



## **Out Year Requests**

### **CSWAN / COMON Upgrade**

6 year Request	Useful Life
\$1,100,000	5 Years

This one year project to replace Ethernet Routing Switches was first requested in 2012 for 2015. Manufacturer support for the switches is expected to end in June of 2016. The request has not changed from last year. The cost estimate is based on the last upgrade which was done in 2008

*Note: the capital request form for this project was incorrectly labeled "Public Safety Communications"*

## **Project Updates**

### **Municipal Phone System Upgrade**

6 year Request	Useful Life
\$,000	Years

This project to replace phone hardware received \$720,000 in funding in the 2012 Budget.

<b>TOTAL DPW ADMINISTRATIVE SERVICES DIVISION</b>	<b>\$625,000</b>
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**DPW - Operations (Forestry, Sanitation, Fleet)**

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**Forestry**

	Carryover	Tax Levy	Gen Oblig.	Revenue	Total	Change
<b>2013 – Request</b>					<b>3,483,765</b>	
2012 – Budget	460,000		447,000	2,747,000	3,194,000	21%
2011 – Budget	0		460,000	2,177,500	2,637,500	(29%)
2010 – Budget	3,064,235		1,042,879	2,678,125	3,721,004	9%
2009 – Budget	2,342,235	640,000	2,767,000	0	3,407,000	73%
2008 – Budget	1,617,000	66,200	1,895,000	0	1,961,435	

**Sanitation**

	Carryover	Tax Levy	Gen Oblig.	Grant/Aid	Total	Change
<b>2013 – Request</b>					<b>3,709,000</b>	
2012 – Budget	691,263		550,000		550,000	(24%)
2011 – Budget	0		727,959		727,959	
2010 – Budget	1,547,190		0		0	
2009 – Budget	1,761,155		0		0	
2008 – Budget	2,048,447		0		0	

**Fleet**

	Carryover	Tax Levy	Gen Oblig.	Grant/Aid	Total	Change
<b>2013 – Request</b>					<b>13,153,000</b>	
2012 – Budget	5,944,440		6,495,000		6,495,000	13%
2011 – Budget	1,617,344		5,738,000		5,738,000	4%
2010 – Budget	9,197,617		5,500,000		5,500,000	13%
2009 – Budget	9,911,202		6,302,000		6,302,000	5%
2008 – Budget	4,411,202		6,000,000		6,000,000	

**Operations  
(Total)**

	Carryover	Tax Levy	Gen Oblig.	Revenue	Total	Change
<b>2013 – Request</b>					<b>20,345,765</b>	
2012 – Budget	7,095,703		7,492,000	2,747,000	10,239,000	12%
2011 – Budget	1,617,344	0	6,925,959	2,177,500	9,103,459	(1%)
2010 – Budget	13,809,042	0	6,542,879	2,678,125	9,221,004	(5%)
2009 – Budget	14,014,592	640,000	9,069,000		9,709,000	22%
2008 – Budget	8,076,649	66,200	7,895,235		7,961,435	

## Forestry

	Carryover	Tax Levy	Gen Oblig.	Revenue	Total	Change
<b>2013 – Request</b>					<b>3,483,765</b>	
2012 – Budget	460,000		447,000	2,747,000	3,194,000	21%
2011 – Budget	0		460,000	2,177,500	2,637,500	(29%)
2010 – Budget	3,064,235		1,042,879	2,678,125	3,721,004	9%
2009 – Budget	2,342,235	640,000	2,767,000	0	3,407,000	73%
2008 – Budget	1,617,000	66,200	1,895,000	0	1,961,435	

The Department of Public Works has submitted four capital requests Forestry for the 2013 Budget.

The total six year request is \$21,626,765 and represents an increase of \$803,765 (3.8%) from last year's request. About half of the increase is related to the new Stump Removal request.

### Concealed Irrigation and General Landscaping City Boulevards

6 year Request	Useful Life	<b>\$606,765</b>
\$3,856,765	40 Years	

This program replaces infrastructure related to irrigation and landscaped boulevard medians in conjunction with the city's paving program. The program does directly correlate to increases in state/federal aided paving because not all arterials have boulevards.

The 2013 request is for 100 locations including 21 taps along four boulevard segments scheduled for repaving in 2012 and 79 taps at various locations city-wide based on age and condition.

Funding will also be used (\$30,000) to reconstruct five signature beds that may be impacted by state paving projects.

Forestry only replaces irrigation in the boulevards at signature beds.

#### Request Summary

2013	\$606,765
2014	\$650,000
2015	\$650,000
2016	\$650,000
2017	\$650,000
2018	\$650,000

#### Six year request history

2013	\$3,856,765
2012	\$4,260,000
2011	\$4,210,000



In addition to its efforts to protect trees on City property, DPW has identified at-risk trees on private property using hyperspectral imaging. Hyperspectral Imagery mapped the location of ash tree canopy in the city. To help Milwaukee residents prepare for Emerald Ash Borer, DPW Forestry conducted a significant door to door outreach campaign in 2010 and 2011. A total of 38,005 individual properties (25,360 owner-occupied; 12,645 absentee owned) with ash canopy coverage identified by the imagery were visited to confirm the presence of ash trees on a parcel basis. 9,670 parcels with ash trees were identified during the outreach and 34% of owner occupied property owners were reached directly. Property owners with confirmed ash trees were provided information about EAB treatment and removal options. Most property owners contacted were not aware that they had an ash tree and were not paying attention to EAB messaging. DPW has also utilized grant funding for an educational billboard campaign in 2010 and a radio campaign in 2011 to increase community awareness of the Emerald Ash Borer and urban canopy benefits.

**Stump Removal**

6 year Request	Useful Life	<b>\$405,000</b>
\$405,000		

This one year request will help eliminate a backlog of 1,800 stumps that need to be removed. Vacancies held open and snow & ice control operations have impacted Forestry’s operations and created a backlog of stumps that need removal.

Using O&M funds Forestry solicited bids for a contract in fall 2011 to remove 800 stumps before the end of 2011. The contract will include chip removal, topsoil backfill and seed. The proposed funding for this program will address the remainder of the backlog in 2012. This project will allow Forestry to continue its tree planting program in a timely manner.

**Project Update**

The Sustainable Boulevard Program was a three phase project approved by the Common Council in 2007. The plan included automated irrigation systems at signature bed locations and a simplified boulevard design that positions high-profile flower beds on landmark and gateway segments. These beds are connected by segments containing turf, shade and ornamental trees.

The final construction of some beds has been delayed due to paving projects such as W. Capitol Drive west of 76th St. The program has no remaining carryover borrowing authority. No funding was requested or provided in 2011, 2012 or 2013 for this program. The remaining beds will be constructed with O&M funds or funds from the Concealed Irrigation/General Landscaping capital account.

There are 700 boulevard trees that remain to be planted from the original plan. Funding for these trees was eliminated from the 2011 Budget. They will be planted using funds from the Tree Planting Program as they are available. This project has allowed Forestry Section to reduce its annual budget for seasonal staffing and reduce the number of seasonal staffing by \$18,000 and reduce the number of Seasonal Urban Forestry Laborers hired by 20.

<b>Forestry Subtotal</b>	<b>\$3,483,765</b>
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## Sanitation

	Carryover	Tax Levy	Gen Oblig.	Grant/Aid	Total	Change
<b>2013 – Request</b>					<b>3,709,000</b>	
2012 – Budget	691,263		550,000		550,000	(24%)
2011 – Budget	0		727,959		727,959	
2010 – Budget	1,547,190		0		0	
2009 – Budget	1,761,155		0		0	
2008 – Budget	2,048,447		0		0	

The Department of Public Works has submitted three capital requests for Sanitation for the 2013 Budget.

The total six year request is \$12,559,000 and represents an increase of \$74,000 (0.5%) from last year's request.

The most significant changes to the six year capital request are the inclusion in 2013 of a new \$1 million request for routing software. This increase is offset by a decrease in the Environmental Services Facilities Headquarters Modification program.

### Environmental Services Facility Modifications

6 year Request	Useful Life	<b>\$1,009,000</b>
\$4,759,000		

This program provides funds for the repair and maintenance of the facilities at the yards used by the Department of Public Work's Operations Division. Since 2001 nearly \$6.8 million in funding has been provided for this program. The 2012 Budget provided \$550,000 for this program.

The six year request is for \$750,000 each year after 2013.

#### 2013 Plan

##### Mount Vernon Facility

Roof repairs	\$564,000
Parking lot overlay & repair	\$220,000
Trench gates	\$225,000

##### Additional facilities to be repaired in future years

1625 N 14 <sup>th</sup> St	Estimate - \$180,000
4031 S 6 <sup>th</sup> St	Estimate - \$1,000,000

The 2012 request included \$550,000 for updates at the Sanitation yard at S 35<sup>th</sup> & W Hayes. A study done in 2006 recommended the consolidation of the Sanitation yard at S 35<sup>th</sup> & W Hayes and the Forestry yard at S 21<sup>st</sup> & W Holt. The location of the combined yard was at the former Water Works facility at S 37<sup>th</sup> & W Lincoln. The consolidation project is not moving forward.

2012 funding for this program would make improvements to the S 35<sup>th</sup> & W Hayes site. The total estimated cost of the necessary updates is \$1 million. The project will be funded with a combination of \$250,000 which was budgeted in 2011, \$215,000 which was authorized by Common Council file #100720, and \$550,000 from the 2012 Budget.

Necessary repairs include replacement of the roof, HVAC system and windows. Other work will include revisions to the floor plan to maximize efficiency

### **Routing Software**

6 year Request	Useful Life	<b>\$1,000,000</b>
\$1,000,000		

This is a **new** one year request for the acquisition and installation of routing software. More efficient routing would increase productivity and reduce fuel costs. The software could be used for numerous DPW activities. The cost estimate is still being developed. Price estimates have been received from several vendors. There will be additional costs associated with developing GIS data for alleys.

### **Industrial Road Facility Relocation**

6 year Request	Useful Life	<b>\$1,700,000</b>
\$6,800,000		

Direct Supply has an option on the property where the Industrial Road facility is located. If Direct Supply exercises the option in order to expand its operation, the City will have two years to relocate the facility. The option will expire December 13, 2019.

The preliminary cost estimate to relocate the facility is \$13,500,000. The City will be responsible for 50% of the cost. This project **did not receive funding** in 2011 or 2012.

In 2012, the Capital Improvements Committee did not recommend funding for this project.

### **Other Projects**

#### **Self Help Scales**

6 year Request	Useful Life	
\$0		

The 2010 Budget directed DPW to implement a charge for construction debris brought to self help stations. Phase I of the project involved charging a flat fee per load. Plans for Phase II involved charging for each load based on weight. The project was determined to be not cost effective and will not move forward.

