

REPORT

LEGISLATIVE REFERENCE BUREAU

WWW.MILWAUKEE.GOV/LRB

23. DPW— Infrastructure, 2014

23. Department of Public Works—Infrastructure

I. EXECUTIVE SUMMARY.

Table 23.1. Statement of Changes in Operating Budget, 2013 to 2014.

10 20 17.
\$37,849,057
\$37,595,621
(\$495,117)
(\$395,394)
(\$890,511)
\$691,375
\$112,500
(\$12,000)
(\$98,636)
\$37,496,985

1. 200% increase to High Impact Paving Program. This program is intended to provide funding for high-volume streets in commercial corridors which may be eligible for state and federal aid, but for which aid is not currently available. These types of streets would normally be eligible for an 80/20 match from the grantor. Funding for the program increases from \$1 million in 2013 to \$3 million in 2014. It is expected this increase will contribute to the reduction of seasonal street maintenance efforts by one week.

- 2. Organizational changes implemented. Several changes are proposed for 2014 to increase efficiency and effectiveness. Changes include restructuring 2 uppermanagement positions in the Administration and Facilities Sections and using city forces to perform repairs on electrical and communications manholes. City crews are expected to repair manholes more quickly and at about half the cost of contractors.
- 3. Federal Highway Administration deadlines eliminated. Many of the FHA deadlines relating to the most recent Manual on Uniform Traffic Control Devices have been eliminated, allowing the City to scale back the accelerated pace of the Traffic Control Program. In 2014, \$700,000 has been allocated for non-paving-related sign replacements.
- 4. Street lighting circuit updates. The City currently maintains nearly 6,800 street lights and over 8,900 alley lights. In 2014, \$800.000 will allocated be toward construction of street-lighting control circuits, allowing the City to more quickly identify problems and outages. Additionally, \$1 million will be allocated toward replacing series circuits with multiple circuits. The Division anticipates converting 900 lights from series to multiple circuits in 2014, the same as 2013.

II. INITIATIVES AND PROGRAMS.

1. High Impact Paving Program.

Funding for street resurfacing projects through the Division's High Impact Paving (HIP) program will increase from \$1 million in 2013 to \$3 million in 2014. Projects in the HIP program are considered "no plan" and have a short lead time, so a large portion of the program (\$2 million) is funded with cash. To select streets appropriate for HIP program funding, the Division focuses on projects which do not require complex reconstruction, such as curb removals, traffic control upgrades or street lighting work. Further, because of the relatively short time it takes to complete HIP projects, the Division targets streets with high-traffic volume in established commercial or employment corridors, where other extended major reconstruction projects would typically have a detrimental impact to the area. Because there are no assessments associated with these projects, they can be estimated and bid in a short amount of time. Further cost savings are generated through the use of more durable pavement marking on some HIP projects.

2. Underground Conduit & Electrical Manhole Work.

The Infrastructure Services Division plans to perform in-house repairs on electrical communication manholes in 2014. To accommodate the increased workload and improve overall efficiency, the Division is consolidating its trades groups into the Streets and Bridges Decision Unit. The Division has also recently initiated a manhole inspection program, by which manholes are inspected on a 5-year rotation. In 2013, 1,421 underground conduit and electrical manholes were inspected, and 1,457 are anticipated to be inspected in 2014. There are presently 7,529 active manholes in the system. All manhole inspection work is contracted out. Prior to this program, the Division repaired or replaced manholes as they were brought to their attention via service calls or routine work.

3. Street Lighting Circuit Conversion.

In the 2014 Proposed Budget, Infrastructure Services is expected to expend \$1 million on replacing series circuits with multiple circuits. The budget also allocates \$800,000 toward replacement of street-lighting control circuits. These programs are aimed at reducing electrical maintenance costs and electrical outages. The number of single/double area outages each year is largely dependent on weather, but Division management has noted an increasing trend in outages as the system ages. Table 23.2 lists the changes in area outages since 2007.

Table 23.2. Changes in Area Outages Since 2007.

Year	Area Outages	% Change, Previous Yr.	Year	Area Outages	% Change, Previous Yr.
2007	2,514		2011	3,315	22.6%
2008	2,762	9.9%	2012	2,574	-22.4%
2009	2,679	-3.0%	2013 (estimate)	3,100	20.4%
2010	2,703	0.9%	7-Yr. Average	2,807	

The Division has standards for responding to street-light outages. Response to area outages remains the highest priority, as these have the largest impact on City neighborhoods. These response time goals are aimed at re-lighting an area. If more extensive underground circuit repairs are required, a temporary repair will be completed to get the area lit, and the final repair work will be deferred. As of pay period 16, the City has experienced 39% more area-wide outages in 2013 (2,240) than in the same period in 2012 (1,611).

Table 23.3 lists total response times for 2012. Because fewer area-wide outages were experienced in 2012 than usual, the Division was able to respond to more single-unit outages.

Table 23.3. Response Time to Street Lighting Outages in 2012.

Outage Type	Response Time Goal	Total Outages	% Complete Within Goal
Area Wide*	24 Hours	2,574	99.7%
Single Unit	30 Days	2,983	80.0%
Alley	72 Hours	2,992	99%

^{*}Three or more lighting units.

Finally, in 2012, the City out-sourced one street-lighting project by including it in a paving contract and found that costs were about 100% above City costs. This was due to the limited purchasing power of the contractor. If the City were able to supply street-lighting materials on other out-sourcing projects, similar to how some City water main projects are let, potential savings could be realized.

4. Business and Resident Assistance During Construction.

Project information is currently available to city residents online. This includes location, type of project, status, costs and work days per division, public hearing information, and bid notice information. Projects can be queried in Map Milwaukee using the "street paving program" layer.

In addition to this service, the Division provides assistance to businesses in preparing for major construction projects. Projects with a significant number of businesses affected are identified and assigned a community liaison. Additionally, workshops and webinars are used as education tools; these have been well-utilized. In 2013, one position was assigned as a business support liaison. The Division has found that proactive communication before work begins has been the most successful approach to limiting the impact construction projects have on affected businesses.

See also CAPITAL PROJECTS, Section VII.

III. EXPENDITURES.

Table 23.4. Changes in Expenditure Amounts by Account.

Expenditure Account	2012 Actual	2013 Adopted Budget	% Chng.	2014 Proposed Budget	% Chng.
Salaries and Wages	\$15,511,364	\$16,268,890	4.9%	\$15,773,773	-3.0%
Fringe Benefits	\$7,872,537	\$7,809,068	-0.8%	\$7,413,674	-5.1%
Operating Expenditures	\$14,237,821	\$13,247,663	-7.0%	\$13,939,038	5.2%
Equipment Purchases	\$227,335	\$258,000	13.5%	\$370,000	43.4%
Special Funds	\$0	\$12,000		\$0	
Total Operating Budget	\$37,849,057	\$37,595,621	-0.7%	\$37,496,985	-0.3%

1. Budget Summary.

The total 2014 Proposed Budget is \$37,496,985, a decrease of \$98,636 (-0.3%) from the 2013 Adopted Budget amount of \$37,595,621.

2. Personnel Costs.

Personnel costs in the 2014 Proposed Budget are \$23,187,447, a decrease of \$890,511 (-3.7%). Salaries and wages decrease \$495,117 (-3.0%). Fringe benefits decrease \$395,394 (-5.1%). Most of the decrease in salaries and wages can be attributed to an increase of \$555,289 (4.3%) in capital improvement deductions, and a decrease of \$136,483 (-16.4%) in anticipated overtime compensation. See Appendix B for detailed information.

3. Operating Expenditures.

Operating Expenditures in the 2014 Proposed Budget are \$13,939,038, an increase of \$691,375 (5.2%) from the 2013 Adopted Budget amount of \$13,247,663. This is largely due to a \$444,500 (9.2%) increase in reimbursements to other departments.

4. Equipment Purchases.

Equipment purchases in the 2014 Proposed Budget are \$370,000, an increase of \$112,000 (43.4%) from the 2013 Adopted Budget amount of \$252,000. Major equipment purchases are associated with infrastructure projects and facilities maintenance, and these purchases fluctuate each year based on number of projects planned and replacement cycles for the equipment.

5. Special Funds.

The Division's one special fund, the City Hall Renewable Energy Program, will be funded through the Energy Efficiency and Renewable Energy capital account in 2014. The Division thought it best to keep expenses for the facilities' environmental effort consolidated under one account. The 2012 and 2013 budgets provided \$12,000 to this special fund, which was created

to pay a premium of \$1,000 per month on 100,000KW of renewable resource energy from We Energies.

IV. PERSONNEL.

Table 23.5. Changes in Full-Time Equivalent (FTE) and Authorized Positions.

Position Category	2012 Actual	2013 Adopted Budget	Change	2014 Proposed Budget	Change
O&M FTEs	298.27	286.46	-11.81	321.41	34.95
Non-O&M FTEs	299.14	310.74	11.6	307.13	-3.61
Total Authorized Positions	803	802	-1	810	8

1. Personnel Changes.

The total number of authorized positions in the department under the 2014 Proposed Budget is 810, an increase of 8 from the 2013 Adopted Budget.

