million, a decrease of \$3.8 million (22%) from the 2017 Budget. The decrease is almost entirely related to the City Hall foundation project which requires significantly less funding than in previous years. Most capital programs were funded essentially as requested. The ADA Compliance Program received \$200,000 more than was requested and the North Point Lake Tower request was reduced by \$330,000.

The 2018 Proposed Budget includes funding from the Sewer Maintenance Fund in the Environmental Remediation program (\$50,000). The remainder of DPW Buildings and Facility's capital programs are financed with debt in 2018.

City Hall Foundation & Hollow Walk, \$9,000,000

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). It included the stabilization of the northwest corner of the building and the relocation of the basement mechanical room. Funding in 2017 (\$13,000,000) allowed the work to continue on the north end of the building. Expenditures in 2015 and 2016 were \$1.13 million and \$7.7 million, respectively.

DPW made a presentation describing the new foundation and the passive load transfer system. It can be found in Common Council File Number 160808.

ADA Compliance Program, \$2,000,000

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 2018 is an increase of \$200,000 (11%) from the 2017 Budget. Expenditures in 2016 were \$213,151.

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 Number 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.

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, \$6.1 million has been budgeted for this program. The 6-year capital request is \$1.3 million. The 2018 Proposed Budget includes \$50,000 of revenue from the Sewer Maintenance Fund. Expenditures in 2016 were \$155,748.

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 2018 is unchanged from the 2017 Budget. Since 2000, \$16.1 million has been budgeted for this program. The 6-year capital request is \$7.35 million. Funding for the account has been reduced, in part, to accommodate funding for the City Hall Foundation project. Expenditures in 2016 were \$1.4 million.

Facilities Systems Program, \$825,000

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 2018 Proposed Budget includes \$825,000 a decrease of \$50,000 (6%) from the 2017 Budget. Since 2000, \$33.7 million has been budgeted for this program. The 6-year capital request is \$8.4 million. Funding for 2016 and 2017 was reduced in part to accommodate funding for the City

Hall Foundation project. Funding in 2018 is \$100,000 less than requested. Funding in 2017 included \$75,000 of revenue from the Sewer Maintenance Fund. There is no revenue funding in 2018. Expenditures in 2016 were \$868,827.

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 2018 is unchanged from the 2017 Budget. Since 2000, \$3.4 million has been budgeted for this program. The 6-year capital request is \$2.9 million. This program has been funded with cash in the past, but in 2017 and 2018 it is financed with general obligation debt. Expenditures in 2016 were \$256,409.

MKE Plays, \$250,000

The 2016 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.

Expenditures from the MKE Plays capital account were \$132,601 in 2016. An additional \$542,000 was expended in 2016 from a contribution account set up for the MKE Plays initiative.

The City recently completed its Comprehensive Outdoor Recreation Plan for 2016-2021. The plan can be found in Common Council File 160675.

North Point Lake Tower, 50,000

DPW assessed the condition of the North Point Lake Tower structure in 2013 and determined that repairs were necessary. This project was first funded in 2015 (\$340,000). The project was not funded in 2016 or 2017. Interior and exterior repairs were made. Expenditures in 2015 were 53,782. The funding requested for 2018 (\$380,000) would complete the exterior repairs.

27 DPW- Sewers

\$37,514,000

Proposed Capital Funding

\$41,514,000

Requested Capital Funding

\$1,200,000

Decrease from 2017 Budget

-3%

Percent Change from 2017 Budget

\$246,207,774

Six-Year Capital Request

Capital	Programs	and	Projects	,
---------	----------	-----	----------	---

Total	\$37,514,100
River Channel Maintenance	\$200,000
I&I Reduction Projects	\$6,650,000
Pump Facility Projects	\$500,000
Water Quality Projects (TMDL)	\$2,164,000
Sewer Relief & Relay Program	\$28,000,000

Unfunded Capital Requests

There are no unfunded capital requests.

Ongoing and Recent Capital Projects

Flood Mitigation Program Private Property Lateral Lining Demonstrations

Anticipated Capital Requests

The total 6-year request is \$246.2 million.

Capital funding for the Sewer Maintenance Fund decreased by \$1,200,000 million (3%) from 2017. The reduction is largely related to a reduction in the Flood Mitigation Program.