<b>Subtotal Sanitation</b>	<b>\$3,709,000</b>
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## **Fleet**

	Carryover	Tax Levy	Gen Oblig.	Grant/Aid	Total	Change
<b>2013 – Request</b>					<b>13,153,000</b>	
2012 – Budget	5,944,440		6,495,000		6,495,000	13%
2011 – Budget	1,617,344		5,738,000		5,738,000	4%
2010 – Budget	9,197,617		5,500,000		5,500,000	13%
2009 – Budget	9,911,202		6,302,000		6,302,000	5%
2008 – Budget	4,411,202		6,000,000		6,000,000	

The Department of Public Works has submitted two capital requests for Operations – Fleet Division for the 2013 Budget. T

The total six year request is \$81,796,940 and represents an increase of \$1.6 million (2%) from last year's request. Most of the increase/decrease is related to ...

### **Major Capital Equipment (\$50,000 or More)**

6 year Request  
\$81,223,940

Useful Life

**\$12,580,000**

This program provides for equipment that exceeds \$50,000 and has a life expectancy of at least 10 years. The program focuses on equipment replacement for garbage and recycling collection, snow and ice control, and pick-up and dump trucks for use as pool equipment.

Average annual funding since 2002 is \$5.6 million. The table below shows the vehicles requested by the department. Actual equipment purchases may be different depending fleet performance.

The current average age of capital equipment is 11.8 years, up 0.3 years from September 2011. The optimal average age based on the average useful life of equipment is 6.0 years. Although the average age is significantly above the optimal, it has improved slightly from 2009. The age of the fleet is of concern because older vehicles cost more to operate. They require more extensive repairs, experience more down time and are not as fuel efficient as newer vehicles.

In an effort to save money on fuel costs, DPW is beginning to transition its garbage and recycling packers to compressed natural gas (CNG) engines. DPW currently has 2 CNG powered packers and expects to take delivery of 19 more in December. The 11 packers in the 2012 Proposed Budget have been budgeted for purchase with CNG engines. DPW anticipates that using CNG will result in significant fuel savings. The long term effect of CNG on engine life and vehicle replacement cycles is unknown at this time.

Modifications may be required at some City facilities to accommodate the repair and storage of CNG vehicles.

No itemized list of equipment was received for 2013 through-2017.

### Fleet Services – Major Capital Equipment

Description of unit	Units	Unit Cost
Backhoe/Loader	2	110,000
Sweeper	4	175,000 <sup>1</sup>
Tractors		
Light, Multi-Purpose	6	105,000
Front-End Wheel Loader	4	140,000
Trencher w/ Breaker & Trailer	1	55,000
Trucks		
Aerial, 30 Ft, Cargo Body	1	120,000
Aerial, 36 Ft, Step Van Body	1	165,000
Aerial, 50 Ft, Chip Box	1	185,000
Digger-Derrick	1	220,000
Dump, 16 yard, Tri-Axle	5	148,000
Dump, 2 Yard w/Compressor	1	120,000
Dump, 5 Yard, Chip Body	3	160,000
Dump, 5 Yard w/Underbody Plow	8	160,000
Dump, 5 Yard, Crew Cab	2	105,000
Log Loader	1	170,000
Packer, 25 Yard, Rear load/Recycle	17	285,000
Packer, 31 Yard Top Load	1	260,000
Platform, Compressor, Salt, Plow	3	80,000
Platform Stake, large	1	90,000
Roll-Off	2	330,000
Road Patcher	1	230,000
Step Van		480,000
Wrecker, Heavy Equipment	1	250,000
<b>Total # of Units</b>	66	

### Central Repair Garage Back Lot

6 year Request	Useful Life	<b>\$573,000</b>
\$573,000	15 Years	

In 2012 DPW requested \$573,000 to repave the back lot at the Central Repair Garage on Canal Street. The area has poor drainage and is prone to flooding. During heavy rain events, storm water runoff containing oil and fuel remnants flows over the Hank Aaron Trail and into the Menomonee River. The Capital Improvements Committee did not recommend funding for this project. No funding was provided in the 2012 Budget.

### Project Update

#### Two-Way Radio Replacement

6 year Request	Useful Life
\$0	

This program provided funding to strategically replace obsolete two-way radio equipment with equipment that utilizes the Police Department's M/A-COM Communication Infrastructure (Open Sky).

Since 2005 \$1.2 million has been budget for this program. Funding has not been requested past 2012. Nearly \$330,000 in carryover borrowing authority remains.

<b>Subtotal Fleet</b>	<b>\$13,153,000</b>
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<b>TOTAL DPW OPERATIONS DIVISION</b>	<b>\$20,345,765</b>
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## **LIBRARY**

	Carryover	Tax Levy	Gen Oblig.	Grant/Aid	Total	Change
<b>2013 – Request</b>					<b>\$6,511,000</b>	
2012 – Budget	3,462,418		2,577,000		2,577,000	2%
2011 – Budget	5,610,774		2,526,000		2,526,000	38%
2010 – Budget	5,920,456		4,075,000		4,075,000	3%
2009 – Budget	2,854,190		4,144,000	50,000	4,194,000	239%
2008 – Budget	1,981,189		1,238,000		1,238,000	

The Library has submitted seven capital requests for consideration for the 2013 Budget.

The total six year request is \$46 million and represents an increase of \$458,000 (1%) from last year's request.

There was no change in the six year request for existing neighborhood library programs. There were slight increases in the Central Library programs and a small decrease in the New Construction program.

Two key issues for the Library capital program include the funding of the Library's Facilities Plan and the condition of the neighborhood library buildings. These issues are interrelated because the direction and funding of the Facilities Plan will determine how much capital needs to be invested in the upcoming years to maintain existing neighborhood libraries.

### **Central Library Improvements Fund**

6 year Request  
\$12,260,000

Useful Life

**\$1,968,000**

The Library makes three separate requests for the Central Library. The **Central Library Interior** segment, which provides funding for the restoration, preservation and renovation of the interior of the Central Library. 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, which provides funding for the maintenance and repair of the exterior façade of the Central Library which includes limestone block and balusters, Chicago brick, marble block, windows, lighting and roofs. And the **Central Library Mechanical Improvements** segment, which provides funding for the Central Library's equipment and systems (HVAC, electrical, building controls, fire safety, security and elevators).

Since 2010, these requests have been budgeted in a general Central Library Improvements account. Since 2000, the City has invested over \$10.3 million in capital improvements at the Central Library.

### **Mechanical**

**\$1,028,000**

- 2013 Air handler; Upgrade fire alarm; Cooling tower
- 2014 Air handler; Upgrade fire alarm; Upgrade elevator
- 2015 Air handler
- 2016 Chiller
- 2017 Air handler (3)
- 2018 Upgrade elevator

Additional air handlers were added to the request in 2013  
The six year mechanical request is \$6,816,000.

**Exterior** **\$140,000**

Funding for 2013 through 2016 will fund masonry repairs on the Annex  
Funding for 2015 through 2018 will provide for roof replacements

The six year Exterior request is \$2,420,000.

**Interior** **\$800,000**

- 2013 Carpeting 1st floor; Upgrade key card system
- 2014 Carpeting 1st floor
- 2015 Carpet & painting in Business, Science and Tech
- 2016 Repair/repaint rotunda dome
- 2017
- 2018 Repair/repaint rotunda dome

The key car system proposed for 2013 was requested and denied in 2011.  
The maintenance schedule is largely unchanged from last year's request.

The six year Interior request is \$3,025,000.

**Neighborhood Library Improvements (Interior, Exterior, Mechanicals)**

6 year Request	Useful Life	<b>\$875,000</b>
\$1,850,000		

No funding was requested or provided for improvements to neighborhood libraries in 2012. The most recent budget allocation for this program was \$295,000 in 2008. Approximately \$287,000 in carryover borrowing authority remains.

Since 2000, \$4,280,000 in capital funding has been budgeted for maintenance and improvements at the 12 neighborhood libraries. Seven branch libraries are currently in need of new HVAC systems. The estimated HVAC cost is over \$5.3 million. The six year capital request, which was unchanged from 2011, is only \$1.85 million and addresses only one HVAC system.

The direction of the Library's Facilities Plan and the City's willingness to fund the Library's capital plan will determine the direction of maintenance efforts and future capital requests for neighborhood libraries. The 6-year capital request for neighborhood library improvements remains unchanged from 2011.

**Mechanicals**

2013 – HVAV at Tippecanoe	<b>\$875,000</b>
Same as 2011 request	
Six neighborhood libraries have HVACs that have outlived their useful lives	

**Exterior**

2014 – Replace roof on Center Street Library (\$175,000)  
Same as 2011 request

**Interior**

2016 – Renovate interior of one neighborhood library (\$800,000)

## Library Facility Initiative

6 year Request  
\$31,928,000

Useful Life  
Varies

**\$3,668,000**

The Library Board has recommended that a new configuration of library facilities be planned, built and opened over the next ten years. The Library's current configuration consists of the Central Library and 12 neighborhood libraries. The proposed configuration would include different types of libraries including Area, Neighborhood, Mixed-Use and Express Center.

Area Libraries would be larger, contain more materials and computers, provide full library services and have more programs. Neighborhood Libraries would be very similar to the current neighborhood libraries. Mixed-Use Libraries would average between 8,000 and 12,000 square feet. Their collections would have 40,000 to 50,000 items. There would be access to technology, popular collections, and reference staff as well as community and study rooms. Express Centers would be small locations allowing quick access to pick-up and drop off materials. There would be limited access to technology, fewer services and smaller collections.

	<b>Area</b>	<b>Neighborhood</b>	<b>Mixed Use</b>	<b>Express</b>
Area (SF)	30,000 – 35,000	12,000 – 20,000	8,000 – 12,000	500 – 1,500
Collection Size (# of items)	100,000 – 150,000	60,000 – 80,000	40,000 – 50,000	Small browsing collection
Computers	70	20 - 40	20 - 25	2-3
Hours per week	54	45 - 54	45	48
Key Benefits	Full service Community rooms Study rooms Children & Teen areas More parking More programs	Similar to current model Community room Reference staff Children & Teen areas	Community room Study room Reference staff Access to technology Children & Teen areas	Hotline to Ready Reference Material pick-up and return

The Library Board believes that a combination of these types of facilities will allow the Library to enhance services and provide long-term savings. Savings would be realized through reductions in energy use and the avoidance of capital maintenance on some existing neighborhood libraries which would be closed or consolidated.