- In 2014, 4 Non-O&M FTEs are added to the Division to perform electrical and communication manhole repair work. This new initiative will use City forces instead of contract work.
- Two upper-management positions in the Administration and Facilities sections are being restructured, saving approximately \$70,000 in salaries. The same work will be performed by the new positions, but the change will create more consistency across section heads by establishing more of a traditional hierarchy within the Division.

2. Vacancies.

There are currently 40 vacant positions in the Division. The Division expects and budgets for savings in personnel costs due to turn-over and vacancies in each decision unit (2% in Transportation & Construction, 3% in Streets & Bridges, 4% in Facilities Design & Management, and 0% in Administration).

3. Seasonal Staffing.

Table 23.6 provides current staffing of seasonal concrete, asphalt and electrical services and weeks of work and the intended 2014 level staffing and weeks of work. This is an estimate used to establish budgetary funding levels and can vary.

Table 23.6 Staffing of Seasonal Positions, 2013 Current and 2014 Projections.

-	-			
Type of Position	Weeks	of Work	Number of Positions	
Type of Fosition	2013 2014 2013 20			2014
Seasonal Asphalt Positions	23	22	44	44
Seasonal Concrete Positions	28	27	30	30
Seasonal Electrical Services	20	20	30	30

V. SPECIAL PURPOSE ACCOUNTS (SPA).

None.

VI. REVENUES.

The 2014 Proposed Budget estimates that \$4,449,500 will be generated in revenues by the Division, an increase of \$672,000 (17.8%) from the 2013 Adopted Budget estimate of \$3,777,500. An additional \$6.25 million in revenue will be available from the Motor Vehicle Registration fee, a decrease of \$50,000 (-0.8%) from the 2013 estimate of \$6.3 million.

Table 23.7. Changes in Revenue by Category.

Revenue Account	2012 Actual	2013 Adopted Budget	% Change	2014 Proposed Budget	% Change
DPW-Infrastructure Division	\$5,263,317	\$3,560,500	-32.4%	\$4,272,500	20.0%
DPW-ISD Facilities- Rent	\$242,186	\$217,000	-10.4%	\$177,000	-18.4%
Vehicle Registration Fee	\$6,256,684	\$6,300,000	0.7%	\$6,250,000	-0.8%

The Motor Vehicle Registration Fee (MVR) fee went into effect December 1, 2008, for vehicles customarily kept in the city. Revenues from the \$20 annual MRV fee on specified vehicles may only be used to defray City costs for transportation-related purposes, including costs related to design, construction, operation and maintenance of streets, alleys, bridges, public way lighting, traffic signs and signals, traffic calming installations and special assessments. A minimum of 10% of the annual MVR fee revenues must be specifically allocated to street maintenance activities.

VII. CAPITAL PROJECTS.

The 2014 Proposed Budget provides \$99.1 million in capital funding for projects and programs in the Infrastructure Services Division, a decrease of \$7.2 million (6.8%) from the 2013 Budget. The programs have been divided into two sections, Core Infrastructure and Facilities. Each section will be discussed separately.

CORE INFRASTRUCTURE.

Capital funding for 2014 Core Infrastructure Programs is summarized in Table 23.8 and the discussion that follows. The 2014 Proposed Budget includes \$93,971,000 in funding for 13 capital programs relating to bridges, streets, alleys, street lighting, traffic control, underground conduit and electrical manholes, a decrease of \$7.5 million (7.43%) from the 2013 Budget.

The largest reduction (\$4.5 million) is in the Major Bridge Program. However, several other programs have significant decreases, including Major Streets, Alleys, Underground Conduit and Manholes and the Traffic Control Program.

Table 23.8. Capital Program Summary, 2014.

Program	2014 Proposed Budget	2013 Actual Budget	Increase (decrease)	% Chng.	6-year Request
Major Bridges ¹	\$1,270,000	\$5,755,000	(\$4,485,000)	-77.9%	\$27,920,000
Local Bridges	\$9,815,000	\$9,785,000	\$30,000	0.3%	\$61,820,000
Major Streets ¹	\$49,993,000	\$51,336,000	(\$1,343,000)	-2.6%	\$228,480,460
Local Streets ²	\$13,500,000	\$16,000,000	(\$2,500,000)	-15.6%	\$96,600,000
High Impact Street	\$3,000,000	\$1,000,000	\$2,000,000	200%	\$9,000,000
New Streets	\$350,000	\$0	\$350,000		\$1,200,000
New Streets - Developer	\$400,000	\$400,000	\$0	0.0%	\$2,400,000
Alley Program ²	\$1,675,000	\$2,500,000	(\$825,000)	-33.0%	\$12,150,000
Sidewalk Program ²	\$1,425,000	\$1,333,000	\$92,000	6.9%	\$11,700,000
Street Lighting Program	\$9,300,000	\$8,540,000	\$760,000	8.9%	\$59,950,000
Traffic Control Program	\$1,993,000	\$2,590,000	(\$597,000)	-23.1%	\$16,830,000
Underground Conduit & Manhole Program	\$500,000	\$1,736,700	(\$1,236,700)	-71.2%	\$29,300,000
Underground Electrical Manhole Reconstruction Program	\$750,000	\$450,000	\$300,000	66.7%	\$5,785,000
Total	\$93,971,000	\$101,425,700	(\$7,454,700)	-7.4%	\$563,135,460

¹ Includes grant and aid funding; ² Includes special assessment 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 the Major Street programs. Total grant funding for 2014 has decreased from 2013 by over \$11.7 million. Grant funding for Major Bridges decreased by 82% (-\$4.6 million). Grant funding has declined by nearly \$30 million from 2012.

The amount budgeted in the Local Street Program has decreased from 2013. Funds available for local streets in 2014 will be similar to 2013 because approximately \$2 million of Local Road Improvement Program (LRIP) funds will be available from the state to use on local streets. LRIP funds are available only in even-numbered years and are budgeted in the Major Streets program.

The 2014 Proposed Budget also provides \$3 million for a High Impact paving program. The High Impact program will target high-volume streets in commercial corridors which may be eligible for state or federal funding but for which funding is not available. \$2 million of this program will be financed with cash.

The decrease in the Alley program reflects a return to previously planned investment levels after increases in the 2012 and 2013 Budgets.

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 inefficient use of resources may result. For example, additional paving projects will require resources from the street-lighting program to be directed toward re-cabling individual streets as part of the street reconstruction project and away from the projects that transition the street-lighting system from series circuitry to multiple circuits.

DPW is attempting to address this issue by including more items that would typically be performed by City crews such as street light cabling and communications conduit with the paving contract.

1. Currently-Funded Projects.

Major Bridge Program, \$1,270,000.

The 2014 Proposed Budget includes \$1,270,000 in funding for the Major Bridge Program, a decrease of \$4.5 million (77.9%) from the 2013 Budget.

Major bridges are those bridges that are part of the major arterial and connector infrastructure within the city and are eligible for federal or state aid. The City's share of these major bridge projects is normally 20%. Funding for this program is fluid, largely dependent on when projects are scheduled in the grantor funding cycle. Anticipated grant funding in 2014 is \$1,040,000, a decrease of \$4,615,000 (81.6%) from 2013.

Local Bridge Program, \$9,815,000

The 2014 Proposed Budget includes \$9,815,000 in funding for the Local Bridge Program, an increase of \$30,000 (0.3%) from the 2013 Budget. Funding for this program has increased substantially since it was created in 2007.

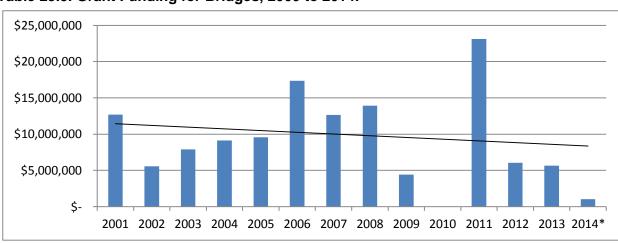


Table 23.9. Grant Funding for Bridges, 2000 to 2014.

*Proposed Budget.

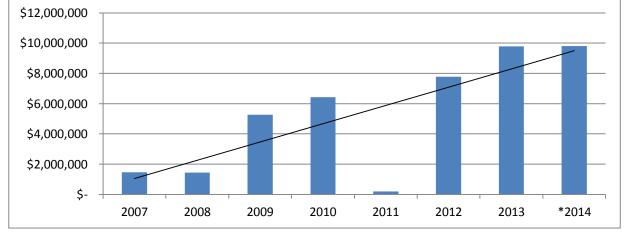


Table 23.10. Budgeted City Funding for Local Bridges, 2007 to 2014.

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 is insufficient. This program now includes high-cost movable bridges, which receive a lower priority for WisDOT aid due to the high cost associated with the projects. City funding for this program covers maintenance work, structural repairs, painting, mechanical upgrades, inspection and engineering for the City's entire bridge system.

The City's investment in its bridge infrastructure has improved the condition of the system. In the late 1980s, 51 bridges had a sufficiency rating of less than 50; today there are 18. This represents approximately 12% of the City's bridges. Although the City's efforts have improved bridge condition, the system overall continues to age, with many bridges being at or near the end of their projected useful lives. Unless structural changes in transportation funding are made at the state level, grant and aid funding will likely remain difficult to obtain, and this program will require significant local funding.