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	2018 Proposed	2017 Budget	Increase (decrease)	% Chng.	6-year Request
Sewer Relief & Relay Program	\$28,000,000	\$28,000,000	\$0	0%	\$195,000,000
Water Quality for TMDLs	\$2,164,000	\$1,664,000	\$500,000	30%	\$12,057,774
Pump Facility Projects	\$500,000	\$700,000	(\$200,000)	-28%	\$3,000,000
I&I Reduction Projects	\$6,650,000	\$6,650,000	\$0	0%	\$34,950,000
Flood Mitigation	\$0	\$1,500,000	(\$1,500,000)	-100%	\$0
River Channel Maintenance	\$200,000	\$200,000	\$0	0%	\$1,200,000
Total	\$37,514,000	\$38,714,000	(\$1,200,000)	-3%	\$246,207,774

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.

The City anticipates issuing \$32.5 million of debt to support improvements to the sewer system; \$26 million for the sewer main program, \$5 million for the I&I program, and \$1.5 million for water quality projects. 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

Sewer Mains - Budgeted Funding


In 2014, there were just over 200 miles of sewers that are more than 90 years old. Even though the recent level of funding for sewer main replacement and rehabilitation has been close to what should be required to maintain the industry standard 90-year replacement cycle, the number of sewers that have exceeded their useful lives has grown to almost 350 miles. By 2026 the department estimates that nearly 20% of the sewer system could be over 90 years old.

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. If 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. 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 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, \$500,000

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



Pump Facilities - Budgeted Funding

homes and businesses. Pumps are located in areas that historically had sewer backup occurrences during periods of heavy rain.

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.



Inflow & Infiltration - Budgeted Funding

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.

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).

Funding for this program began in 2008. Since that time, \$6.75 million has been budgeted. Expenditures for 2016 totaled \$250,816.

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, \$77.1 million in funding has been budgeted, including \$14.75 million in grant funding. Anticipated grant funding for 2018 is \$1.65 million. The amount of grant funding has not changed since 2015. All work on private property done to date has been paid for with grant funding from MMSD. There is no provision in the 2018 Proposed Budget to assess property owners for work done in conjunction with this program.

Expenditures in 2016 were \$8.9 million.

Water Quality for Total Maximum Daily Loads (TMDL), \$2,164,000 This program has provided funding to construct various Best Management Practices (BMPs), such as green streets, rain gardens, wet detention ponds, bioinfiltration 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 2017, the City has allocated over \$11.36 million for water quality projects. Expenditures in 2016 were \$1.1 million.

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

Total Maximum Daily Load Regulations

New water quality standards 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.

intended for routine maintenance or mowing activities. Budgeted funding was \$400,000 in 2012, and \$160,000 in 2013. Since 2014 this account has received \$200,000 each year. Expenditures in 2016 were \$104,000.

Other Capital Projects

Flood Mitigation

This account was created in 2015 (\$2,750,000) 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 (\$4,300,000) for a flood mitigation project in Copernicus Park (20th & Grange). The memorandum of understanding can be found in Common Council File Number 161598. The 2017 Budget provided funding (\$1,500,000) for the completion of the projects. No funding was requested for 2018. Expenditures from this account in 2016 were \$7,585.

28 DPW- Parking

\$3,424,500

Proposed Capital Funding

\$6,240,997

Requested Capital Funding

\$84,500

Increase from 2017 Budget

3%

Percent Change from 2017 Budget

\$22,052,497

Six-Year Capital Request

Capital	Programs	and	Projects
---------	----------	-----	----------

Unfunded Capital Requests

Parking Facility Maintenance

123 N. 25th St. Relocation

License Plate Recognition System

Revenue Control & Access Equipment

MacArthur Square Parking Structure

Total	\$3,424,500
Single-space Credit Card Meters	<u>\$1,225,000</u>
Repave Tow Lots and Surface Lots	\$50,000
Electrical Upgrade	\$67,000
Repairs	\$2,082,500

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 2018 would allow the department to fully equip the remainder of its vehicle and expand enforcement to include time violations.

Anticipated Capital Requests

The total 6-year capital request is \$22.1 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. Nearly 25% of the department's 6-year capital request is for on and off street revenue collection equipment.