In 2012, the Capital Improvements Committee did not recommend fully funding the Library's request for the Facilities Plan. The Committee expressed concerns about embarking on a broad construction initiative without firm commitments to close or consolidate aging branches. If new libraries are constructed and existing branches are not closed, the City will be financially responsible for maintaining a larger portfolio of buildings many of which have significant amounts of deferred maintenance.

The 2013 request includes funding for the East Library (\$300,000), two area libraries, two express centers and one mixed use library.

**TOTAL LIBRARY**

**\$6,511,000**

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## HEALTH DEPARTMENT

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	Carryover	Tax Levy	Gen Oblig.	Grant/Aid	Total	Change
<b>2013 – Request</b>					<b>\$485,000</b>	
2012 – Budget	1,028,829		450,000		450,000	309%
2011 – Budget	927,750		110,000		110,000	10%
2010 – Budget	2,305,822	50,000	50,000		100,000	(88%)
2009 – Budget	2,065,588		864,000		864,000	8%
2008 – Budget	1,672,907		800,000		800,000	

The Health Department has submitted one capital request for the 2013 Budget.

The total six year request is \$3,465,000 and represents a decrease of \$168,000 (4.6%) from last year's request. About half of the decrease is related to the omission of the Data Repository project from the 2013 request. The rest is related to a modest increase in the Health Facilities Capital Project account.

The \$50,000 on tax levy funding in 2010 was for the Data Repository project.

### Health Facilities Capital Projects

6 year Request	Useful Life	<b>\$485,000</b>
\$3,465,000		

This program provides funding for interior, exterior and mechanical repairs and improvements in the Health Department facilities.

This program has received \$610,000 in capital funding; \$50,000 in 2010, \$110,000 in 2011 and \$450,000 in 2012. Prior to 2010 capital projects were funded with three separate capital programs; Mechanical Systems, Exterior Building and Interior Building. Since 2000 these three accounts have received \$1.6 million, \$2.5 million and \$1.9 million in funding respectively. These accounts have a combined carryover authority of just over \$1 million.

### 2013 Anticipated Projects

#### Exterior      **\$335,000**

- Roof repairs
- Tuckpointing
- Window Replacement project at SSHC (Year 2)

#### Mechanical      **\$90,000**

- Generator testing and maintenance (annual)
- Sprinkler testing and maintenance (SSHC & NWHC)
- Security equipment update
- Elevator maintenance
- Water heater replacement (SSHC)
- HVAC control replacement (SSHC)

#### Interior      **\$10,000**

- Painting

**Data Repository**

This project initially received funding in 2010. The Health Department requested \$50,000 in 2012 to continue the project whose purpose is to consolidate various sources of Health Department data. The consolidation of this data will allow for more timely and consistent data retrieval and reporting. Because of the amount of data and the complexity of the system the project would be implemented over several years. The Health Department anticipated requesting \$50,000 in each of the next five years.

This project did not receive funding in 2012. No request was submitted in 2013.

This project is supported by the cash levy so there is no carryover borrowing authority.

<b>TOTAL HEALTH DEPARTMENT</b>	<b>\$485,000</b>
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## DPW Facilities

	Carryover	Tax Levy	Gen Oblig.	Grant/Aid	Total	% Change
<b>2013 – Request</b>					<b>7,158,000</b>	
2012 – Budget	15,309,300	210,000	3,292,900		3,502,900	(56%)
2011 – Budget	9,682,278		8,022,800		8,022,800	34%
2010 – Budget	14,278,477		5,999,440		5,999,440	8%
2009 – Budget	21,880,847		5,554,000		5,554,000	(53%)
2008 – Budget	37,110,997	300,000	11,534,800		11,834,800	

The Department of Public Works has submitted eleven capital requests for the 2013 Budget.

The total six year request is \$36,752,800 and represents a decrease of \$1.4 million (4%) from last year's request. The most significant change is the omission of the City Hall Foundation project request which reduced the six year capital request by \$5.6 million. That reduction was partially offset by increases in the Facilities Exterior Program, the Municipal Garage/Outlying Facilities Program and the Facilities Systems program.

The City Hall Foundation Project remains on hold pending the resolution of the issues related to the failure of the restored cotta.

The \$300,000 in tax levy funding in 2008 was for recreational facilities.

### 2013 Capital Request Summary – DPW Facilities

Program	2013	2014	2015	2016	2017	2018	6 Yr Total
Environmental Program	200,000	324,000	329,000	334,000	339,000	344,000	\$1,870,000
ADA Compliance	320,000	190,000	295,400	295,400	374,000	250,000	\$1,724,800
Facilities Exterior Program	1,651,000	925,000	1,200,000	1,200,000	1,200,000	2,000,000	\$8,176,000
City Hall Remodeling	200,000	250,000	250,000	250,000	250,000	250,000	\$1,450,000
Muni Garages & Outlying Facilities	1,450,000	500,000	500,000	500,000		500,000	\$3,450,000
Facilities Systems	2,532,000	1,200,000	1,200,000	1,600,000	1,600,000	2,000,000	\$10,132,000
Space Planning	205,000	172,000	178,000	184,000	190,000	196,000	\$1,125,000
<b>Projects</b>							
City Hall Foundation							
IT Equipment Room Compliance							
Facilities Condition Assessment Program	140,000	150,000	150,000	150,000	150,000	150,000	\$890,000
Energy Efficiency & Renewable Energy	150,000	800,000	850,000	900,000	950,000	1,000,000	\$4,650,000
Building Exterior Façade Restoration		500,000	500,000	500,000			\$1,500,000
MacArthur Square Plaza Remediation		251,000	255,000	259,000	263,000	267,000	\$1,295,000
Municipal Service Building Relocation	250,000	100,000					\$350,000
City Facilities Consolidation	60,000	80,000					
Recreational Facilities							
<b>Total</b>	<b>\$7,158,000</b>	<b>\$5,442,000</b>	<b>\$5,707,400</b>	<b>\$6,172,400</b>	<b>\$5,316,000</b>	<b>\$6,957,000</b>	<b>\$36,752,800</b>



compliance with the American's with Disabilities Act. Staff from the DOJ inspected all City facilities and will issue a report of their findings in the coming months. The City will generally have two years to address deficiencies noted in the report.

The City has funded various ADA compliance programs through the years and DPW staff believes the DOJ report will not present unexpected challenges. In the event there are significant upgrades required, the DOJ has worked with municipalities in the past to extend compliance dates to avoid undue financial hardship.

2012 is the first year that funding for ADA improvements to recreational facilities has been included in this program. In the past, ADA improvements to recreational facilities were funded through a separate Recreational Facilities Program capital account.

The construction of the restrooms on the 3rd floor of the 809 building which was funded in 2011 will be completed in 2012.

**2013 Plan**

ZMB 4 <sup>th</sup> Floor	\$150,000
Recreational Facilities	
26 <sup>th</sup> & Medford	\$95,000
Long Island Dr	\$75,000

**2012 Plan**

Dept of Justice – transition plan	\$50,000
809 Bldg 2 <sup>nd</sup> floor bathrooms-	\$100,000
Rec Facilities Upgrades	\$161,000

**Facilities Exterior Program (3 of 7)**

6 year Request	Useful Life	<b>\$1,651,000</b>
\$8,176,000	Years	

This on-going program maintains City facilities in a watertight, 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.

Since 2000 \$9.5 million has been budgeted for this program. Annual funding for this program has been highly variable.

The 2012 Budget provided \$430,000. Carryover authority of \$2.4 million remains.

**2013 Plan**

Safety Academy stained glass façade	\$175,000
EPDM Roof replacements	\$603,000
Asphalt Pavement Repairs and Seal Coating	\$101,000
Overhead Door replacements	\$150,000
Fencing and gate repairs	\$37,000

**Request Summary**

2013	\$1,651,000
2014	\$925,000
2015	\$1,200,000
2016	\$1,200,000
2017	\$1,200,000
2018	\$2,000,000

**Six year request history**

2013	\$8,176,000
2012	\$6,005,000
2011	\$7,200,000

Pavement Replacement	\$107,000
Windows & Siding	\$200,000
Various Emergency Repairs	\$100,000

**2012 Plan**

Safety Academy stained glass façade	(not funded)
Reroofing Anderson Tower and Muni Bldg	\$180,000
Overhead door replacement	\$150,000
Various Site Emergency Repairs	\$200,000

**City Hall Complex Remodeling – Misc (4 of 7)**

6 year Request	Useful Life	<b>\$200,000</b>
\$1,450,000		

This program provides the funding to address the architectural and mechanical remodeling work needed in the City Hall Complex. The remodeling work will create functional, efficient, and safe working environments, meet new State of Wisconsin energy, safety and building code requirements and address environmental concerns such as asbestos. In addition, this program will address interior building restoration work and departmental organizational changes.

Since 2000, \$4.1 million has been budgeted for this program. Average annual funding between 2000 and 2006 was \$545,000. The level of funding dropped significantly in 2007. Since that time average annual funding has been \$55,000.

The 2012 Budget provided \$100,000 in funding for this program. \$41,000 in carryover authority remains.

DPW estimates that between \$2 million and \$4 million is necessary to address ongoing remodeling issues in the City Hall Complex

Assuming a 20 year useful life for remodeling projects, DPW estimates that the 22 floor City Hall Complex would require between \$2 million and \$4 million of funding annually. The following projects have been postponed because of funding constraints.

City Hall 8 <sup>th</sup> Floor	\$5.4 million
Mayor’s Office	\$1.8 million
City Clerk’s Office	\$2.9 million
809 Building – 2 <sup>nd</sup> , 3 <sup>rd</sup> & 4 <sup>th</sup> Floors	
Tunnel (ZMB – 809 Bldg)	\$250,000

<b>Request Summary</b>	
2013	\$200,000
2014	\$250,000
2015	\$250,000
2016	\$250,000
2017	\$250,000
2018	\$250,000
<b>Six year request history</b>	
2013	\$1,450,000
2012	\$1,350,000
2011	\$12,369,000

## Municipal Garages/Outlying Facilities Remodeling (5 of 7)

6 year Request  
\$3,450,000

Useful Life

**\$1,450,000**

This on-going program was designed to provide funding for the basic functional needs of DPW's municipal garage facilities, many of which have surpassed their useful life. Because of their age, many of the garages do not accommodate the use of modern diagnostics in a current repair environment. The program specifically addresses the replacement of major operational systems – hydraulic lifts, material handling equipment and pneumatic systems – that do not comply with current safety codes.

The program also addresses the functional and operational needs of other outlying facilities not covered by other programs.