Due to complexity of bridge projects, bridges are often constructed in a year other than the year of initial funding. Therefore, large amounts of bridge funding in a particular year may not correspond to a large amount of construction in that year. Below is a list of recent and proposed bridge construction activity from both the Major Bridge and Local Bridge accounts.

Major Street Program, \$49,993,000.

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 Highways, Highway Safety Improvement and Local Road Improvement programs. Because 2014 is an even-numbered year, Local Road Improvement Program funds are available.

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 future years. The \$43.8 million in grant funding that is expected in 2014 is less than what has been received in each of the previous 3 years, but it is still above the average amount for the years from 2000 through 2010.

^{*}Proposed Budget.

Although the funding can be volatile, the grant funding has been trending upward. Anticipated grant funding for 2014 is \$5.7 million (14.9%) above the 10-year average.

Table 23.11. Bridge Construction, 2011-2014.

Bridges Proposed for Construction in 2014	Construction Start	Opened
45 th Street Bridge over the Menomonee River	May 2014*	Oct. 2014*
27 th Street Bridge over the KK River	April 2014*	Nov. 2014*
1 st Street Bridge over the KK River;	May 2014*	Nov. 2014*
Lisbon Avenue Bridge over the CPRR	May 2014*	Nov. 2014*
Granville Road Bridge over Little Menomonee (removal)	Sept. 2014*	Nov. 2014*
St. Paul Avenue Bridge over the Milwaukee River	2013	June 2014*
**Hank Aaron State Trail Ped Bridge @ 6 th Street Viaduct	2013	May 2014*
Bridges Constructed in 2013		
Pleasant Street Lift Bridge	2012	July 2013
**Hank Aaron State Trail Ped Bridge @ 6 th Street Viaduct	Sept. 2013	May 2014*
St. Paul Avenue over the Milwaukee River	July 2013	June 2014*
**Hank Aaron State Trail Ped Bridge @ S. 33 rd Ct	2012	July 2013
**Hank Aaron State Trail Ped Bridge over CP RR	2012	July 2013
Capitol Drive Bridge over Menomonee River	May 2103	Nov. 2013
**Marsupial Trestle Bridge (1870 N. Commerce)	Jan. 2013	Aug. 2013
**KK River Trail Ped Bridge over Chase Ave	Nov. 2012	Oct. 2013
Bridges Constructed in 2012		
Wisconsin Avenue Bridge over the Milwaukee River	2011	Aug. 2012
Juneau Ave Bridge over the Milwaukee River	2011	Nov. 2012
Pleasant Street Lift Bridge	Sept 2012	July 2013
**Hank Aaron State Trail Ped Bridge @ S. 33 rd Ct	June 2012	July 2013
**Hank Aaron State Trail Ped Bridge over CP RR	June 2012	July 2013
**KK River Ped Bridge over Chase Ave	Nov. 2012	Oct. 2013
Bridges Constructed in 2011		
County Line Road Bridge over the Little Menomonee River		July 2011
Clybourn Ave. Lift Bridge		July 2011
Wisconsin Avenue Bridge over the Milwaukee River	2011	Aug 2012
Juneau Avenue Bridge over the Milwaukee River	2011	Nov 2012

^{*}Estimate; **new bridges.

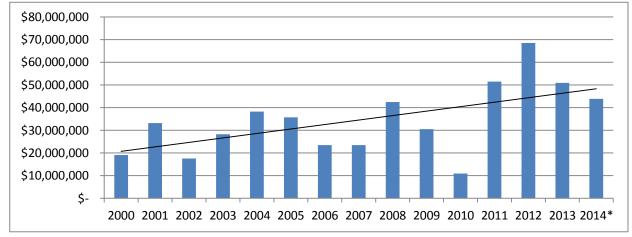


Table 23.12. Grant Funding for Major Streets, 2000 to 2014.

The following major streets are scheduled for construction in 2014:

- S. 27th Street: W. Howard Avenue Union Pacific Railroad
- S. 35th Street: W. Mitchell Street W. Greenfield Avenue
- W. Appleton Avenue (Hwy 41): W. Capitol Drive N. 107th Street
- W. Hampton Avenue: N. Teutonia Avenue N Green Bay Avenue
- S. Howell Avenue (STH 38): W. Ryan Road to W. Grange Avenue
- N. Mayfair Road/N. Lovers Lane Road: W. Burleigh Street W. Silver spring Drive.

Recent Construction Activity:

N. 27 th Street: W. St. Paul Avenue – W. Highland Boulevard	(2013)
Capitol Drive: N. 84 th Street – N. Mayfair Road	(2013)
107 th Street: W. Brown Deer Road – City Limits	(2013)
20th Street: W. Hopkins Street - W. Capitol Drive	(2012)
91st Street: N. Swan Road – W. Flagg Avenue	(2012)
Capitol Drive: N. 60th Street - N. 84th Street	(2012)
Morgan Avenue: S. 68th Street – S. 84th Street	(2012)
Port Washington Road: N. Dr. MLK Dr. – City Limits	(2012)

Local Street Program, \$13,500,000.

The 2014 Proposed Budget allocates \$13.5 million in capital funding for local street resurfacing and reconstruction, a \$2.5 million (15.6%) decrease from the 2013 budget. Funding for this program has increased substantially since 2000. This level of funding will allow approximately the same level of effort as in 2013 because the decrease in local funding is offset by Local Road Improvement Program funds from the state. LRIP funds are budgeted in the Major Streets program. Additional streets will be improved with the High Impact Street program.

DPW anticipates it will be able to pave approximately 16 miles of streets in 2014. The addition of \$3 million for High Impact roads will allow for the improvement of approximately 9 additional miles in 2014. 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. The replacement cycle, based on 16 miles of annual replacement is approximately 62 years.

^{*}Proposed Budget.

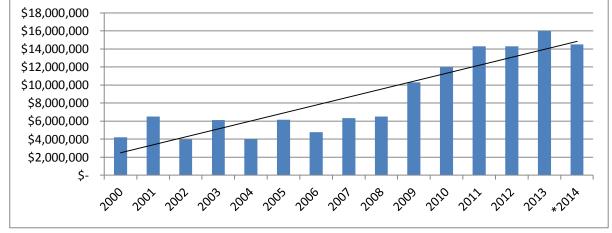


Table 23.13. Budgeted Funding for Local Streets, (excluding High Impact) 2000 to 2014.

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 its pavement management system which allows it 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. DPW is currently installing the module and fine-tuning the data so it can be used for programming.

DPW will use approximately \$200,000 in local road funding from 2013 to hire a consultant to do a condition survey of the entire street system. Using specialized equipment, the consultant will determine the current Pavement Quality Index which is a standardized rating of pavement condition. Combined with the new MATRIX module, this survey will populate DPW's database with current condition data giving the City the ability to accurately measure the improvements made since the Comptroller's audit of the Local Road Paving program in 2008. The survey is expected to begin in mid-October 2013 and be completed by year-end.

Amendments to Tax Incremental Districts provided some additional funding for paving projects in 2013. Amendments made to 3 TIDs in 2012 provided \$500,000 in additional funding for the paving program. Amendments are pending for 3 more TIDs. Funding estimates are subject to change but currently total \$905,000 for the 3 proposed amendments.

The Common Council passed an ordinance (File Number 080034) which adjusted the recovery ratios for certain assessable improvements. The ordinance also established a Motor Vehicle Registration (MVR) Fee whose revenues would be used to defray City costs for transportation-related improvements. The 2014 Proposed Budget includes \$6.25 million in revenues from the fee which will be allocated to the General Fund to pay for street-related capital programs.

By ordinance, a minimum of 10% of the MVR fee receipts must be allocated to street-maintenance activities. DPW has allocated \$1.3 million of the total budget for the local road program in 2014 for capital maintenance. This amount is equal to 21% of the anticipated revenue from the MVR. When the MVR was implemented, a provision was included that prohibited the fee from being raised until April, 2012. The fee has not been increased since it was first implemented.

^{*}Proposed Budget.

High Impact Street Paving Program, \$3,000,000.

The 2014 Proposed Budget provides \$3 million for High Impact streets, an increase of \$2 million (200%) from the 2013 Budget. High Impact streets serve businesses in commercial corridors. This program will target streets that may be eligible for state or federal aid, but for which aid is not currently available. The goal is to expedite street improvements that will have an immediate benefit to adjacent businesses and to prolong the lives of pavements that are still in fair condition.

Streets in this program are improved using an asphalt overlay. There are no assessments and projects can be estimated and bid in a short amount of time. Because there is no curb removal, the projects have a minimal impact on street-lighting and traffic-control facilities. Projects are typically constructed in a few days, minimizing impacts on businesses and traffic patterns.

Approximately 1.25 miles of streets have been improved in 2013 using funds from this program. An additional 1.4 miles will be paved later in 2013 or carried over into 2014. Construction has been delayed because the projects were re-bid after the first round of bids came in too high.