\$50.000

\$666,497

\$100,000

\$2,000,000

Capital Program	Detail -	DPW Parking
------------------------	----------	--------------------

Program	2018 Proposed	2017 Budget	Increase (decrease)	% Chng.	6-year Request
Parking Facilities Maintenance	\$0	\$100,000	(\$100,000)	-100%	\$800,000
Tow Lot / Surface Lot Paving	\$50,000	\$130,000	(\$80,000)	-62%	\$300,000
Single Space Credit Card Mechanisms	\$1,225,000	\$1,000,000	\$225,000	23%	\$3,225,000
MacArthur Sq. Repairs	\$2,082,500	\$1,610,000	\$472,500	29%	\$6,219,000
MacArthur Sq. Elec Upgrade	\$67,000	\$0	\$67,000		\$1,367,000
2nd & Plankinton Structure	\$0	\$500,000	(\$500,000)	-100%	\$832,000
1000 N Water Street	\$0	\$0	\$0	0%	\$1,023,000
Milwaukee/Michigan Structure	\$0	\$0	\$0	0%	\$2,020,000
4th & Highland Structure	\$0	\$0	\$0	0%	\$0
Revenue Control and Access Equipment	\$0	\$0	\$0	0%	\$2,000,000
License Plate Recognition	\$0	\$0	\$0	0%	\$666,497
123N. 25 th St Relocation	\$0	\$0	\$0	0%	\$3,600,000
Total	\$3,424,500	\$3,340,000	\$84,500	3%	\$22,052,497

Single-space Credit Card Meter Mechanisms, \$1,225,000

2017 was the third year of funding for a single-space credit card parking meter installation project. The project will take place 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. Since 2015, \$2.3 million has been budgeted for this project. The department issued an RFP in January 2017 for single space smart meters. A meter trial is underway. The existing single space meters were last replaced in 1997 and had a useful life of 15 years.

MacArthur Square Parking Structure Repairs, \$2,082,500

Funding was provided in 2016 to make concrete repairs and paint the east and west sides of the lower level. Funding in 2017 was provided to begin the replacement of the Pioneer Village slab. In June 2017, the City and the County entered

into an intergovernmental cooperation agreement to facilitate repairs. The agreement is available in Common Council File Number 170244. In addition to the funding proposed for 2018, the department anticipates needing \$4.14 million over the next 6 years for various repairs and maintenance. That estimate does not include the upgrade of the structure's electrical system, which is expected to cost \$1.4 million.

MacArthur Square Parking Structure Electrical Upgrade, \$67,000 The electrical system at the MacArthur Square parking structure is past its useful life. It requires significant, disruptive maintenance and is expensive to operate. Funding in 2018 will provide for system design. The new system would be installed in 2019. The total project cost is expected to be \$1.4 million.

Repave Tow Lot and Surface Lots, \$50,000

This capital account was created in 2014 to repave the Tow Lot and over 40 other surface parking lots the City owns. The Tow Lot was paved in phases to minimize operational disruptions. Funding in 2016 was used for the final phase of the Tow Lot. Since 2014, \$425,000 has been budgeted for this account. Expenditures is 2016 were \$22,800.

Unfunded Capital Requests

Parking Facilities Maintenance

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. **No funding is proposed in 2018 for this program.**

123 N. 25th Street Relocations

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.

The department requested \$100,000 for 2018 to begin the relocation of the tire shop, parking dispatch and parking enforcement operations to a different facility. The 6-year request for the project is \$3.6 million. The project was first requested in 2014. No capital funding has been provided. **No funding is proposed in 2018 for this project.**

The 123 Building is a 2 story light industrial facility. It contains offices, the tire repair ship and storage space. The structure was developed in 19+88 and renovated in 2001 to accommodate parking operations. The City leases the facility from MMSD. The terms of the lease may require the City to make capital investments at the facility.

License Plate Recognition System

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. No additional capital funding has been provided. Funding in 2018 would equip the remaining 12 parking checker jeeps in the department's fleet. **No funding is proposed in 2018 for this project.**

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

The department requested \$2 million to begin replacing parking structure revenue and access control equipment. Most of the equipment was installed in 2004 and had 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. **No funding is proposed in 2018 for this project.**

Other Capital Programs

1000 N. Water Street Parking Structure Repairs

The department anticipates needing just over \$1 million over the next 6 years for various repairs and maintenance. Work is tentatively scheduled for 2020, 2021 and 2022.