In 2012, funding for recreational facilities was added to this program. The Capital Improvements Committee recommended that funding for recreational facilities be returned to a discrete program.

Since 2003, \$6.9 million has been budgeted for this program. The most significant funding years were 2003 through 2005 when a total of \$4.3 million was provided.

The 2012 Budget provided \$650,000 in funding. \$473,000 in carryover authority remains.

Upgrades to the fire protection and air handling units at the Northwest Garage which were funded in 2011 (\$400,000) have been delayed. As the City begins to transition to compressed natural gas (CNG) vehicles, provisions must be made for their maintenance. DPW is investigating the modifications that may be required at the Northwest Garage to meet State of Wisconsin building codes. CNG vehicles can pose an explosion hazard if repair work is performed in an inappropriate environment.

### Request Summary

2013	\$1,450,000
2014	\$500,000
2015	\$500,000
2016	\$500,000
2017	\$0
2018	\$500,000

### Six year request history

2013	\$3,450,000
2012	\$2,850,000
2011	\$6,200,000

### 2013 Plan

Lincoln Garage CNG Service Center	\$900,000
NW Lincoln Garage 4 Bay Vehicle Repair Area	\$500,000 (matching funds)
Recreational Facilities	\$50,000

### 2012 Plan

Northwest Garage Upgrade	\$600,000
Recreational Facilities	\$50,000

**Facilities Systems Program (6 of 7)**

6 year Request  
\$10,132,000

Useful Life

**\$2,532,000**

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.

Since 2000, \$27.4 million has been budgeted for this program. Although average annual funding since 2000 has been nearly \$2.1 million, funding since 2010 has decreased significantly with \$685,000, \$615,000 and \$970,000 being budgeted in 2010, 2011 and 2012 respectively.

This program has \$926,000 in carryover authority.

Programming decisions are made using the Facilities Condition Assessment Program which provides condition data on City buildings.

A list of projects can be found at the end of this report.

**Request Summary**

2013	\$2,532,000
2014	\$1,200,000
2015	\$1,200,000
2016	\$1,600,000
2017	\$1,600,000
2018	\$2,000,000

**Six year request history**

2013	\$10,132,000
2012	\$7,570,000
2011	\$15,020,000

**Space Planning Alterations and Engineering (7 of 7)**

6 year Request  
\$1,125,000

Useful Life

**\$205,000**

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.

Since 2001 this program has received \$1.6 million in funding. Funding has been fairly consistent except for 2004 and 2005 when \$0 and \$50,000 were budgeted.

This program has \$144,000 in carryover borrowing authority.

**Request Summary**

2013	\$205,000
2014	\$172,000
2015	\$178,000
2016	\$184,000
2017	\$190,000
2018	\$196,000

**Six year request history**

2013	\$1,125,000
2012	\$1,125,000
2011	\$1,086,000

<b>Plan</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Space Planning	\$12,000	\$15,000	\$15,000
General Dept Reorganization and alteration	\$84,000		\$40,000
General engineering & Facility Inspection	\$70,000	\$150,000	\$150,000
4 bay vehicle repair area		\$40,000	

### **City Hall Hollow Walk Structural Repairs (SP1)**

6 year Request	Useful Life
\$0	100 Years

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. Capital funding began in 2008 with \$1.2 million for professional design services. \$1.8 million, \$2.7 million and \$3.2 was allocated in 2009, 2010 and 2011 respectively.

The City contracted with Facilities Value Management (FVM) in June 2010 to provide owner representative services. It was anticipated that a design/build firm would be selected in early 2011. The project was placed on hold on March 1, 2011 by Common Council file 101367 in response to the failure of a terra cotta piece on the south tower of City Hall on February 17, 2011. Without further Common Council action, the foundation project cannot move forward until all issues with the exterior structural integrity of City Hall are resolved.

As of February 2012, the Department of Public Works has expended approximately \$1.3 million on inspection, testing, monitoring and public safety related to the terra cotta failure. Expenditures have included approximately \$400,000 for scaffolding to protect pedestrians, inspection services provided by Ropelink and inspection and consulting services provided by Wiss, Janney Elstner (WJE).

Because the Foundation project remains on hold and there is insufficient funding in the City Hall Restoration Program account to pay for the terra cotta investigation, Common Council file 111320 transferred \$2.6 million from this account to the Restoration Account. Those funds will be used to complete the investigation and begin the design process.

The Department of Public Works anticipates the investigation will be completed in the spring of 2012. Once the extent of the work is known, the repairs can be designed and contract documents drafted. Construction could begin in late 2012 or early 2013.

### **IT Equipment Room Compliance Program (SP2)**

6 year Request	Useful Life
\$0	

**This project is on HOLD per DPW – no request submitted for 2012 or 2013**

This program would investigate the current definition of an information technology equipment room, determine which rooms throughout the City meet that definition and make necessary upgrades to the rooms to bring them in compliance with current building codes.

Building codes now have special and specific construction, power source, fire suppression and ventilation requirements for technology data rooms. **This program may require significant future capital expenditures to bring existing data and computer rooms into compliance.**

This program has received no capital funding, The 2011 six year request totaled \$450,000

### Facilities Condition Assessment Program (SP3)

6 year Request  
\$890,000

Useful Life  
Years

**\$140,000**

In 2012, DPW requested \$140,000 to establish a new capital program to fund the on-going inspection of City buildings and the maintenance of a building condition database. The information gathered in this program will provide important asset maintenance data and serve as a valuable budgeting and infrastructure preservation tool. The 2012 Budget did not include funding for this program. The Committee strongly recommended including funding for this new program.

Once the initial inspection of all DPW maintained buildings is complete (expected by the end of 2012) 20% of city facilities will be inspected annually. Inspections are currently being funded from the Space Planning Program.

Buildings Scheduled for inspection in 2012 include

- 809 Building
- City Hall
- DPW Field Headquarters
- Municipal Nursery
- Municipal Service Building Complex
- North District Field Station
- Sanitation Central
- Sanitation South II

#### Request Summary

2013	\$140,000
2014	\$150,000
2015	\$150,000
2016	\$150,000
2017	\$150,000
2018	\$150,000

#### Six year request history

2013	\$890,000
2012	\$890,000

### Energy Efficiency & Renewable Energy Initiative (SP4)

6 year Request  
\$4,650,000

Useful Life

**\$150,000**

This program, established in 2011, will be used to match grant funding for projects which will reduce the City's energy use. The City has established a goal of reducing energy consumption by 15%. Grant funding will be sought to implement projects identified by energy audits which will provide energy use related savings.

This program received \$150,000 in funding in 2011 and 2012. Carryover borrowing authority of \$150,000 remains.

No projects were identified in the 2013 request.

Grant funding received in 2011 was used to install a photovoltaic system at the Central Repair Garage. The project design was revised to reflect lower than anticipated grant funding. The total project cost is expected to be \$130,000.

#### Request Summary

2013	\$150,000
2014	\$800,000
2015	\$850,000
2016	\$900,000
2017	\$950,000
2018	\$1,000,000

#### Six year request history

2013	\$4,650,000
2012	\$4,650,000
2011	\$5,600,000

Projects for 2012 will focus on occupancy sensors for lighting and HVAC control for DPW's outlying facilities.



### Building Exterior Façade Restoration (SP5)

6 year Request  
\$1,500,000

Useful Life

\$0

This program corrects façade deficiencies in City owned buildings. City Ordinance #275-32-13, enacted in 2001, requires the owner of any building in the City that is five stories or greater to complete a critical exam to determine if the façade of their building is in a safe condition. The inspections required by the ordinance were performed in 2006.

The 2012 Budget did not include funding for this program.

DPW received \$385,000 in 2011 to begin Phase I of the repairs on the Zeidler Municipal Building. An inspection revealed that the glass and clearwall sections of the building are in adequate condition and do not require remedial work at this time. The masonry at the corners of the building needs restoration which will take place in 2012 with funding carried over from 2011. This program has \$385,400 in carryover borrowing authority.

#### Request Summary

2013	\$0
2014	\$500,000
2015	\$500,000
2016	\$500,000
2017	\$0
2018	\$0

#### Six year request history

2013	\$1,500,000
2012	\$2,090,000
2011	\$2,159,300

DPW anticipates making requests in 2014-2016 to fund repairs to the 809 Building and the Police Administration Building.

Repairs will be required on the following buildings:

- Anderson Tower/Municipal Building
- Zeidler Municipal Building
- Police Administration Building
- 809 Building

(No cost estimates were given for individual building projects in the 2013 request.)

### MacArthur Square Plaza Remediation (SP6)

6 year Request  
\$1,295,000

Useful Life  
Years

\$0

The MacArthur Square Plaza was construction in the mid 1960s. A 2005 engineering condition report outlined major deficiencies to all elements of the Plaza, including landscaping, irrigation, pool and fountain, architectural and structural elements, plumbing and electrical lighting. Cost estimates for restoration range between \$16 million and \$19.2 million.

The 6 year request of \$1.5 million will be used to maintain MacArthur Square as a safe, functioning structure. The plaza as it is currently configured is underutilized. **Long range restoration or redevelopment is not addressed in this request.**

Since 2008, \$1.5 million has been budgeted for the MacArthur Square Plaza. Nearly \$1 million in carryover authority remains.

Funding in 2012 will replace the waterproofing that protects the parking

#### Request Summary

2013	\$0
2014	\$251,000
2015	\$255,000
2016	\$259,000
2017	\$263,000
2018	\$267,000

#### Six year request history

2013	\$1,295,000
2012	\$1,456,000
2011	\$1,542,000



## Project Updates

### **Hartung Park Landfill Closure**

6 year Request                      Useful Life  
\$0

This capital account was created in 2012 to finalize the closure of the landfill and make improvements for future use as a recreational area. \$200,000 in funding was provided. No additional funding was requested for 2013.

### **ZMB Lower Parking Floor Restoration**

6 year Request                      Useful Life  
\$0

A defect in the garage floor in the Lower Parking area of the ZMB was discovered in 2008. Professional design services (\$86,500) were included in the 2010 Budget. Construction of the new floor began in June 2011. The project was completed within its \$1.6 million budget.

## Deleted Requests

### **Recreational Facilities Program**

6 year Request                      Useful Life  
\$0

This on-going program had been used for the improvement of neighborhood recreation facilities, including DPW play areas and stand-alone recreation sites operated and maintained by Milwaukee Public Schools. The 2012 capital request moved funding from the Recreational Facilities to the ADA Compliance Program and the Municipal Garage/Outlying Facility Program.