Streets Improved in 2013 using High Impact funds include:

- E. Kilbourn Avenue: The Milwaukee River N. Marshall Street
- N. Jefferson Street: E. Kilbourn Avenue E Wells Street
- N. Water Street: E. Mason Street E. Kilbourn Avenue
- N. Water Street @ E. Clybourn Avenue
- E. Michigan Street: N. Water Street N. Van Buren Street

Pending projects for 2013 include:

- N. Prospect Avenue: E. Kilbourn Avenue E. Ogden Avenue
- W. Center Street: N. 35th Street N. Sherman Boulevard
- N. 107th Street south of Good Hope
- N/ 60th Street: W. Center Street W. Appleton Avenue.

The preliminary High Impact Program for 2014 is still being developed.

New Street Construction, \$350,000.

The 2014 Proposed Budget provides \$350,000 in funding for this program. No funding was provided in the 2013 Budget. This program provides funding for the construction of unimproved streets to serve residential, commercial or industrial area. These projects are sponsored by the City, with a portion of the cost being recovered by special assessments levied against abutting properties. Typically, a request is made by the adjacent property owner.

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

The 2014 Proposed Budget provides \$400,000 in funding for this program the same amount as was provided in the 2013 Budget. This program provides for the construction of streets required to serve platted subdivisions and planned developments with funding provided by the developer. This fund is also used for street paving projects that are partially in adjacent communities. Projects will typically be constructed and then billed to the participating community.

In April 2013, \$1,350,000 was transferred into this account to provide authority for the paving projects on N. 124th Street and W. County Line Road. Those projects are being constructed in partnership with the adjacent municipalities. Agreements are in place to ensure the reimbursement of funds spent on these projects.

Alley Program, \$1,675,000.

The 2014 Proposed Budget includes \$1,675,000 in funding for the Alley program, a decrease of \$825,000 (33%) from the 2013 Budget.

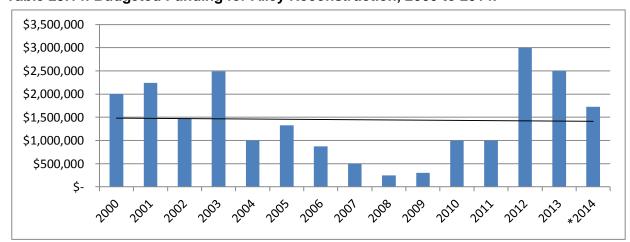


Table 23.14. Budgeted Funding for Alley Reconstruction, 2000 to 2014.

The City's alley network is comprised of ~4,000 alleys totaling 400 miles in length. DPW generally considers the useful life of an alley to be 50 years. Using that standard, over 120 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. Annual funding between 2006 and 2009 decreased by over 70%. Funding levels have recovered significantly since 2009. Maintaining a 50-year replacement cycle will take approximately \$2.5 million of funding each year.

The 2013 Budget funded just over 3 miles of alley reconstruction (approximately 25 alleys). The 2014 Proposed Budget will fund 2 miles (approximately 17 alleys). DPW let 29 alleys to contract in 2013 and anticipates letting 30 alleys in 2014. Because of the long lead times for paving projects, the number of alleys constructed each year may not reflect the budgeted funding. Over time, DPW expends virtually all of its appropriated funding.

Until 2009, the cost of paving alleys was recovered through a special assessment at a rate of 90%. With the passage of the Motor Vehicle Registration Fee, the recovery rate was reduced to 60%. This reduced property owner resistance to alley-paving projects, but also increased the amount of City funding required to pave the same number of alleys. 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, as the project moves through the public hearing process. Since instituting this practice, deletions at public hearings for alley projects

^{*}Proposed Budget

have been reduced to virtually zero. The 2012 Budget reduced the recovery rate to 30%. The current assessment rate of \$19 per frontage foot is nominally similar to the assessment rate in the early 1990s. See Table 23.15.

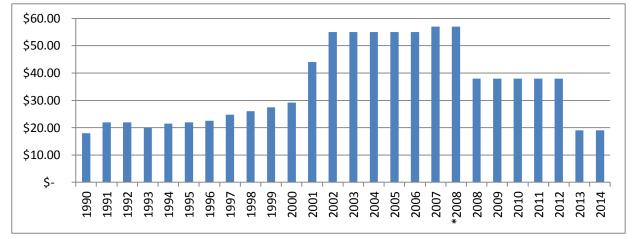


Table 23.15. Alley Assessment Rates per Frontage Foot, 1990 to 2014.

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, \$1,425,000.

The 2014 Proposed Budget provides \$1,425,000 for this program, an increase of \$92,000 (6.9%) from the 2013 Budget. 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.

^{*}Alley assessment rate was adjusted midyear.

DPW's goal is to maintain an annual program of between 300,000 and 350,000 square feet of walk replacements. The proposed level of funding will only provide for the replacement of between 270,000 and 310,000 square feet of sidewalk. Although significant increases have been made in this program in the last 5 years, the investment trend in sidewalks since 2000 has been downward.

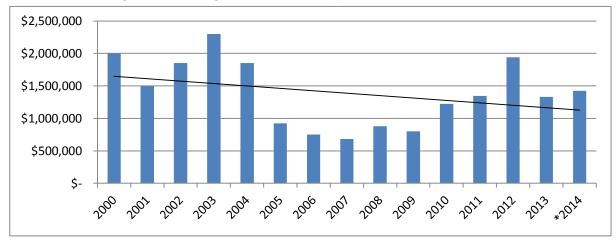


Table 23.16. Budgeted Funding for Sidewalk Replacement, 2000 to 2014.

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. The average annual area-wide walk replacement for the last 5 years is 189,000 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. Approximately \$240,000 is proposed for scattered sites in 2014. In October 2011, there was a backlog of 520 properties. DPW estimated that an additional \$840,000 in funding would be required to eliminate the backlog. A portion of the backlog was likely due to a change in City policy in 2010 that changed the assessment rate for sidewalks replaced by the Scattered Sites Program which were damaged by City trees. DPW estimates that approximately half of the requests in the scattered site program are driven by tree damage. Nearly \$600,000 was added to the 2012 Budget with the intent of eliminating the backlog in the Scattered Sites Program.

In October 2012, the backlog was approximately 400 properties. As of October 2013, there are 790 requests for sidewalk inspection. DPW estimates that only 70% of those properties will have sidewalks replaced, so the backlog is just over 550 properties.

Historically, the assessment rate per square foot for scattered site walk replacement was higher than the rate for sidewalk replaced on a regular paving contract. Beginning in 2013, the assessment rate was reduced to match the assessment rate for concrete walk in the area-wide program.

^{*}Proposed Budget.

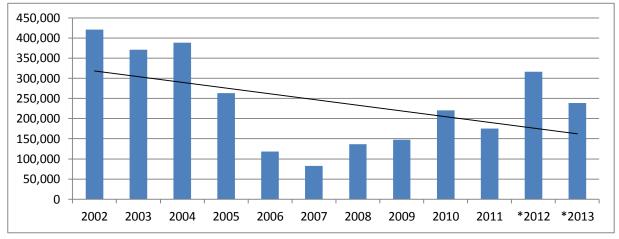


Table 23.17. Sq. Feet of Sidewalk Replacement, Area Wide & Scattered Site, 2002 to 2014.

^{*} Estimated amount.

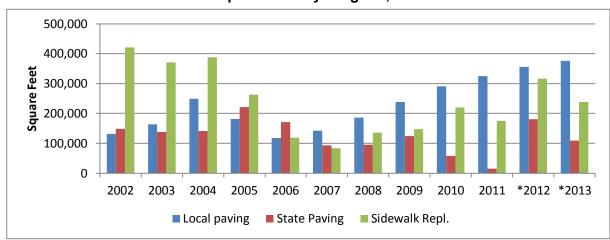


Table 23.18. Annual Sidewalk Replacement by Program, 2002 to 2014.

*Estimated amounts.

The Sidewalk Replacement Program is not the only means by which sidewalks are replaced in the city. Additional sidewalks routinely get replaced in conjunction with local and major street improvement projects. The average annual walk replacement since 2007 for these programs has been 274,000 square feet and 96,000 square feet, respectively.

Street Lighting Program, \$9,300,000.

The 2014 Proposed Budget provides \$9,300,000 in capital funding for the Street Lighting program, an increase of \$760,000 (8.9%) from the 2013 Budget. Nearly half (\$4.5 million) will be allocated to paving-related improvements, \$1 million will be used for the series circuit conversion project, and \$800,000 will replace street light control circuits.

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 nearly 6,800 street lights and over 8,900 alley lights.

Approximately 45% of the department's requested budget for street-lighting in 2014 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 circuitries. The series circuitry, which is the older technology, represents approximately 40% of the system, and is becoming increasingly unreliable. It is also more difficult to repair; requiring more time, specialized knowledge and unique parts which are becoming more difficult to obtain. The City began transitioning to multiple circuits in the 1950's.