Milwaukee/Michigan Parking Structure Repairs

The department anticipates needing just over \$2 million over the next 6 years for various repairs and maintenance. Work is tentatively scheduled for 2021, 2022 and 2023.

2nd & Plankinton Structure Repairs

The department anticipates needing approximately \$832,000 over the next 6 years for various repairs and maintenance. Work is tentatively scheduled for 2021 and 2022.

Fourth & Highland Parking Structure Repairs

This parking structure has been demolished and will be replaced in conjunction with the new arena project.

29 DPW- Water

		C
\$32,780,000	1	L
Proposed Capital Funding		
	I	
\$33,070,000		-
+,,	1	-
Requested Capital Funding	 	
	1	
\$3,570,000		
Increase from 2017 Budget		ſ
	l	
12%	7	ſ
cent Change from 2017 Budget		
229.980.000		

Six-Year Capital Request

Per

Capital Programs and Projects		
Distribution System	\$24,810,000	
Developer Agreement	\$5,000	
Assessable Water Main	\$5,000	
Linnwood Building Improvements	\$275,000	
Linnwood Treatment Improvements	\$1,550,000	
Howard Building Improvements	\$375,000	
Howard Treatment Improvements	\$800,000	
Pump Facilities Improvements	\$2,350,000	
Storage Facilities Improvements	\$2,500,000	
Meter Shop Improvements	\$10,000	
Capital Projects Contingencies	<u>\$2,000,000</u>	
Total	\$32,780,000	

Unfunded Capital Requests

There are no unfunded capital requests.

00	Backup Power Generation - This project is complete.
0	
0	
0	
0	
0	
0	
0	
0	
00	
0	
00	
	Anticipated Capital Requests

Ongoing and Recent Capital Projects

Anticipated Capital Requests

Using information from recent projects, the department will develop a new capital request for 2019 and beyond that addresses water main replacements with lead service lines.

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 18 miles of water mains 2018, 18 miles in 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 approximately 2.5% per year.

Capital Program Detail - DPW Water

Program	2018 Proposed	2017 Budget	Increase (decrease)	% Chng.	6-year Request
Water Main Program	\$24,820,000	\$22,760,000	\$2,060,000	9%	\$181,260,000
Linnwood Building Improvements	\$275,000	\$750,000	(\$475,000)	-63%	\$3,885,000
Linnwood Treatment Improvements	\$1,550,000	\$500,000	\$1,050,000	210%	\$12,905,000
Howard Building Improvements	\$375,000	\$150,000	\$225,000	150%	\$1,395,000
Howard Treatment Improvements	\$800,000	\$450,000	\$350,000	78%	\$5 <i>,</i> 550,000
Pump Facilities Improvements	\$2,350,000	\$125,000	\$2,225,000	1,780%	\$20,250,000
Storage Facilities Improvements	\$2,500,000	\$2,300,000	\$200,000	9%	\$4,300,000
Meter Shop Improvements	\$10,000	\$175,000	(\$165,000)	-94%	\$435,000
Capital Project Contingencies	\$100,000	\$2,000,000	(\$1,900,000)	-95%	
Total	\$32,780,000	\$29,210,000	\$3,570,000	12%	\$229,980,000

Water Main Program, \$24,810,000

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 2017

Annual Water Main Breaks



is projected to be lower than in 2016. Although the number of main breaks can be highly variable from year to year, the number of main breaks per 100 miles of water main has been trending downward for at least 20 years.

Linnwood Plant Building Improvements, \$275,000

Since 2001, this program has received \$10.7 million in funding. Funding has been highly variable. Projects planned for 2018 include the replacement of a roof and a sanitary sewer line and upgrades to the Water Quality lab to support new equipment and technologies.

The department anticipates requesting additional funding each year from 2019 through 2022. The 6-year capital request for this program is \$3.9 million. Expenditures in 2015 and 2016 were \$470,000 and \$130,340, respectively.



Water Mains - Budgeted Funding

Linnwood Plant Treatment Improvements, \$1,550,000

Since 2001, \$11.6 million has been budgeted for this program. Projects planned for 2018 include the rehabilitation or replacement of wash water discharge piping, the continuation of the motor control replacement project, roof replacement, and the installation of a pilot plant treatment model.

The department anticipates requesting additional funding each year from 2019 through 2023. The 6-year capital request for this program is \$12.9 million. Expenditures in 2015 and 2016 were \$54,900 and \$757,993, respectively.