Average budgeted funding from 2007 through 2010 has decreased approximately 36% from the budgeted average of the years 2001 through 2006. The capital requests indicate that the funding projected to be used in 2012 for recreational facilities has increased by \$60,000 (40%) from 2011. Requested funding for 2013 is \$9,000 higher than for 2012. Although requested funding has increased in 2012 and 2013, because of the way funding is requested for the six year program, there is no way to determine projected funding for recreational facilities through 2018.

In 2012 the Capital Improvements Committee recommended that funding for recreational facilities be returned to a separate program.

Work will began in fall of 2011 on the playfield at Columbia Playground. Completion is expected in spring of 2012. The 2012 projects include the Allis Street and the 31<sup>st</sup> & Lloyd playfields. Funding for 2013 will be used for the 26<sup>th</sup> & Medford and Long Island Dr playfields.

<b>Program</b>	<b>2012</b>	<b>2013</b>
ADA Compliance	\$161,000	\$170,000
Muni Garage/Outlying Facilities	\$50,000	\$50,000

**TOTAL DPW BUILDING PROJECTS** **\$7,158,000**

## FACILITIES SYSTEMS PROGRAM

This program is used to sustain the operating system including heating, ventilating and air-conditioning (HVAC), plumbing, fire protection, life safety, security, electrical distribution, lighting and computerized building management systems in proper and efficient operating condition.

Buildings and Fleet Services is responsible for the upkeep of the systems in approximately 95 buildings. While we strive to keep these buildings operating under code compliance and as efficiently as possible this continues to be a challenge with the recent and current budgetary restrictions.

The following projects are for 2012:

<b>City Hall Complex - Annual Electrical Switchgear Testing and Repair</b>	<b>\$35,000</b>
Maintain and repair electrical systems on a regular schedule so that shutdowns are scheduled not emergencies.	
<b>City Hall - Electrical Distribution and Code Compliance</b>	<b>\$200,000</b>
Two new 1000 KVA Transformers were installed in the basement of City Hall in 2008 as Phase 1 of this electrical distribution and code compliance project and distribution up to the 4 <sup>th</sup> floor for Phase 2 is being completed in 2010 transformers in rooms on the 4 <sup>th</sup> and 7 <sup>th</sup> floors of City Hall will require structural reinforcement.	
<b>Building Automation Systems</b>	<b>\$244,000</b>
Provide new digital control systems to better control the systems at the 123 Building, Forestry South HQ, and Lincoln Garage.	
<b>Generators</b>	<b>\$378,000</b>
Provide emergency generators to maintain City service at the Robert Anderson Building and the 123 Building.	
<b>Safety Academy – Data Room cooling unit</b>	<b>\$50,000</b>
The data room is currently cooled by a system serving the general spaces at the Safety Academy and it does not address the unique cooling loads of this room.	
<b>Lincoln Garage – Electrical Upgrades</b>	<b>\$533,000</b>
Secondary distribution and branch circuit Upgrades	
<b>Lincoln Garage – HVAC Upgrades</b>	<b>\$566,000</b>
Replace Air Filtering, Make-up Air Handling, and Heating Units	
<b>Forestry South HQ – Fire Alarm System</b>	<b>\$26,000</b>
<b>Various Sites – CCTV and Access Control Upgrades</b>	<b>\$100,000</b>
Replace existing obsolete analog equipment with new digital technology	
<b>Various Sites – Emergency Mechanical Repairs</b>	<b>\$200,000</b>
Facilities Development and Management operates 256 air handling units, 212 heating units, 195 pumps, and 198 exhaust fans.	
<b>Various Sites – Emergency Electrical Repairs</b>	<b>\$200,000</b>
Facilities Development and Management operates 200 electrical switchgear and 400 electrical transformers, 400 block heaters.	
<b>Total</b>	<b>\$2,532,000</b>

**PARKING FUND**

	Carryover	New Borrowing	Perm Imp Reserve	Grant/Aid	Total	% Change
<b>2013 – Request</b>					<b>1,441,000</b>	
2012 – Budget	2,984,764	790,000				(33%)
2011 – Budget	2,589,764	1,175,000				24%
2010 – Budget	4,439,064	950,000				(68%)
2009 – Budget	4,098,064	2,936,000				9%
2008 – Budget	2,636,369	2,700,000				

The Department of Public Works has submitted eight capital requests for the Parking Fund. Only two are for funding in 2013.

The total six year request is \$7.7 million and represents an increase of \$546,000 (7.6%) from last year’s request.

The most significant changes to the six year request are the inclusion of two new projects, the Parking Meter WiFi Network (\$721,000) and the License Plate Recognition project (\$720,000).

**Parking Facility Maintenance**

6 year Request                      Useful Life  
\$900,000

Funding for this 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.

No funding is requested for 2013 because there is sufficient carryover authority.

The six year request is for \$100,000 in 2014 and \$200,000 each year thereafter.

**Parking Meter Wireless Network**

6 year Request                      Useful Life    **\$721,000**  
\$721,000                                      7 Years

This is a **new** request for a one year project to install a wireless communications (WiFi) network for the City’s multi-space meters. Installing a WiFi network will reduce cellular communication costs. Expected savings over the 7 year useful life of the hardware is \$288,000. The installation of this network will also provide free wireless internet access in the downtown area.



The City is contractually obligated to Johnson Controls to make capital improvements

**Anticipated Work**

- 2015 Joint caulking and paint (painting originally scheduled for 2013)
- 2016 Replace slabs and pavement markings
- 2017 Traffic membrane; pavement markings; water repellent sealer (membrane last applied in 2005)
- 2018 Planning and administration for steel component painting

**MacArthur Square Parking Structure Repairs**

6 year Request                      Useful Life  
\$1,875,000

**Anticipated Work**

- 2014 Repair elevated slabs; repair membrane; repaint pavement markings
- 2015 Repair concrete surfaces; replace expansion joint (James Lovell level); paint lower level (E & W sides)
- 2016 Repair elevated slabs; reapply membrane; repaint pavement markings

**Multi-Space Meters**

6 year Request                      Useful Life  
\$0

Between 2006 and 2009 this program received \$4.2 million in funding to replace single space parking meters with multi-space electronic meters that accept credit/debit card payments. No requests for additional funding were received in 2012 or 2013.

**TOTAL PARKING FUND** **\$1,441,000**

## DPW – Sewer Maintenance

	Carryover	Cash	Borrowing	Assessable	Grant/Aid	Total
<b>2013 – Request</b>						<b>41,500,000</b>
2012 – Budget	52,998,573	3,800,000	37,510,000		2,640,000	38,000,000
2011 – Budget	20,740,820	2,700,000	33,933,000	\$400,000	2,800,000	39,833,000
2010 – Budget	85,764,826	2,600,000	21,337,000			23,937,000
2009 – Budget	57,518,648	2,900,000	28,550,000			31,450,000
2008 – Budget	46,261,582	2,250,000	27,700,000			29,950,000

The Department of Public Works has submitted five capital requests for the Sewer Maintenance Fund.

The total six year request is \$257,500,000 and represents an increase of \$7,200,000 (3%) from last year's request. The request includes \$11.8 million in grant funding. Although the increase has multiple causes it is primarily due to a \$9 million increase in the sewer relay program.

The elimination of the Storm Water Quality (BMPs) program is partially offset by the inclusion of a new, more comprehensive water quality program.

The six year request anticipates an additional \$1.6 million in grant funding for the I&I Reduction Program.

### Sewer Relief & Relay Program

6 year Request	Useful Life	<b>\$30,000,000</b>
\$195,000,000	90 Years	

The 2013 request reflects the continuation of a more aggressive strategy to maintain the City's sewers. In 2011, the average annual request was just over \$4 million for a total six year request of \$25.2 million. The 2013 request increases annual requests by \$1 million each year until they reach \$35 million in 2018 resulting in a replacement cycle that closely approximates the current recommended cycle of 90 years. The replacement cycle in 2010 was approximately 160 years.

Although the increased level of funding will address on-going maintenance and rehabilitation needs, it does not address the existing backlog of older sewers. There are currently over 200 miles of sewers that are more than 90 years old. DPW estimates that even if enough funding is provided to maintain a 90 year replacement cycle, by 2020 there will be over 300 miles of sewer mains that have exceeded their useful life.

#### Request Summary

2013	\$30,000,000
2014	\$31,000,000
2015	\$32,000,000
2016	\$33,000,000
2017	\$34,000,000
2018	\$35,000,000

#### Six year request history

2013	\$195,000,000
2012	\$186,000,000
2011	\$186,000,000

The estimates of useful life also do not take into consideration that a significant portion of the sewer main program consists of sewer lining projects – not replacement projects. Sewer lining is a technique that has proven to be a cost effective alternative for rehabilitating many sewers that in the past would have required complete replacement. So far, the relining projects have exceeded



expectations for extending useful sewer main life, but it is unknown if the lined sewers will achieve the same 90 year useful life as traditionally installed sewer mains.

### **Water Quality Projects to Meet Total Maximum Daily Load Requirements (TMDL)**

6 year Request	Useful Life	<b>\$500,000</b>
\$3,000,000		

This is a **new** on-going program to construct various Best Management Practices to reduce total maximum daily loads in the Menomonee, Milwaukee, Kinnickinnic River watersheds and estuary areas.

MMSD and the DNR are working jointly to develop the standards that will apply to impaired watersheds with respect to TMDLs. The standards are expected to be largely complete by the end of 2012. The City will have three permit cycles (5 years each) to comply with the new standards.

This program will replace and expand the Best Management Practices for Total Suspended Solid (TSS) Reduction. The TSS program was not funded in the 2012 Budget. *(see discussion below)* The TMDL program will construct best management practices in a similar manner to the TSS program, but it will take a broader approach to water quality, focusing on bacteria and total phosphorus as well as total suspended solids.

The capital request for this program is for \$500,000 each year through 2018.

### **Sanitary Pump Rehabilitation Project**

6 year Request	Useful Life	<b>\$1,000,000</b>
\$4,800,000	Years	

Funding for this program began in 2008. Since that time \$3.2 million has been budgeted. Actual expenditures through the end of 2010 total \$1.4 million.

The capital request is for \$700,000 each year after 2013.

Funding for this program will provide for the inspection, rehabilitation and replacement of sanitary pump facilities. The City owns and maintains 7 sanitary lift stations and 83 sanitary bypass pump stations. These pumps reduce the risk of sewage backing up into homes and businesses. Pumps are located in areas that historically had sewer backup occurrences during periods of heavy rain.

The City's lift stations pump sanitary flow from low areas into gravity sanitary sewers so the flow can reach the Milwaukee Metropolitan Sewerage District'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 Department of Justice allows for the DNR to assess a fine for the operation of bypass pumps during small events or dry weather.