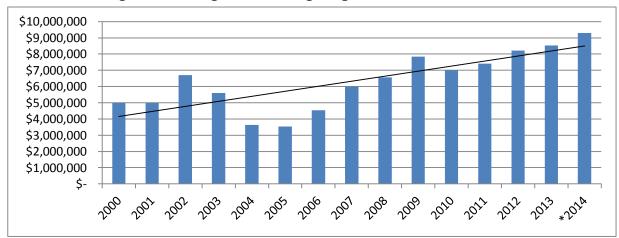


Table 23.19. Budgeted Funding for Street Lighting, 2000 to 2014.

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 circuitries. The report estimated that replacing the remaining series circuitry over the next 6 years would cost between \$120 million and \$131 million. This was determined to be the least cost-effective of the alternatives evaluated. Maintaining the status quo and continuing to fund the conversion program with \$1 million per year is the most cost-effective method 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.

The department is exploring several new strategies for speeding up the series circuit conversion These strategies include, replacing single circuits instead of entire substations, outsourcing the installation of overhead street-lighting cables by including them in the paving contract, and laying the cable for multiple circuits when a street is paved so that the block will be "pre-wired" when the series circuit is replaced. These strategies are still in the early stages of development; the department is doing limited testing and evaluating their feasibility and cost effectiveness. In one test project, DPW found that including the street lighting in the paving contract doubled the cost. The key challenge for the contractor was obtaining materials at a cost-effective price. DPW also anticipated having a dedicated crew for series circuit replacement in 2013 to complete the replacement of 22 series circuits (755 lights) from the ND substation at N. 24th Street and W. Vienna Avenue.

^{*}Proposed Budget.

"Replacement of Control" (\$800,000) 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.

DPW began to replace the controllers in 2006. It was originally a 4-year project. Funding cuts and resource diversions that were required because of ARRA funded paving projects and the increase in the local paving program have delayed the completion of this project. The system has 250 substations and enclosures. The master control system is currently operational at 51 stations. Design work began on 40 additional stations in 2013. The system is anticipated to be fully operational by 2016.

While past Executive Budgets have proposed reducing street-light burn time by 15 minutes during the evening, no such reduction is proposed for 2014.

Traffic Control, \$1,993,000.

The 2014 Proposed Budget provides \$1,993,000 for the Traffic Control program, a decrease of \$597,000 (23.1%) from 2013. Approximately \$700,000 is allocated to non-paving related signs.

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

Although proposed funding in 2014 is somewhat less than in 2013, overall, funding for this program has increased significantly since 2008.

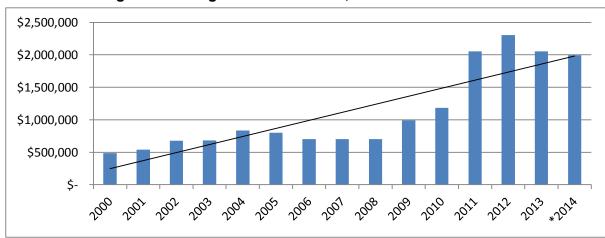


Table 23.20. Budgeted Funding for Traffic Control, 2000 to 2014.

^{*}Proposed Budget.

Typically about 25% of the traffic control program is paving-related. Although the new High Impact paving program targets streets with high-traffic volume roads which are more likely to have traffic signals or other traffic control devices, there has not been a large impact on this program. That is because High Impact streets are asphalt overlays that do not have curb removal.

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 statues. 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.

A MUTCD revision in May, 2012 removed all fully-defined compliance dates for meeting sign retro-reflectivity requirements. The revision also requires the establishment of a management plan to maintain sign retro-reflectivity. DPW adopted a Traffic Sign Retro-reflectivity Policy on November 29, 2011. The policy establishes the program that the department will follow to meet Federal Highway Administration standards for sign retro-reflectivity as set forth in the 2009 MUTCD. DPW anticipates meeting the retro-reflectivity standards in 2017 or 2018.

New sign standards include increased retro-reflectivity and changes in size, placement and content. DPW estimated 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 sign upgrades represent approximately 30% 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 requested budget includes \$200,000 to continue the installation of these signs in 2014.

Underground Conduit & Manhole Program, \$500,000.

The 2014 Proposed Budget includes \$500,000 for the Underground Conduit and Manhole program, a decrease of \$1,236,700 (71.2%) from the 2013 Budget.

The installation of a permanent underground electrical conduit and manhole system provides secure weatherproof public safety cable and circuit networks for multiple City agencies. The system ensures a reliable route for City communication cables to be installed into all existing and proposed City buildings, provides a reliable route for traffic control at signalized intersections and is used for street-lighting cable circuits. Typically, 100% of the underground conduit and manhole program is driven by the paving program.

An increase in 2010 funding for this program was directly related to a significant increase in street projects driven by ARRA grants. Funding has increased steadily since 2011 to reflect the increased workload caused by the increase in funding for the Local Street Program. Projects related to the Zoo Freeway Project were included in the 2013 Budget.

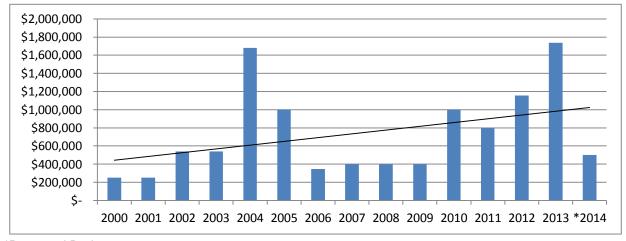


Table 23.21. Budgeted Funding for Underground Conduit, 2000 to 2014.

Underground Electrical Manhole Reconstruction Program, \$750,000

The 2014 Proposed Budget includes \$750,000 in funding to replace electrical manholes, an increase of \$300,000 (66.7%) from the 2013 Budget.

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 7,529 active manholes in the system. The 2014 Proposed Budget includes \$150,000 for the inspection of manholes. DPW estimates that 1,250 can be inspected for that amount.

Based on existing condition records, DPW estimates that 400 manholes need to be repaired and 200 need to be replaced. The cost of repairs can range from \$2,000 to \$14,000 per manhole. Manhole replacement typically costs between \$20,000 and \$25,000. To update the condition records, DPW began, in 2011, to contract out for the inspection of electrical manholes.

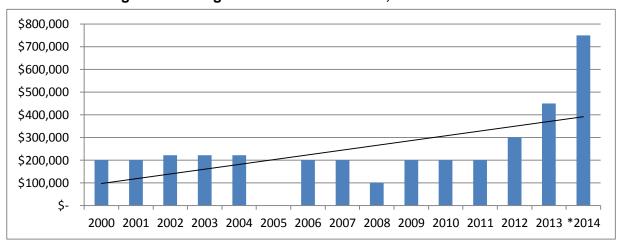


Table 23.22. Budgeted Funding for Electrical Manholes, 2000 to 2014.

^{*}Proposed Budget.

^{*}Proposed Budget.

In 2014 DPW will have a dedicated City crew to repairs electrical manholes. These types of manholes are more complex to repair than sewer manholes because fiber and electrical cables in the manhole generally must be kept active.

2. Unfunded Capital Requests.

(See Facilities section for unfunded DPW – ISD requests related to buildings.)

3. Project Updates.

There are no significant projects relating to core infrastructure that are not part of an on-going program.

4. Future Capital Requests.

There are no anticipated out year requests relating to core infrastructure that are not part of an on-going program.

FACILITIES.

The 2014 Proposed Budget includes 9 capital improvement items for City building and facilities programs totaling \$5,085,000, an increase of \$231,000 (4.8%) from the 2013 Budget.

Most DPW - Facilities capital programs are financed with general obligation borrowing. The 2013 Proposed Budget provides \$492,000 of cash financing for 4 programs, the ADA Compliance program (\$100,000), the Space Planning and Alterations Program (\$205,000), the City Hall Complex Remodeling program (\$101,000) and the Municipal Garages and Outlying Facilities program (\$86,000). The Proposed Budget also funds a portion of the Environmental Remediation program (\$50,000) with revenue from the Sewer Maintenance Fund.

The 2014 Proposed Budget does not include any capital funding for the City Hall Hollow Walk/Structural Repair project or funding to address the terra cotta failure on the exterior of City of Hall.

1. Currently-Funded Projects.

ADA Compliance Program, \$340,000.

The 2014 Proposed Budget includes \$340,000 of funding for the ADA Compliance program, an increase of \$95,000 (38.8%) from the 2013 budget.

This on-going program provides funding for building alteration projects to comply with the Americans with Disabilities Act Accessibility Guidelines, respond to new and updated regulations, and improve access to City facilities for the disabled. Alteration projects provide access to building entrances, restrooms, public telephones, drinking fountains, lobbies, meeting rooms and office space in the City Hall complex as well as outlying City facilities. Since 2000, \$3.4 million has been budgeted for this program. This program has \$582,000 in carryover borrowing authority. The 6-year capital request is \$1.7 million. The estimated cost to bring all City facilities into compliance with the ADA Guidelines is \$6.6 million.

In the spring of 2011, the City participated in the Federal Department of Justice's (DOJ) Project Civic Access (PCA) program. Through this program, the DOJ works cooperatively with state and local governments to ensure that they are in compliance with the Americans with Disabilities Act. Staff from the DOJ inspected all City facilities and will issue a report of their findings. The City will generally have 2 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. If significant upgrades are required, the DOJ will work with municipalities to extend compliance dates to avoid undue financial hardship. As of October 2013, the report has not been received from the DOJ.