Howard Plant Building Improvements, \$375,000

Since 2001, this program has received \$4.25 million in funding. Funding in 2018 will be used for roof replacements.

The department anticipates requesting additional funding each year from 2019 through 2022. The 6-year capital request for this program is \$1.4 million. Expenditures in 2015 and 2016

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. were \$756,900 and \$218,000, respectively.

Howard Plant Treatment Improvements, \$800,000 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 \$4.55 million in funding. Projects planned for 2018 include an upgrade of the flocculator system and upgrades to the Water Quality lab to support new equipment and technologies. Funding in 2014 was allocated to replace dielectric tubes in one of the plant's ozone generators. The project was expected to add between 5 and 10 years to the life of the generator.

The department anticipates requesting additional funding almost every year from 2019 through 2023. The 6-year capital request for this program is \$5.6 million. Expenditures in 2016 were \$27,000.

Pump Facilities Improvements, \$2,350,000

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 \$23.4 million in funding. Annual funding is highly variable.

The PSC's recent requirement that MWW install a minimum amount of water mains 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. Funding in 2018 will provide for the inspection and repair of the Northpoint tunnel which carries water from the Linnwood treatment plant to the Northpoint pumping station. The tunnel was last inspected in 1963.

In 2012, \$2,250,000 was budgeted 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 2019 through 2023. The 6-year capital request is \$20.25 million. Expenditures in 2015 and 2016 were \$2.4 million and \$311,361, respectively.



Storage Facilities Improvements, \$2,500,000

This program provides funding for the evaluation, elimination or enhancement of the system's water storage capacity. Since 2001, this program has received \$19.0 million in funding. Funding in 2018 will be used for the roof of the north reservoir at the Linnwood treatment plant. Funding in 2015 and 2016 was used to paint the Lincoln water tanks.

The department anticipates requesting additional funding in 2020. The 6-year capital request is \$4.3 million. Expenditures in 2015 and 2016 were \$2.9 million and \$954,402, respectively.

Meter Shop Improvements, \$10,000

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, \$2.9 million has been budgeted. The recent requests for this program have been intermittent. In 2019, the department plans to replace the perimeter security fence and gate. Funding in 2018 will be used to design the project. No additional capital funding was requested after 2019. The 6-year capital request is \$4.3 million. Expenditures in 2015 and 2016 were \$130,500 and \$30,962, respectively.

30 Library

\$4,695,000 Proposed Capital Funding

\$5,345,000

Requested Capital Funding

\$1,851,000

Increase from 2017 Budget

65.1%

Percent Change from 2017 Budget

\$27,040,050

Six-Year Capital Request

Capital Programs and Projects		Ongoing and Recent Capital Projects
Central Library Improvements Branch Library - New Construction Total	\$745,000 <u>\$3,950,000</u> \$4,695,000	Villard Square –opened in 2011East Library –opened in 2014Express @ Silver Springopened in 2014Tippecanoe –renovated in 2015-2016Mitchell –opening October 2017
Unfunded Capital Requests		Anticipated Capital Requests
Neighborhood Library Improvements	\$200,000	The total 6-year request is \$27.0 million.

The library system has significant amounts of deferred maintenance at neighborhood libraries, 4 of which had 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	2018 Proposed	2017 Budget	Increase (decrease)	% Chng.	6-year Request
Central Library Improvements Fund	\$745,000	\$894,000	(\$149,000)	-17%	\$14,490,050
Branch Library – New Construction	\$3,950,000	\$1,600,000	\$2,350,000	147%	\$9,200,000
Neighborhood Library Improvements Fund	\$0	\$350,000	(\$350,000)	-100%	\$3,350,000
Total	\$4,695,000	\$2,844,000	\$1,851,000	65%	\$27,040,050

Capital Program Detail - Library

Central Library Improvements Fund, \$750,000

Since 2000, the City has invested over \$21.4 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).



Library Construction - Budgeted Funding

The Library requested \$1.3 million for 2018, \$700,000 of which was for the replacement of three air handling units. Funding proposed for 2018 will provide for on-going repairs of mosaic tile and scagliola, as well as carpet and lighting improvements.

The department anticipates requesting additional funding each year from 2019 through 2023. The 6-year capital request is \$14.5 million. Expenditures in 2015 and 2016 were \$2.1 million and \$705,000, respectively.