The DNR is continuing its review of their sanitary sewer overflow rules. It is not known when those rules will be finalized. It is DPW's understanding that the revised rules would not eliminate the use

of sanitary bypass pumps as long as the municipality is maintaining its system and addressing infiltration and inflow problems.

The requested level of funding for 2013 would allow for the reconstruction of 4 pumps, moderate rehabilitation of 10 additional pumps, as well as monthly inspections and comprehensive testing.

### **River Channel Maintenance**

6 year Request	Useful Life	<b>\$200,000</b>
\$1,200,000		

This was a new request for the 2012 Budget to provide funding for the restoration of the channels and drainage ditches which carry stormwater 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.

\$400,000 was included in the 2012 Budget.

The capital request is for \$200,000 each year through 2018 and is unchanged from 2012.

2012 funding will be used to restore the channel at N. 91<sup>st</sup> Street and W. Hasting Avenue.

### **I&I Reduction Projects**

6 year Request	Useful Life	<b>\$9,800,000</b>
\$42,000,000 (excluding grants)		

Funding for this program began in 2008 with \$3 million. Funding increased to \$3.7 million, \$6.4 million and \$14.3 million in 2009, 2010 and 2011 respectively. The 2012 Budget provided \$10.8 million.

The capital request is for \$8.8 million each year after 2013. The request includes \$1.8 million in grant funding each year except for 2013 when \$2.8 million is requested. There has been some uncertainty regarding the availability of grant funding.

### **Cooper Park Sewer Lateral Demonstration Project**

To address I/I issues on private property, DPW proposed a pilot project to repair defective sanitary sewer laterals. The project is located in an area bounded by West Burleigh Street, West Center Street, North 82<sup>nd</sup> Street and North 92<sup>nd</sup> Street, which is an area where multiple homes have experienced basement backups and which has been shown to have excessive I/I. The goal of the project is to rehabilitate sanitary laterals, reduce I/I and the resulting sewer backups, and gather data regarding the effectiveness of rehabilitation efforts.

The proposed work consists of sanitary lateral inspection and lateral rehabilitation using a cured-in-place lining. The project will not include the disconnection of foundation drains or the installation of backflow preventers.

Participation in the project is voluntary. Nearly 87% of property owners have chosen to participate. Of the 563 properties in the demonstration area, nearly 500 property owners gave their consent to allow the City to inspect their laterals. The inspections have been completed and reviewed. The City must obtain a signed Right of Entry form before performing lateral rehabilitation work on private property. Requests were mailed to all 450 property owners whose laterals were inspected. As of April 1, 2012, 491 of them have been returned.

Bids for the lateral lining were published on September 23, 2011 and opened on October 14, 2011. Work is began in mid- November and is expected to be completed by May, 2012. DPW is continuing to monitor sanitary flows in the area to observe improvements achieved from this lateral rehabilitation project.

The estimated \$3.8 million cost of the project will be jointly funded by the City and MMSD. The City expects to receive \$3.4 million from MMSD after work has been completed. The funding agreement, has been finalized. There will be no property owner assessment for this work.

Another area wide project on private property is being proposed for 2012. The location of the project has not been finalized. At this time the City does not intend to assess homeowners for the I/I work done on their property in conjunction with this project.

**Pilot Rehabilitation Project**

In addition to the area wide I/I demonstration project, the City is also piloting a rehabilitation project on five city owned homes. The scope of the work included the rehabilitation of the sewer lateral with a cured-in-place liner, removal of the palmer valve and floor drain replacement, installation of a sump, pump and discharge piping, and the installation of backflow valve to prevent sewer backups. The total cost per home was approximately \$18,600. Work was completed in 2011.

The key challenges that were encountered with this project were the need to upgrade the existing electrical system to accommodate the installation and operation of the sump pump, difficulties locating the sump pump discharge piping, and the extensive coordination that was required to schedule work with the tenants.

The outcome of this project will be used as a basis for policy decisions regarding foundation disconnection and sump pump installation and other rehabilitation work.

<b>Request Summary</b>	
2013	\$1,000,000
2014	\$1,500,000
2015	\$1,500,000
2016	\$2,000,000
2017	\$2,000,000
2018	\$2,000,000
<b>Six year request history</b>	
2013	\$10,000,000
2012	\$4,500,000
2011	\$8,650,000

**Deleted Requests**

**BMPs for TSS Reduction**

6 year Request                      Useful Life  
 \$0

This program provided funding to construct various Best Management Practices (BMPs) such as green streets, rain gardens, wet detention ponds, bio-infiltration areas, and end of pipe treatments to reduce the amount of Total Suspended Solids (TSS) that enter waterways. Due to changes in the Wisconsin state budget as discussed below and new EPA regulations that are pending, this program is being replaced by a more comprehensive water quality program.

This program has \$2.1 million in carryover authority. In 2012, the department will use carryover borrowing authority to construct bio-filtration facilities along W. Grange Avenue from S. 6<sup>th</sup> Street to S. 19<sup>th</sup> Street and to complete a project on E. Greenfield Avenue. In 2011, bio-filtration areas were constructed along S. 6<sup>th</sup> Street from W. Howard Avenue to W Layton and at the intersection of N. 85<sup>th</sup> Street and W. Auer Avenue.

The Wisconsin Department of Natural Resources' regulation in ch. 151, Wis, Adm. Code requires the City to reduce the amount of TSS in runoff by 40%. This project began in 2009 and was intended to continue until the 40% TSS goal was reached. The original deadline for compliance was March 10, 2013. Since 2009, the City has allocated over \$5.1 million for the program. In order to meet the compliance deadline, the City has worked with the DNR to be given credit for the TSS removed by the treatment of stormwater in the combined sewer area. With the allowance of this credit, the City had attained the 40% compliance rate.

The State of Wisconsin's 2011-2013 Budget, which was adopted in June 2011 contained language prohibiting the DNR from implementing water quality requirements that were more restrictive than neighboring states. The result of this constraint is that the requirement to reduce TSS has been eliminated at this time.

**Development Out-of-Program Agreement (Various Loc)**

6 year Request

\$0

From 2000 through 2006 \$2.6 million has been budgeted for this program. No funding has been provided since 2007. No request was submitted by the department.

<b>TOTAL SEWER MAINTENANCE FUND</b>	<b>\$41,500,000</b>
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## ***DPW - Infrastructure Services Division***

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The 2013 capital request for the Department of Public Works – Infrastructure Services Division (ISD) includes \$106.2 million for eleven capital programs relating to bridges, streets, alleys, street lighting, traffic control and underground conduit. This represents a decrease of \$17.9 million (14%) from the 2012 Budget. Most of the decrease is related to grant funding.

The total capital investment in ISD programs can vary significantly from year to year because of fluctuations in the amount of grant funding available for the Major Bridge and Major Street programs. Total grant funding for 2012 was nearly unchanged from 2011. A \$17.1 million loss in the Major Bridge Program (74%) was offset by a \$17.5 million gain in the Major Street Program. In 2013, total grant funding decreased by \$18 million (24%). Most of the reduction was in the Major Street Program.

The Local Street Program increased from \$14.3 million to \$15 million (5%). In order to maintain the level of paving that was achieved in 2012, more funds had to be budgeted because Local Road Improvement Program (LRIP) funds from the state are not available in even years to supplement the Local Street Program.

Requested funding for most other ISD programs has increased over the 2012 Budget with the exception of the Sidewalk Replacement Program. Funding for this program was unusually high in 2012. A budget amendment increased funding in the 2012 Budget to allow DPW to address the backlog of scattered site replacement requests. The 2013 capital request is lower than the 2012 Budget amount but still significantly higher than the average budgeted amount in this program since 2005.

The 2013 alley request matches the budgeted funding from 2012. Like the sidewalk replacement program, this alley program received an unusual amount of funding in 2012 because a budget amendment added \$2 million. Since 2010, \$1 million has been budgeted annually. In the years prior to that, alley funding was significantly lower.

The key challenge in providing capital funding for 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 the inefficient use of resources may result. For example, additional paving projects will require resources from the street lighting program to be directed toward recabling individual streets as part of the street construction and away from the projects that transition the street lighting system from series circuitry to multiple circuits.

## Major Bridge Program

	Carryover	Revenue	Gen Oblig.	Grant/Aid	Total	% Change
<b>2013 – Request</b>			<b>\$100,000</b>	<b>\$5,655,000</b>	<b>\$5,755,000</b>	
2012 – Budget			\$500,000	\$6,035,000	\$6,535,000	(98%)
2011 – Budget			\$6,354,000	\$23,116,000	\$29,470,000	265%
2010 – Budget		\$500,000		\$7,572,000	\$8,072,000	55%
2009 – Budget			\$762,000	\$4,436,000	\$5,198,000	(69%)
2008 – Budget			\$3,046,000	\$13,922,000	\$16,968,000	

6 year Request                      Useful Life  
 \$25,505,000                          70 Years

Major bridges are those bridges that are part of the major arterial and connector infrastructure within the City and are eligible for federal and/or state aid. The City's share of these major bridge projects is normally 20%. Funding for this program is fluid, largely dependent on when projects are scheduled in the grantor funding cycle. Anticipated grant funding for 2013 is \$5,655,000. Grant funding is down slightly from 2012.

This program has \$4.1 million in carryover borrowing authority. Because of the complexity of bridge projects, it is not unusual for a bridge to be constructed in a year other than the year it was initially funded. Therefore large amounts of bridge funding in a particular year may not correspond to a large amount of construction in that year.

A key challenge in the Major Bridge Program is its dependence on State and Federal Aid. There is increased competition for limited aid dollars as the nation's bridge infrastructure continues to age. This will put increasing pressure on the Local Bridge Program.