2012 was the first year that funding for ADA improvements to recreational facilities was included in this program. In the past, ADA improvements to recreational facilities were funded through a separate Recreational Facilities Program. The Recreational Facilities program has not been funded since 2012.

In 2013, ADA Compliance funds were used to design the site at N. 31st Street & W. Lloyd Street and the site at N. 26th Street & W. Medford. Proposed recreational facility upgrades for 2014 include N. 90th Street & W. Bender Road and S. 16th Street & W. Edgerton Avenue. Allis Street was upgraded using funds from 2012.

City Hall Remodeling, \$191,000.

The 2014 Proposed Budget includes \$191,000 of funding for the City Hall Remodeling program, an increase of \$91,000 (91%) from the 2013 budget. A portion of this program (\$101,000) is funded with cash.

This on-going program provides funding for various architectural and mechanical remodeling work in the City Hall Complex, including projects necessary to comply with State of Wisconsin energy and safety building code requirements. Most projects undertaken from this account are responding to an immediate need caused by operational or staff changes during the year. This account is also used to fund repairs for minor deteriorating conditions.

Funding for this program was suspended in 2008 and 2009. Average annual funding since 2010 has been \$82,500. The 6 year capital request is \$1.4 million. 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.

Funding in 2013 was used to replace hazardous carpeting, to relocate staff from the 11th floor of the ZMB to the 9th floor, and to move the Unified Call Center to the 10th floor of the ZMB.

Energy Efficiency & Renewable Energy Initiative, \$150,000.

The 2014 Proposed Budget includes \$150,000 of funding for the Energy Efficiency & Renewable Energy Initiative, the same amount as the 2013 Budget.

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%. Energy reduction has exceeded 20%. This program has received \$150,000 in funding each year since 2011. The 6-year capital request is \$4,700,000.

Three major projects were undertaken in 2012, a lighting project at DPW Field Headquarters, and the replacement of pneumatic controls in the 809 Building and the Zeidler Municipal Building. In 2013, funding was used to install a heat pump chiller which will use the heat removed from the 809 Building server rooms to heat other areas of the complex. Additional LED lighting and occupancy sensors were also installed.

Proposed projects for 2014 include steam valve and building control upgrades in the City Hall Complex and the installation of lighting and occupancy sensors city-wide.

Environmental Remediation Program, \$200,000.

The 2014 Proposed Budget includes \$200,000 of funding for the Environmental Remediation program, an increase of \$50,000 (33.3%) from the 2013 budget. A portion of this program (\$50,000) is funded with revenue from the Sewer Maintenance Fund.

The goal of this on-going program is to provide a safe environment for the public and City employees. Activities include asbestos removal and lead abatement in City-owned buildings: the monitoring of closed landfills and contaminated sites; repairs to petroleum storage tanks; and upgrades and repairs to stormwater management systems and equipment.

This program was funded as requested. Since 2000, over \$5.5 million has been budgeted for this program. This program has \$149,000 in carryover borrowing authority. The 6-year capital request is \$1,896,000.

Projects in 2013 included the replacement of fuel dispensers at the Northwest Garage and the District 4 Police station; the removal/abandonment of vapor recovery systems, access improvements at the College Avenue landfill, and leak detection upgrades at the Lincoln Garage.

Facilities Exterior, \$2,088,000.

The 2014 Proposed Budget includes \$2,088,000 of funding for the Facilities Exterior program, an increase of \$1,165,000 (126.23%) from the 2013 budget. Since 2000, \$10.5 million has been budgeted for this program. Carryover borrowing authority of \$1.1 million remains. The 6year capital request is \$8,395,500.

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

The requested funding for this program was reduced by \$1,382,500 (39.8%) Projects requested for 2013 include EPDM roof replacements; asphalt pavement repairs at Lincoln and Central garage; overhead door replacements; and the inspection of the water tank at the Anderson Municipal Building.

Facilities Systems Program, \$1,765,000.

The 2014 Proposed Budget includes \$1,765,000 of funding for the Facilities Systems program, an increase of \$319,000 (22.1%) from the 2013 budget. Since 2000, \$28.9 million has been budgeted for this program. Carryover borrowing authority of \$1.4 million remains. The 6-year capital request is \$14,353,350.

This on-going program is used to sustain the operating systems of approximately 95 City-owned buildings. Operating systems include heating, ventilating and air-conditioning, plumbing, fire protection, electrical distribution, lighting, chillers, boilers, computerized facility management, security and life safety. Programming decisions are made using the Facilities Condition Information System which provides condition data on City buildings. Although the requested funding was reduced by \$1.6 million (47.3%), the 2014 Proposed Budget represents an increase of \$319,000 (22.1%) from the 2013 Budget.

Municipal Garages/Outlying Facilities Remodeling, \$86,000.

The 2014 Proposed Budget includes \$86,000 of funding for the Municipal Garages/Outlying Facilities Remodeling program, a decrease of \$1,314,000 (93.9%) from the 2013 Budget. Since 2000, \$8.1 million has been budgeted for this program. Carryover borrowing authority of \$1.7 million remains. The 6-year capital request is \$2,836,000. This program is funded with cash.

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 lives. 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.

The inclusion of compressed natural gas vehicles in the City's fleet will require significant upgrades to the City's repair garages. State building codes require that garage spaces that are to be used for CNG vehicle repair have modifications to mitigate explosion hazards. Funding in 2013 was used to make improvements to the Northwest Garage (\$500,000) and to upgrade the Lincoln Garage CNG Service Center (\$900,000). DPW estimates that the Central Repair Garage will require \$1.25 million of CNG upgrades. Currently repairs are done outside when possible. Limited repairs can be done indoors if the vehicle's fuel tanks are shut off.

DPW has applied for a CMAQ grant to install a time fill station at the Northwest Garage. This will allow trucks to be fueled overnight while they are parked. If the grant is received it is expected to pay 80% of the \$500,000 cost.

2012 was the first year that funding for recreational facilities was included in this program. In the past funding for recreational facilities was provided in a separate program. The Recreational Facilities Program has not been funded since 2012. The Capital Improvements Committee has recommended that funding for recreational facilities be returned to a discrete program. Improvements were made to 9 recreational facility sites in 2013.

Table 23.23. Capital Program Summary, 2014.

Program	2014 Proposed Budget	2013 Actual Budget	Increase (decrease)	% Chng.	6-year Request
ADA Compliance program	\$340,000	\$245,000	\$95,000	38.8%	\$1,740,000
City Hall Remodeling	\$191,000	\$100,000	\$91,000	91%	\$1,400,000
Energy Efficiency & Renewable Energy Initiative	\$150,000	\$150,000	\$0	0.0%	\$4,700,000
Environmental Remediation	\$200,000	\$150,000	\$50,000	33.3%	\$1,896,000
Facilities Exterior	\$2,088,000	\$923,000	\$1,165,000	126.2%	\$8,395,000
Facilities Systems	\$1,765,000	\$1,446,000	\$319,000	22.1%	\$14,353,350
Muni Garages & Outlying Facilities Remodeling	\$86,000	\$1,400,000	(\$1,314,000)	-93.94%	\$2,836,000
Space Planning Alterations& Engineering	\$205,000	\$205,000	\$0	0.0%	\$1,158,000
Playground Challenge Fund	\$60,000	\$100,000	(\$40,000)	-40%	\$0
Municipal Service Building Relocation	\$0	\$75,000	(\$75,000)0	-100%	\$0
City Facilities Consolidation	\$0	\$60,000	(\$60,000)	-1000%	\$60,000
Total	\$5,085,000	\$4,854,000	\$231,000	4.87%	\$36,538,350 [*]

The total does not include capital requests that were not funded in 2014. The total 6 year capital request for DPW Facilities is \$41.7 million.

Space Planning Alterations and Engineering, \$205,000.

The 2014 Proposed Budget includes \$205,000 of funding for the Space Planning Alterations and Engineering program, the same amount as in the 2013 Budget. Since 2000, \$1.8 million has been budgeted for this program. The 6-year capital request is \$1,158,000. This program is funded with cash.

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. This program was funded as requested.

Playground Challenge Fund, \$60,000.

The 2014 Proposed Budget includes \$60,000 of funding for the Playground Challenge fund, a decrease of \$40,000 (40%) from the 2013 Budget. There was no capital request for 2014. This program was created by the 2013 with funding of \$100,000 to provide matching funds for corporate partnerships, foundation contributions and neighborhood fund raising activities to support recreational facilities. Funds were used in 2013 to make improvements to the Merrill Park parking lot and the softball diamond trail.

2. Unfunded Capital Requests.

Storm Water Management, \$250,000.

The 2014 Proposed Budget provides no capital funding for this program.

This was a new request for an on-going program that would be used to provide matching funds to supplement MMSD grant funding for storm water reduction projects on City-owned properties. Ten sites have been submitted to MMSD for grant consideration.

The Capital Improvements Committee recommended that this program be funded by the Sewer Maintenance Fund.

City Facilities Consolidation, \$60,000.

The 2014 Proposed Budget provides no capital funding for this program.