Branch Library, New construction, \$3,950,000

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 3 mixed-use libraries, Villard Square East Library and Mitchell Street, which replaced the Forest Home library. The grand opening of the new library at 906-10 W. Mitchell Street is scheduled for early October 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.

The 2018 Proposed Budget continues funding for a project manager to oversee the development of the new libraries. It is anticipated that funding will be needed for approximately 6 years. The position will be 90% capital-funded. The department anticipates requesting additional funding in 2019 and 2020. The 6-year capital request is \$9.2 million. Expenditures for the construction of new libraries in 2015 and 2016 were \$1.6 million and \$511,000, respectively.

Unfunded Requests

Neighborhood Library Improvements Fund

With the exception of funding 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. However, the remaining branch libraries continue to age and will require funding to replace HVAC and building control systems as well as interior improvements.

The Library requested \$200,000 for 2018. The department anticipates requesting additional funding each year from 2019 through 2023. The 6-year capital request is \$3.35 million. Expenditures from this account in 2015 and 2016 were \$3.2 million and \$173,000, respectively.



Neighborhood Library Improvements Budgeted Funding

(2017)

(2016)

(2016)

(2015)

Ongoing and Recent Capital Projects

31 Department of City Development

Capital Programs and Projects

\$52,920,000 Proposed Capital Funding \$47,485,000

Requested Capital Funding

\$597,000

Decrease from 2017 Budget

-1%

Percent Change from 2017 Budget

\$211,885,000

Six-Year Capital Request

Tax Incremental Districts	\$49,470,000	Century City Site Improvements
Advanced Planning Fund	\$150,000	Art & Resource Buildings
Housing Infrastructure Preservation	\$100,000	Vacant Lot Loan Program
<i>in rem</i> Property	\$600,000	Rental Housing Rehab Program
Commercial in rem Property	\$200,000	Business Improvement Districts
STRONG Homes Loan Program	\$1,150,000	Healthy Neighborhoods
Commercial Investment Program	\$1,000,000	
Brownfields	\$250,000	
Total	\$52,920,000	
Unfunded Capital Requests		Anticipated Capital Requests
There are no unfunded capital reques	ts.	The 6 year request is \$211.9 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.

Program	2018 2017 Proposed Budget		Increase (decrease)	% Chng.	6-year Request	
Tax Incremental Districts	\$49,470,000	\$47,500,000	\$1,970,000	4%	\$186,000,000	
Advanced Planning Fund	\$150,000	\$150,000	\$0	0%	\$900,000	
Housing Infrastructure Preservation Fund	\$100,000	\$450,000	(\$350,000)	-78%	\$2,050,000	
In Rem Property Program	\$600,000	\$1,550,000	(\$950,000)	-61%	\$8,385,000	
Commercial In Rem Property Program	\$200,000	\$250,000	(\$50,000)	-20%	\$1,450,000	
STRONG Homes Loan Program	\$1,150,000	\$1,167,000	(\$17,000)	-1%	\$3,900,000	
Commercial Investment Program	\$1,000,000	\$1,400,000	(\$400,000)	-29%	\$6,000,000	
Brownfield Program	\$250,000	\$500,000	(\$250,000)	-50%	\$2,750,000	
Business Improvement Districts	\$0	\$150,000	(\$150,000)	-100%	\$450,000	
Century City Site Improvements	\$0	\$400,000	(\$400,000)	-100%	\$0	
Total	\$52,920,000	\$53,517,000	(\$597,000)	-1%	\$211,885,000	

Capital Program Detail - Dept. of City Development

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 nearly \$160,000 per year. This program is not supported by debt, so there is no carryover borrowing authority.

The department anticipates requesting additional funding in 2019, 2021 and 2023. Expenditures in 2015 and 2016 were \$245,800 and \$163,400, respectively.

Tax Incremental Districts (TID), \$49,470,000

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

Since 2000, \$581.6 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 \$401.2 million, for an average of \$23.6 million per year.