### Request Summary

	Borrowing	Grant/Aid	Total
2013	\$100,000	\$5,655,000	\$5,755,000
2014	\$1,170,000	\$4,680,000	\$5,850,000
2015	\$680,000	\$2,720,000	\$3,400,000
2016	\$700,000	\$2,800,000	\$3,500,000
2017	\$700,000	\$2,800,000	\$3,500,000
2018	\$700,000	\$2,800,000	\$3,500,000

### Six year request history

2013	\$25,505,000
2012	\$24,990,000
2011	\$74,790,000

### Bridges Proposed for Construction in 2012:

- Lincoln Avenue Viaduct – Estim Start February 2012
- Morgan Ave. Bridge over the Honey Creek – Estim Start July 2012
- Pleasant Street Lift Bridge – Estim Start November 2012

### Bridges Constructed in 2011:

- County Line Rd over the Little Menomonee River – Opened July 2011
- Clybourn Ave Lift Bridge – Opened July 2011
- Wisconsin Ave over the Milwaukee River – Estim Completion August 2012
- Juneau Ave over the Milwaukee River – Estim Completion November 2012

## Local Bridge Program

	Carryover	Tax Levy	Gen Oblig.	Grant/Aid	Total	% Change
<b>2013 – Request</b>			<b>\$9,785,000</b>		<b>\$9,785,000</b>	
2012 – Budget	\$11,900,000		\$7,782,000		\$7,782,000	3,791%
2011 – Budget	\$11,700,000		\$200,000		\$200,000	(97%)
2010 – Budget			\$6,425,000		\$6,425,000	22%
2009 – Budget			\$5,275,000		\$5,275,000	266%
2008 – Budget			\$1,440,000		\$1,440,000	

6 year Request                      Useful Life  
 \$57,835,000                          70 Years

Structures within the Local Bridge Program are essentially all those bridges within the City that are not eligible for federal and/or state aid or where federal and state aid is not available or insufficient. This program now includes high cost movable bridges, which have been deemed ineligible for WisDOT aid. City funding for this program covers maintenance work, structural repairs, painting, mechanical upgrades, inspection and engineering.

In 2010 the Local Bridge Program provided funding for the rehabilitation of the Clybourn Lift Bridge over the Milwaukee River. TIGER grants of \$21.5 million were received in 2011 for the Wisconsin Ave Bridge over the Milwaukee River and the Juneau Ave Bridge over the Milwaukee River. Funding in 2012 will address the Pleasant Street Lift Bridge.

This program also funds bridge inspections and miscellaneous administrative and engineering costs

This program was first funded in 2007. Since then the program has faced increasing pressure as higher cost bridges have become ineligible for state funding and the City's bridge network continues to age. At the end of 2009 there were 12 bridges that had sufficiency ratings below 50. At the end of 2010, there were 18.

<b>Request Summary</b>	
2013	\$9,785,000
2014	\$9,825,000
2015	\$9,600,000
2016	\$9,525,000
2017	\$9,600,000
2018	\$9,500,000
<b>Six year request history</b>	
2013	\$57,835,000
2012	\$64,810,000
2011	\$37,975,000

## Major Street Program

	Carryover	Spec Assess	Gen Oblig.	Grant/Aid	Total	% Change
<b>2013 – Request</b>		<b>\$1,000</b>	<b>\$435,000</b>	<b>\$50,900,000</b>	<b>\$51,336,000</b>	
2012 – Budget		\$1,000	\$9,776,200	\$68,556,800	\$78,334,000	31%
2011 – Budget		\$100	\$8,314,100	\$51,505,230	\$59,819,230	277%
2010 – Budget		\$194,000	\$4,760,000	\$10,936,200	\$15,860,200	(54%)
2009 – Budget		\$100	\$4,230,100	\$30,450,000	\$34,680,100	31%
2008 – Budget		\$1,260,149	\$6,471,340	\$42,460,825	\$50,192,314	

6 year Request                      Useful Life  
 \$252,888,000                      25 Years  
*(incl Grants and Spec Asses)*

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

After increasing for three years in a row, grant funding will decrease for 2013 by \$17.6 million. Grant funding is expected to drop to \$16.8 million in 2014. The tax levy supported portion of this program was nearly 30% in 2010. It declined to approximately 14% in 2011 and is expected to remain at that level for 2012.

Funding for this 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 the out years. In even years, grant funding from the Local Road Improvement Program can be used to pave streets which would not otherwise be eligible for grant funding.

**The following major streets are scheduled for construction in 2012:**

- N. 20th St. : W. Hopkins St. – W. Capitol Dr.
- N. 91st St. : N. Swan Rd. – W. Flagg Ave.
- W. Capitol Dr. : N. 60th St. - N. 84th St.
- W. Morgan Ave. : S. 68th St. – S. 84th St.
- N. Poet Washington Rd. : N. Dr. MLK Dr. – north City Limits



## Local Street Program

	Carryover	Tax Levy	Gen Oblig.	Spec Assess	Total	% Change
<b>2013 – Request</b>	<b>10.5</b>		<b>\$15,000,000</b>	<b>\$1,000,000</b>	<b>\$16,000,000</b>	
2012 – Budget			\$14,297,500	\$100	\$14,297,600	
2011 – Budget			\$14,291,600	\$100	\$14,291,700	
2010 – Budget			\$12,000,000	\$1,000	\$12,001,000	17%
2009 – Budget			\$10,300,000	\$100	\$10,300,100	58%
2008 – Budget		\$1,020,000	\$4,480,000	\$1,000,000	\$6,500,000	

6 year Request                      Useful Life  
 \$97,900,000                          35 Years  
*(incl Spec Assess)*

The 2013 request is for \$15 million in capital funding for local street resurfacing and reconstruction. This program will have essentially the same funding available in 2013 as in 2012 because the City was able to utilize Local Road Improvement Program (LRIP) funds to enhance the Local Street Program in 2012. Funding for this program has increased substantially since 2000.

15.2 miles of streets were paved in 2011. DPW anticipates it will be able to pave approximately 16 miles of streets in 2012 and a similar amount in 2013. The actual number of miles paved with the provided level of funding will depend on the percentage of streets that are reconstructed as opposed to resurfaced. Final programming decisions have not been made. It is estimated that the replacement cycle will be approximately 62 years.

Using a replacement cycle based on average useful pavement life has limitations when trying to determine adequate funding levels. Different pavement types have different useful lives, regular maintenance can extend the useful life and utility cuts can shorten it. To begin addressing these issues, DPW has purchased a module for their pavement management system which allows them to track maintenance and other data in addition to reconstruction dates. This will enable DPW to more accurately predict when a street will reach the end of its useful life. Data reconciliation with the old Pavement Management System may be required before the system is fully operational.

Common Council File Number 080034 established an ordinance which adjusted the recovery ratios for certain assessable improvements. The ordinance also established a Motor Vehicle Registration Fee (MVR) whose revenues would be used to defray City costs for transportation related improvements. A minimum of 10% of MVR fee receipts must be allocated to street maintenance activities. DPW has allocated \$1.4 million of the total budget for the local road program in 2012 for capital maintenance.

The change in the special assessment policy has had distinct programmatic implications. Because the direct assessment is far lower than in the past, there are fewer property owner objections to projects. This allows DPW to program the streets that will provide the greatest overall benefit to the system. In 2011, virtually all paving and alley projects were approved at public hearing. This has allowed staff to focus on projects which have a high likelihood of being paved. Traffic calming and speed hump projects still face objections on a regular basis.

## Alley Paving Program

	Carryover	Tax Levy	Gen Oblig.	Spec Assess	Total	% Change
<b>2013 – Request</b>			<b>\$1,950,000</b>	<b>\$1,050,000</b>	<b>\$3,000,000</b>	
2012 – Budget			\$2,400,000	\$600,000	\$3,000,000	200%
2011 – Budget			\$800,000	\$200,000	\$1,000,000	
2010 – Budget			\$800,000	\$200,000	\$1,000,000	233%
2009 – Budget			\$300,000	\$100	\$300,100	20%
2008 – Budget			\$150,000	\$100,000	\$250,000	

6 year Request                      Useful Life  
 \$20,500,000                      50+ Years  
*(incl. Spec Assess)*

The six year capital request is for \$3,500,000 per year after 2013. (\$2.2 million of borrowing and \$1.4 million of special assessment)

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. Using that standard, approximately 125 miles (30%) of the alley system are past their useful lives. Between 2000 and 2005, based on funds budgeted for the alley program, approximately 2 miles of alleys were replaced each year resulting in a replacement cycle of nearly 200 years. Average funding between 2006 and 2009 decreased by over 70%. Funding levels have recovered significantly since 2009. Maintaining a 50 year replacement cycle, however, would take at least \$2.5 million of borrowing authority each year.

Until 2009, the cost of paving alleys was recovered through a special assessment at a rate of 90%. With the passage of the Motor Vehicle Registration Fee (CC file # 080034) the recovery rate was reduced to 60%. As part of the 2012 Budget process, the Common Council increased funding for the Alley Program and decreased the special assessment recovery ratio from 60% to 30%. The Alley Program will have the capacity to pave 4.4 miles of alleys in 2012. Going forward, the reduction of the recovery rate will reduce the number of alleys that can be paved with a fixed amount of borrowing.

Maintaining funding at the 2012 level with the 30% recovery ratio is likely to provide a replacement cycle between 90 and 100 years. The replacement cycle does not reflect an extension of DPW’s 2012 capacity because the 2012 Alley Program represents an unusual situation. In order to accommodate the short time frame between when funding was budgeted and when projects need to go to contract, DPW filled its program with existing alley projects that had been cancelled from past programs. Most of the projects already had plans prepared. Eliminating the need to survey, prepare plans and design projects will allow DPW to pave more alleys in 2012 than would otherwise be possible.

In an effort to maximize the number of alleys that can be paved each year, DPW has begun sending a postcard survey to property owners prior to the design phase of a proposed alley. If there is not sufficient property owner support, the project will not move forward. Property owners may still object after the design is complete and the project moves through the public hearing process. Since instituting this practice, deletions at public hearing for alley projects have been reduced to virtually zero.

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.

In a climate of funding constraints, deferring maintenance on alleys for a period of years can be an effective strategy for focusing limited infrastructure dollars where they will have the most impact.

Disinvestment in alleys can, however, lead to an overall decline in the appearance of a neighborhood and adversely affect property values. Investment in alley improvements can increase the perception of safety and accessibility. This may in turn encourage other neighborhood investments and improvements. This could be especially beneficial in neighborhoods struggling with high numbers of vacant and foreclosed homes.

Increased investment in alleys could also create jobs and opportunities for smaller contractors. It is important to note, however, that although their size makes alley projects manageable for small contractors, **alleys are technically much more difficult to design and construct** than most streets. Using inexperienced contractors may result in drainage and access issues in newly paved alleys.

## Sidewalk Replacement Program

	Carryover	Tax Levy	Gen Oblig.	Spec Assess	Total	% Change
<b>2013 – Request</b>			<b>\$1,200,000</b>	<b>\$400,000</b>	<b>\$1,600,000</b>	
2012 – Budget			\$1,478,000	\$464,500	\$1,942,500	44%
2011 – Budget			\$1,000,000	\$325,000	\$1,345,000	10%
2010 – Budget			\$900,000	\$325,000	\$1,225,000	53%
2009 – Budget			\$650,000	\$150,000	\$800,000	(9%)
2008 – Budget			\$480,000	\$400,000	\$880,000	

6 year Request                      Useful Life  
 \$11,100,000                      60 Years  
*(incl. Spec Asses)*

The six year capital request increases by annual funding by \$100,000 each year.