This program has provided funding to study the consolidation of all City Facilities Management functions into the Department of Public Works. Currently DPW provides facilities management services for approximately 95 City buildings. These services include custodial and facilities maintenance functions. The remaining City buildings are the responsibility of various departments. This program would identify efficiencies that could be realized by having DPW provide management services for a larger portion of the City's buildings. In 2013, DPW worked with the Police Department to consolidate the operation of some mechanical systems. The 6-year capital request is \$60,000. No funding has been requested by DPW beyond 2014.

Facility Condition Assessment Program.

The 2014 Proposed Budget provides no capital funding for this program.

DPW requested \$100,000 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. Funding to inspect DPW buildings and provide condition data is included in the Space Planning & Alterations capital account as well as in the department's operating budget. The Capital Improvements Committee believes that establishing quantitative baseline condition of all City facilities and infrastructure in a timely manner is critical to effective maintenance and prudent decision-making. The Capital Improvements Committee strongly recommends including funding for this capital program.

Recreational Facilities Program.

The 2014 Proposed Budget provides no capital funding for this program. This on-going program has 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 Budget moved funding from the Recreational Facilities Program to the ADA Compliance Program and the Municipal Garages/Outlying Facilities Program. The average budgeted funding from 2007 through 2010 has decreased approximately 36% from the budgeted average of the years 2001 through 2006. The program has \$40,000 in carryover borrowing authority.

Because of the way funding is requested for the 6-year program, there is no way to determine projected funding for recreational facilities through 2019. The Capital Improvements Committee recommended that funding for recreational facilities be returned to a separate program.

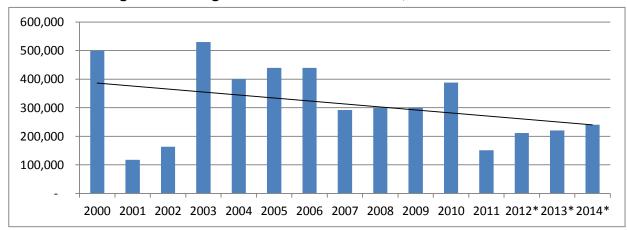


Table 23.24. Budgeted Funding for Recreational Facilities, 2000 to 2014.

3. Project Updates.

Municipal Service Building Relocation.

The 2014 Proposed Budget provides no capital funding for this program.

The 2014 Proposed Budget provides no funding for the Municipal Service Building Relocation program, a decrease of \$75,000 (100%) from the 2013 Budget. No funding was requested for 2014.

This program first received funding in 2012. To date it has received \$150,000 of funding. The program is being used to identify and procure a location, and set up a program for a new facility which will replace the Municipal Service Building (1540 W. Canal St.) and the Traffic Sign Shop (1430A W. Canal St.). Relocation is being considered due to the age and required maintenance costs of the facility as well as the potential economic benefit of the facility being converted to private use.

^{*}Amount allocated in other capital accounts for recreational facilities.

The facility portion of the study has been completed. The evaluation of the effect on the operations of a combined facility has not been determined. Combining this facility at the current DPW Field Headquarters (35th & Capitol) would require the site to expand an additional 6 aces. A building addition of 102,000 square feet would also have to be constructed. The estimated cost would be \$20.6 million. Approximately 180 employees would have to be relocated if this facility is closed.

4. Future Capital Requests.

City Hall Foundation & Hollow Walk.

Significant repair and restoration work is needed to address age-related deterioration of key elements of City Hall, including wood foundation piles, pile caps, below-grade hollow sidewalk walls, and structural concrete beams and sidewalk. Funding for this project has been deemed critical to the long-term stability of the structure. Capital funding began in 2008 with \$1.2 million for professional design services. \$1.8 million, \$2.7 million and \$3.2 was allocated in 2009, 2010 and 2011, respectively. Funding of \$5.840,000 was requested for 2012. Due to concerns regarding the failure of the new terra cotta, the 2012 Budget did not include funding for this project. This project has \$3.2 million in carryover borrowing authority.

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 Number 101367 in response to the failure of a terra cotta piece on the south tower of City Hall on February 17, 2011.

On July 24, 2012, Common Council File 120362 authorized DPW to move forward with Task I of the foundation project. The design/build team is anticipated to begin Task I of the project in October, 2013. Task I will include an investigation of the wood piles, water recharge and hollow sidewalk systems and a preliminary engineering report of their findings with proposed repair options, cost estimates and schedules. A revised project schedule is being developed at this time.

\$2,600,000 was transferred from this account to the City Hall Restoration account (CC File 111320). DPW believes that adequate funding remains to complete Task I. It is unknown at this time what the total cost of this project will be.

MacArthur Square Plaza Remediation.

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. Since 2008, \$1.5 million has been budgeted for the MacArthur Square Plaza. Carryover borrowing authority will be used to maintain MacArthur Square as a safe, functioning structure. Long-range restoration has not addressed.

Funding was requested in 2012 to replace the waterproofing that protects the parking structure beneath the plaza. The funding provided in 2011 was used to restore the concrete deck, lighting, handrails and stonework on the lower plaza explanatory text here. DPW anticipated requesting an additional \$251,000 for 2014; however, that request has been moved to 2016.

Building Exterior Façade Restoration.

This program corrects façade deficiencies in City-owned buildings. Section 275-32-13 of the code, enacted in 2001, requires the owner of any building 5 stories or greater to complete a critical exam to determine if the façade of the building is in a safe condition. 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 clear wall sections of the building are in adequate condition and do not require remedial work. The masonry at the corners of the building needed restoration which took place in 2012 with funding carried over from 2011. No funding has been provided in this account since 2011. DPW anticipates making requests in 2015-2017 to fund repairs to the 809 Building and the Police Administration Building. The 6-year capital request is \$1,500,000.

IT Equipment Room Compliance Program.

This program has received no capital funding. The 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.

VIII. ISSUES TO CONSIDER.

1. Street Lighting Circuit Conversion Funding.

As the street-lighting system ages, it has required an increase in repairs. Replacement of deteriorated poles, defective cable, outdated circuitry, aging electrical substations and other lighting equipment has resulted in increasing costs for the City. The frequency of area outages and single/double outages has increased steadily as the system has aged.

Funding has likewise increased significantly in the street-lighting program over the last 10 years, but technical complexities with the conversion and pressures from the paving program have made progress challenging. At the current level of funding, it will take decades to complete the conversion. In the meantime, failure rates will increase and costs related to repairs will continue to rise.

The department is exploring several new strategies for maximizing existing resources and expediting the project. These strategies include replacing single circuits instead of entire substations and laying cable for multiple circuits when a street is paved so that a block will be "pre-wired" when the series circuit is replaced. These strategies are still in the early stages of development. Their feasibility and cost-effectiveness will have to be carefully evaluated. Although the above strategies may prove to have a measureable positive impact on the street lighting circuit conversion program, in the absence of a significant funding source, street lighting will continue to be one of the most challenging elements of the core infrastructure program.

2. Funding Street Repairs.

In 2013, the Mayor's Proposed Budget transferred \$500,000 from the Sewer Maintenance Fund to partially offset the cost of curb and gutter replacement. While this transfer was ultimately cut from the 2013 budget, the issue of funding for the city's aging infrastructure remains.

In 2008, the City implemented a Motor Vehicle Registration fee of \$20 per vehicle. The fee is expected to generate \$6.25 million in revenue for street repairs in 2014. A corresponding shift away from special assessments has cut street construction costs by lowering property owner opposition to projects and increasing the number of designed and drafted projects which are ultimately completed. Despite these gains, the shift in emphasis away from special assessments has offset some of the MVR fee revenue and further complicated funding.

As infrastructure maintenance, repair, and reconstruction needs continue to rise, consideration will need to be given to other means of increasing revenues or cutting costs. For instance, DPW used to take measurements for sidewalk and driveway approach special assessments after street work was completed, despite the same measurements being taken by City workers prior to work commencing. Eliminating the redundancy proved cost-efficient.

Finally, 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. For instance, 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.

3. Replacement Cycle Considerations.

Using a replacement cycle based on average useful pavement life has limitations when trying to determine adequate funding levels. The issue is complex: new technologies in repair and maintenance are emerging, different pavement types have different useful lives, regular maintenance can extend the useful life of a street, and utility cuts can shorten it. For instance, the city's High Impact Paving (HIP) program has utilized paving technology which rejuvenates existing asphalt, increasing a street's life by seven years. How such technologies are accounted for when determining replacement cycles will need to be studied carefully.

Metrics other than street age – street condition, funding availability, or extraneous street repair costs, for instance – are currently informally used in conjunction with the replacement cycle to more accurately identify and target streets for maintenance, repair or reconstruction. To begin addressing these issues systematically, DPW has purchased a module for its pavement management system which allows it 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.

Further, DPW will use approximately \$200,000 in local road funding from 2013 to hire a consultant to perform a condition survey of the entire street system. Using specialized equipment, the consultant will determine the current Pavement Quality Index, which is a standardized rating of pavement condition.

Combined with the new MATRIX module, this survey will populate DPW's database with current condition data giving the City the ability to accurately measure the improvements made since the Comptroller's audit of the Local Road Paving program in 2008. The survey is expected to begin in mid-October 2013 and be completed by year end.