An ordinance change in September 2013 (Common Council File Number 130460) 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 CC File # Location Year 170787 #92 Sherman Phoenix 2017 170504 #91 Park Place 2017 15th & North 170425 #90 2017 160397 #89 Garfield & North 2016 4th & Wisconsin 2016 160297 #88 160112 #87 Welford Sanders Loft 2016 151788 #86 Germania Building 2016 6th & National 150654 #85 2015 150383 #84 McKinley & Juneau 2015 Broadway & Michigan 2015 150184 #83

Housing Infrastructure Preservation Fund (HIP), \$100,000

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. The fund can also be used for mixed-use properties. (Common Council File 140397)

Since 2010, this program has received \$4.1 million. Expenditures through 2016 totaled \$3.5 million.

Through September 11, 2017, 42 properties have been preserved. Twenty three properties have been sold. Four properties are under construction.

- 2813 West Kilbourn Avenue
- 2430 North 2nd Street
- 2833 West State Street
- 2361 North 4th Street

In Rem Property Program, \$600,000

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. As of September 2017, the City owned just over 1,100 improved properties.

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. Programs supported by the *In Rem* Property Program account include the Challenge Grant, the ACTS Housing Partnership, the Lease to Own (T3OP) program, Home Buyer's Assistance, and the RICH program.

A portion of this program (\$85,000) will be funded with revenue from tax incremental districts. Since 2011, a total of \$8.38 million has been provided. Expenditures through the end of 2016 were \$4.62 million.

Strong Neighborhoods Plan Capital Funding Summary

Dept.	Account	2017	2018
DNS	Code Compliance Loans	\$800,000	\$800,000
DNS	Concentrated Blight Elimination	\$2,100,000	\$1,200,000
DCD	<i>In rem</i> Property	\$1,550,000	\$600,000
DCD	STRONG Loans	\$1,167,000	\$1,150,000
DCD	Housing Infrastructure Preservation	\$450,000	\$100,000
DCD	Commercial in rem	\$250,000	\$200,000
DPW	Vacant Lot Beautification	<u>\$0</u>	<u>\$0</u>
		\$6,317,000	\$4,050,000

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

Address	CC File
2430 N. 2 nd Street	170505
2330 W. McKinley Blvd	160300
2402 N. Sherman Blvd	150250
964-66 N. 35 th Street	140872
2425 W. McKinley Blvd	140219

Strong Homes Loan Program, \$1,150,000

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 help fill gaps which aren't being addressed because of the limitations of existing programs, such as income restrictions, rehabilitation requirements, and geographic restrictions. A portion of this program (\$750,000) will be funded with revenue from tax incremental districts.

The department requested \$1.4 million for this capital account. The 6-year capital request is \$3.9 million. This account was created in 2016, prior to that, the program

was funded through the *in rem* Property capital account. Expenditures in 2016 were \$541,000.

Commercial in rem Property Program, \$200,000

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 160 foreclosed, improved commercial properties. Over 93% of the properties have been acquired since 2010.

This program was funded as requested. The 6-year capital request is \$1.45 million. There were no

Reports and other information compiled by the Special Joint Committee on the Redevelopment of Abandoned and Foreclosed Homes committee are available in Common Council Files.

2017	161359
2016	15136 <mark>2</mark>
2015	141695
2014	131272
2013	121405
2012	111347
2011	110809

expenditures from this account in 2015. Expenditures in 2016 were \$190,000.

Commercial Investment Program, \$1,000,000 (Formerly the Façade Program) This is an on-going program created by the 2012 Budget. Since 2012, this program has received \$3.15 million in funding. Prior to 2012, façade projects were funded by the Development Fund capital account. 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

STRONG Home Loans					
District	Loans	Applications (In process)			
1	37	17			
2	19	9			
3	6	0			
4	9	1			
5	6	4			
6	39	12			
7	42	11			
8	11	5			
9	3	0			
10	20	5			
11	7	0			
12	9	2			
13	7	3			
14	15	3			
15	28	15			
Total	258	87			

White Box grant program was previously funded by the Development Fund.

This program was funded as requested. The 6-year capital request is \$6 million. Expenditures in 2015 and 2016 were \$800,500 and \$1.4 million, respectively.

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. The 6-year capital request is \$2.75 million. Expenditures in 2015 and 2016 were \$270,400 and \$718,000, respectively.

Other Programs

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 was intended to provide support to private landlords for the purpose of providing quality rental opportunities. No additional funding has been provided for this program.

Business Improvement Districts (BID)

The 2018 Proposed Budget provides no funding for this program which was 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. Expenditures in 2016 were \$278,000. The department requested \$150,000 for this capital account.