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. Although significant increases have been made in this program in the last five years (the 2012 Proposed Budget nearly doubles the budget amount from 2007) the investment trend in sidewalks since 2000 has been downward.

This program is not the only means by which sidewalk is replaced in the City. Additional sidewalks routinely get replaced in conjunction with local and major street improvement projects, City maintenance force work, excavation restoration work and development projects. Average annual walk replacement since 2007 for the local and major street programs is 375,000 SF and 77,000 SF respectively.

This capital account funds 2 separate sidewalk replacement programs. The larger of the 2 programs, replaces sidewalks in a systematic, area by area manner. The goal of this program is to replace between 300,000 and 350,000 square feet of sidewalk each year. Average annual walk replacement since 2007 is 136,000 square feet.

The second program, called “Scattered Sites” replaces defective sidewalks around the City as they are requested by property owners. DPW budgets approximately \$200,000 each year in capital authority to replace sidewalks through this program. This level of funding allows the City to complete work at approximately 100 properties each year. There is currently (as of September 2011) a backlog of 520 properties. DPW estimates that an additional \$840,000 in funding would be required to eliminate the backlog. The Common Council added \$597,5000 to this sidewalk program during the 2012 Budget process.

## Street Lighting Program

	Carryover	Tax Levy	Gen Oblig.	Grant/Aid	Total	% Change
<b>2013 – Request</b>					<b>\$9,700,000</b>	
2012 – Budget			\$8,220,000		\$8,220,000	11%
2011 – Budget			\$7,400,000		\$7,400,000	6%
2010 – Budget			\$7,000,000		\$7,000,000	(10%)
2009 – Budget			\$7,850,000		\$7,850,000	20%
2008 – Budget		\$817,080	\$5,746,170		\$6,563,250	

6 year Request                      Useful Life  
 \$60,250,000                          40 Years

Funding in 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 over 68,300 street lights and 8,800 alley lights. Approximately 46% of the total budget for street lighting in 2013 is related to the paving program.

The frequency of area outages and single/double outages has been increasing steadily due to the City's aging street lighting infrastructure. The City's street light system is a combination of series and multiple circuitry. The series circuitry which is the older technology represents approximately 40% of the system. The City began transitioning to multiple circuitry in the 1950's. It is the series part of the system that 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.

One of the main challenges with the conversion project is that series circuits cannot be replaced one block at a time – for example with a paving project. Each series circuit, which consists of multiple blocks, must be replaced in its entirety. The circuits are large – covering multiple blocks.

A study done by the LaFollette School of Public Affairs in 2009 evaluated various funding alternatives for transitioning from series to multiple circuitry. The report estimated that replacing the remaining series circuitry over the next six years would cost between \$120 million and \$131 million.

This was determined to be the least cost effective of the alternative evaluated. Maintaining the status quo and continuing to fund the conversion program with \$1 million per year is the most cost effective in the short run but **it is not a long term solution**. As the failure rate increases, costs related to repairs including parts and overtime will continue to rise. Excessive outage could increase tax payer dissatisfaction, decrease the perception of neighborhood safety and have an impact on crime.

Average funding for the street lighting program since 200 has been \$5.9 million. Since 2009 the average has increase to \$7.5 million. The increase has gone largely to pay for the increased paving related projects. The department allocates about \$1 million each year to fund the series conversion.

DPW has indicated that they are developing a new strategy for the conversion project. The City has 249 substations and enclosures, each with numerous circuits. In the past DPW would replace the entire substation at one time. This year they will begin replacing individual circuits that are problematic. This will keep the project moving forward in the absence of large amounts of resources and also allow the City benefit from the reduced maintenance costs of failing circuits. It remains to be seen whether this will be an effective or affordable approach.

There may be opportunities to reallocate some street light funding from paving projects to series circuitry conversion by postponing the removal of overhead wiring after paving projects.

“Replacement of Control” continues as part of the City’s Street Lighting Control System Improvement Project. This involves replacing the existing hard-wired control system at substations and enclosures with a radio-based computerized communications system. This improvement provides backup in the event of a communications system failure, allows monitoring of street lighting operation, provides intrusion alarms and provides diagnostics to identify and assist with troubleshooting in response to street lighting system problems. The control system is operational at 33 substations. Implementation of this program has been delayed due to increases in the lighting program relative to ARRA funded paving projects.

## Traffic Control Program

	Carryover	Tax Levy	Gen Oblig.	Grant/Aid	Total	% Change
<b>2013 – Request</b>					<b>\$2,590,000</b>	
2012 – Budget		\$20303,000			\$2,303,000	20%
2011 – Budget		\$1,912,250			\$1,912,250	61%
2010 – Budget		\$1,182,500			\$1,182,500	19%
2009 – Budget		\$990,000			\$990,000	29%
2008 – Budget	\$700,000				\$700,000	

6 year Request                      Useful Life  
 \$16,585,000                          40 Years

The capital request is approximately \$2.8 million each year.

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 utilize technological advances to improve traffic flow. Traffic control devices are installed and maintained to conform with the federal Manual on Uniform Traffic Control Devices (MUTCD). Technology based improvements and techniques are constantly being incorporated in City traffic control systems to improve traffic flow and reduce vehicle emissions.

In December 2009, the Federal Highway Administration issued a final rule adopting changes to the 2003 MUTCD. These changes became effective on January 15, 2010. The changes were adopted and incorporated by the State of Wisconsin into state statutes. The changes mandate upgrades and improvements to traffic control signs, signals and pavement marking systems in the City. In August 2011, the FHWA proposed amendments to the MUTCD that would eliminate most of the deadlines for replacing street signs including the 2018 deadline for replacing street name signs. The comment period for the proposed amendments ended October 31, 2011. After the comment period the FHWA will issue a final ruling on the proposed amendments.

New sign standards include increased retro-reflectivity and changes in size, placement and content. DPW estimates that over 40% of existing signs will need to be replaced to meet the new standards. Changes in traffic signal standards include signal mounting, location, size, type and configuration. DPW has developed a schedule for phasing in the mandated upgrades. Different components of the traffic control system will be phased in on slightly different schedules. **MUTCD upgrades represent approximately 41% of the requested budget for this program.**

A supplement to the MUTCD, adopted by the Wisconsin Legislature in Spring 2011 requires the installation of mandatory “Fines Double and “End School Zone” signs. **The six year request contains \$400,000 to make these installations** (\$200,000 in 2013 and 2014)

In addition to the requirements of the MUTCD, the FHWA and the Department of Justice are considering proposed “Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way”. The public comment period closed on February 2, 2012. It is not known when the final rules will be adopted. 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 (flashing Don’t Walk sign). **Costs for these upgrades have not been included in the six year request.**

## Underground Conduit and Manhole Program

	Carryover	Tax Levy	Gen Oblig.	Grant/Aid	Total	% Change
<b>2013 – Request</b>					<b>\$5,000,000</b>	
2012 – Budget			\$1,56,500		\$1,56,500	44%
2011 – Budget			\$800,000		\$800,000	(20%)
2010 – Budget			\$1,000,000		\$1,000,000	150%
2009 – Budget			\$400,000		\$400,000	
2008 – Budget		\$400,000			\$400,000	

6 year Request                      Useful Life  
\$30,000,000

The six year request is for \$5,000,000 each year.

The installation of a permanent underground electrical conduit and manhole system provides secure weatherproof public safety cable and circuit networks for multiple City agencies. The system ensures a reliable route for City communication cables to be installed into all existing and proposed City buildings, provides a reliable route for traffic control at signalized intersections and is utilized for street lighting cable circuits.

Typically, 100% of the underground conduit and manhole program is driven by the paving program. An increase in 2010 funding for this program was directly related to a significant increase in street projects driven by ARRA grants. Funding in 2012 continued above historical averages to reflect increased funding for the Local Street Program. Since 2000 this program has received \$8.8 million in funding. This program has approximately \$2.0 million in carryover borrowing authority.

From 2011 to 2012 there was a \$25 million increase in the six year request. The cause of the increase was a departmental policy shift which changed the average annual requested amount to more accurately reflect opportunities for installing conduit. DPW has identified 16 projects that were jointly requested by Communications and Traffic. The related paving and bridge projects must be approved by the Common Council. Approved construction projects will be prioritized based on the funding made available in this program.

DPW also identified five projects that may be required in advance of the Zoo Freeway project.

### Proposed Conduit Projects for 2012

- W. Capitol Dr. Structure over the Menomonee River
- W. Lloyd St. : N. 47th St. – W. Lisbon Ave.
- W. Hampton Ave. : N. Green Bay Rd. – W. Teutonia Ave.
- N. 27th St. : W. St. Paul Ave. – W Highland
- S. 27th St. : W. Howard Ave. – W Kinnickinnick Ave.
- W. Capitol Dr. from the West City Limits – N. 84th St.
- N. Mayfair Rd. (STH 100) : W. Burleigh St. – W Silver Spring Ave.



## Underground Conduit and Manhole Reconstruction Program

	Carryover	Tax Levy	Gen Oblig.	Grant/Aid	Total	% Change
<b>2013 – Request</b>					<b>\$1,000,000</b>	
2012 – Budget			\$300,000		\$300,000	50%
2011 – Budget			\$200,000		\$200,000	
2010 – Budget			\$200,000		\$200,000	
2009 – Budget			\$200,000		\$200,000	100%
2008 – Budget			\$100,000		\$100,000	

6 year Request                      Useful Life  
 \$6,000,000                              75 Years

The six year request is for \$1,000,000 each year.

This program funds the reconstruction of existing manholes located in street right-of-way that provide the necessary entrance networks for all of the communications, traffic control and street lighting cable circuits that serve the City’s governmental buildings and agencies. There are presently 7,543 active manholes in the system.

Since 2000 this program has received approximately \$200,000 in funding each year. The 2012 Budget provided \$300,000 in funding. This program has \$240,000 in carryover borrowing authority.

Manholes are not inspected on a regular basis. The department is actively developing an inspection and maintenance plan for the system’s manholes. The goal is to develop and implement an inspection program on a 5 to 10 year cycle. Part of the strategy is to use consultants to perform the inspections. In 2011 the department let a contract for paving related manhole inspection. 301 manholes were inspected at an average cost of \$80 each. In 2012, the cost increased to \$114.75 per manhole. (\$67.50 for inspection and \$67.50 to dewater 70% of the manholes.

The maintenance and finance strategy will be based on the findings of the inspection program.

The average cost for manhole maintenance based on 2011 service orders

Repair	\$4,700
Replace	\$23,500