4. Compressed Natural Gas.

The transition to compressed natural gas vehicles will present challenges for vehicle maintenance and will necessitate upgrades to the City's repair facilities. The cost of the upgrades is still being determined. Many of these facilities were already in need of upgrades. If grant funding can be obtained to offset the cost of the required code upgrades, the City may benefit in the long-run by making other City-funded repairs and upgrades to the facilities at the same time. Each CNG vehicle is expected to save \$6,500 annually in fuel costs. Those savings may be offset by required building upgrades that not grant funded. DPW estimates that Central Garage will need \$1.25 million in upgrades.

5. Hollow Walk/Structure Repair Project.

The Hollow Walk/Structural Repair project is beginning to move forward. The design/build team will soon begin Task I: evaluating the wood piles, the water recharge system and the hollow sidewalk. The scope of the project and its overall cost will not be known until the engineering analysis is complete.

Prepared by: Andrew VanNatta, Legislative Research Analyst – Associate

Contributor: Kathy Brengosz, Fiscal Planning Specialist

Budget Hearing Date: October 14, 2013

Last Updated: October 9, 2013

Appendix A: Capital Budgets.

Major Bridges	Budget							
	2008	2009	2010	2011	2012	2013	2014	
Cash								
Borrowing	\$3,046,000	\$762,000	\$0	\$6,354,000	\$500,000	\$100,000	\$260,000	
Grants & Aid	\$13,922,000	\$4,436,000		\$23,116,000	\$6,035,000	\$5,655,000	\$1,040,000	
Revenue			\$500,000					
Total Current Funding	\$16,968,000	\$5,198,000	\$500,000	\$29,460,000	\$6,535,000	\$5,755,000	\$1,300,000	
Carryover Funding	\$2,841,000	\$5,887,000	\$6,504,000	\$762,000	\$4,139,965	\$6,854,000		
Local Bridges		Budget						
	2008	2009	2010	2011	2012	2013	2014	
Cash								
Borrowing	\$1,440,000	\$5,275,000	\$6,425,000	\$200,000	\$7,782,000	\$9,785,000	\$9,815,000	
Total Current Funding	\$1,440,000	\$5,275,000	\$6,425,000	\$200,000	\$7,782,000	\$9,785,000	\$9,815,000	
Carryover Funding	\$6,047,956	\$7,487,956	\$12,621,000	\$11,700,000	\$11,900,000	\$13,612,965		
Major Streets			Buc	lget			Proposed	
	2008	2009	2010	2011	2012	2013	2014	
Borrowing	\$6,471,340	\$4,230,100	\$4,730,000	\$8,314,100	\$9,776,200	\$435,000	\$6,214,000	
Special Assessment	\$1,260,149	\$100	\$194,000	\$100	\$1,000	\$1,000	\$1,000	
Grants & Aid	\$42,460,825	\$30,450,000	\$10,936,200	\$51,505,230	\$68,556,800	\$50,900,000	\$43,778,000	
Total Current Funding	\$50,192,314	\$34,680,100	\$15,860,200	\$59,819,430	\$78,334,000	\$51,336,000	\$49,993,000	
Carryover Funding	\$16,245,675	\$23,420,075	\$26,253,956	\$12,476,518	\$13,044,100	\$18,090,300		
Local Streets			Ruc	lget			Proposed	
Local Officets	2008	2009	2010	2011	2012	2013	2014	
Cash	\$1,020,000							
Borrowing	\$4,480,00	\$10,300,000	\$12,000,000	\$14,291,600	\$14,297,500	\$14,500,000	\$12,500,000	
Special Assessment	\$1,000,000	\$100	\$1,000	\$100	\$100	\$1,000,000	\$1,000,000	
Revenue - SMF	, , ,	7:-0	7.,	7	7	, , , , , , , , , , , ,	, , ,	
Total Current Funding	\$6,500,000	\$10,300,100	\$12,001,000	\$14,291,700	\$14,297,600	\$16,000,000	\$13,500,000	
Carryover Funding	\$8,177,144	\$11,083,309	\$11,751,587	\$10,865,029	\$14,291,600	\$18,445,230		

Appendix A. Continued.

High Impact Paving	Budget						
	2008	2009	2010	2011	2012	2013	2014
Cash							\$2,000,000
Borrowing						\$1,000,000	\$1,000,000
Special Assessment							\$0
Total Current Funding						\$1,000,000	\$3,000,000
Alley Paving	Budget						
	2008	2009	2010	2011	2012	2013	2014
Cash							
Borrowing	\$150,000	\$300,000	\$800,000	\$800,000	\$2,400,000	\$1,625,000	\$1,625,000
Special Assessment	\$100,000	\$100	\$200,000	\$200,000	\$600,000	\$875,000	\$50,000
Total Current Funding	\$250,000	\$300,000	\$1,000,000	\$1,000,000	\$3,000,000	\$2,500,000	\$1,675,000
Carryover Funding	\$862,631	\$796,652	\$787,432	\$1,345,819	\$1,600,000	\$2,438,809	
Sidewalk Replacement	Budget						
	2008	2009	2010	2011	2012	2013	2014
Cash							
Borrowing	\$480,000	\$650,000	\$900,000	\$1,000,000	\$1,478,000	\$1,000,000	\$1,000,000
Special Assessment	\$400,000	\$150,000	\$325,000	\$345,000	\$464,500	\$333,000	\$425,000
Total Current Funding	\$880,000	\$800,000	\$1,225,000	\$1,345,000	\$1,942,500	\$1,333,000	\$1,425,000
Carryover Funding	\$3,468,121	\$3,116,579	\$2,835,170	\$1,285,185	\$730,185	\$1,407,151	
Street Lighting	Budget						
	2008	2009	2010	2011	2012	2013	2014
Cash	\$817,080						\$800,000
Borrowing	\$5,746,170	\$7,850,000	\$7,000,000	7,400,000	\$8,220,000	\$8,540,000	\$8,500,000
Total Current Funding	\$6,563,250	\$7,850,000	\$7,000,000	\$7,400,000	\$8,220,000	\$8,540,000	\$9,300,000
Carryover Funding	\$3,406,883	\$7,611,277	\$8,850,000	\$0	\$6,554,590	\$4,121,006	
Traffic Control Program						Proposed	Proposed
O -20	2008	2009	2010	2011	2012	2013	2014
Cash	\$700,000						
Borrowing	\$0	\$990,000	\$1,182,500	\$1,912,250	\$2,303,000	\$2,055,000	\$1,993,000
Total Current Funding	\$700,000	\$990,000	\$1,182,500	\$1,912,250	\$2,303,000	\$2,055,000	\$1,993,000
Carryover Funding	\$0	\$0	\$990,000	\$332,500	\$1,271,638	\$1,963,069	

Appendix A. Continued.

UG Conduit & Manholes	Budget						Proposed
	2008	2009	2010	2011	2012	2013	2014
Cash	\$400,000						
Borrowing	\$0	\$400,000	\$1,000,000	\$800,000	\$1,156,500	\$1,736,700	\$500,000
Total Current Funding	\$400,000	\$400,000	\$1,000,000	\$800,000	\$1,156,500	\$1,736,700	\$500,000
Carryover Funding	\$877,950	\$64,524	\$400,000	\$1,302,939	\$1,979,317	\$2,726,897	,
UG Conduit & MH Reconst.	Budget						Proposed
	2008	2009	2010	2011	2012	2013	2014
Cash							
Borrowing	\$100,000	\$200,000	\$200,000	\$200,000	\$300,000	\$450,000	\$750,000
Total Current Funding	\$100,000	\$200,000	\$200,000	\$200,000	\$300,000	\$450,000	\$750,000
Carryover Funding	\$600,000	\$500,033	\$495,000	\$200,000	\$239,854	\$290,594	

Appendix B: Changes in Capital Improvement Deductions and Overtime.

Decision Unit	Capital Improvements Deductions						
Decision unit	2013	2014	\$ Change	% Δ			
Administration	\$236,276	\$243,185	\$6,909	2.9%			
Transportation	\$3,135,894	\$3,354,061	\$218,167	7.0%			
Construction	\$3,947,431	\$3,950,000	\$2,569	0.1%			
Streets/Bridges	\$938,572	\$1,050,000	\$111,428	11.9%			
Electrical Serv.	\$3,404,337	\$3,560,000	\$155,663	4.6%			
Facilities	\$1,353,447	\$1,414,000	\$60,553	4.5%			
Total	\$13,015,957	\$13,571,246	\$555,289	4.3%			
	Overtime						
	2013	2014	\$ Change	% Δ			
Administration	\$6,195	\$5,000	-\$1,195	-19.3%			
Transportation	\$20,777	\$10,000	-\$10,777	-51.9%			
0 ' '	\$40,000	\$30,000	-\$10,000	-25.0%			
Construction	\$ 4 0,000	\$30,000	-\$10,000	-23.070			
Streets/Bridges	\$284,950	\$250,000	-\$34,950	-12.3%			
	' '		. ,				
Streets/Bridges	\$284,950	\$250,000	-\$34,950	-12.3%			