Neighborhood Commercial District Street Improvement Fund

The 2018 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 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. No capital funding has been provided since 2015. Expenditures in 2015 were \$31,900. There were no capital expenditures in 2016.

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.

Century City Site Improvements

This was a new capital account for 2017. The account was 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 department did not request additional funds for 2018.

34 Port of Milwaukee

\$700,000

Proposed Capital Funding

\$1,550,000

Requested Capital Funding (excluding grant funding)

\$60,000

Increase from 2017 Budget

9%

Percent Change from 2017 Budget

Six-Year Capital Request

pital Programs and Projects		Ongoing and Recent Capital Projects		
Rail Track & Service Upgrades Pier Berth and Channel Improvements Dockwall Rehabilitation Total	\$300,000 \$200,000 <u>\$200,000</u> \$700,000	Upgrades to railroad tracks(On-going)Pavement Surfacing(2017)Heavy Lift Crane(2016)		
Unfunded Capital RequestsDemolish/Rehab Leasehold Facilities\$600,000ADA Improvements\$250,000		Anticipated Capital Requests The Port has submitted capital requests for variou capital projects related to equipment, dock maintenance, dredging and energy efficiency.		

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 2018 Proposed Budget provides \$1.8million tax-levy-supported special funds that can be used to maintain infrastructure. This is a decrease of \$236,000 (17%) from 2017. Actual expenditures in 2015 and 2016 from infrastructure-related special funds were \$362,116 and \$217,320, respectively.

Program	2018 Proposed	2017 Budget	Increase (decrease)	% Chng.	6-year Request
Dockwall Rehab	\$200,000	\$0	\$200,000		\$1,200,000
Pier, Berth & Channel Improvements	\$200,000	\$100,000	\$100,000	100%	\$1,200,000
Rail, Track & Service Upgrades	\$300,000	\$500,000	(\$200,000)	-40%	\$500,00
Roadway Paving/Pvmt Surfacing	\$0	\$40,000	(\$40,000)	-100%	
Total	\$700,000	\$640,000	\$60,000	-9%	

Capital Program Detail - Port of Milwaukee

Pier, Berth and Channel Improvements, \$200,000

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.

Dockwall Rehabilitation, \$200,000

The purpose of this program is to avert costly emergency repairs and to maintain the dockwall in appropriate condition for cargo operations. 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

Rail, Track & Service Upgrades, \$300,000

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 also developeda 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.

This program was funded as requested. Expenditures in 2015 and 2016 were \$110,000 and \$352,000, respectively.

Port - Budgeted Capital Funding



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.

Unfunded Capital Requests

Demolish/Rehabilitate Expired Leasehold Equipment

The 2018 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. The department requested \$600,000. In addition to this capital account, the Port has a Leasehold Demolition Special Fund. That fund received \$744,000 in the 2017 Budget.

	2011	2012	2013	2014	2015	2016	2017	2018	
	Actual	Actual	Actual	Actual	Actual	Actual	Budget	Proposed	
Major Maintenance – Terminals & Piers	\$110,072	\$101,240	\$56,053	\$172,118	\$77,486	\$91,316	\$80,000	\$80,000	
Major Rehab & Upgrades – Equipment	71,856	51,725	89,633	58,730	143,690	36,104	185,000	109,000	
Environmental Cleanup Fund	37,646	37,419	48,217		22,538	31,601	100,000	100,000	
Harbor Maintenance Dredging									
Equipment Rehab & Upgrade	113,932	74,753	157,663	108,405	91,186	58,299	210,000	210,000	
Dockwall & Breakwater Rehabilitation	29,221		61,146	44,213	25,154		50,000	50,000	
Energy Efficiency Upgrade	31,338	22,265		50,000			20,000	20,000	
Leasehold Demolition	12,701			24,500	2,062		744,000		
Sewer System Upgrade	24,198	35,437	5,6510	75,043			25,000	25,000	
Harbor Security		46,859							
Total *	\$430,964	\$369,698	\$469,222	\$500,000	\$362,116	\$217,320	\$1,414,000	\$1,178,000	

Other Capital Projects

Roadway Paving

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.

This account has received funding in odd numbered years. Since 2013, \$640,000 has been provided. Expenditures in 2016 were \$70,999.

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.

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.