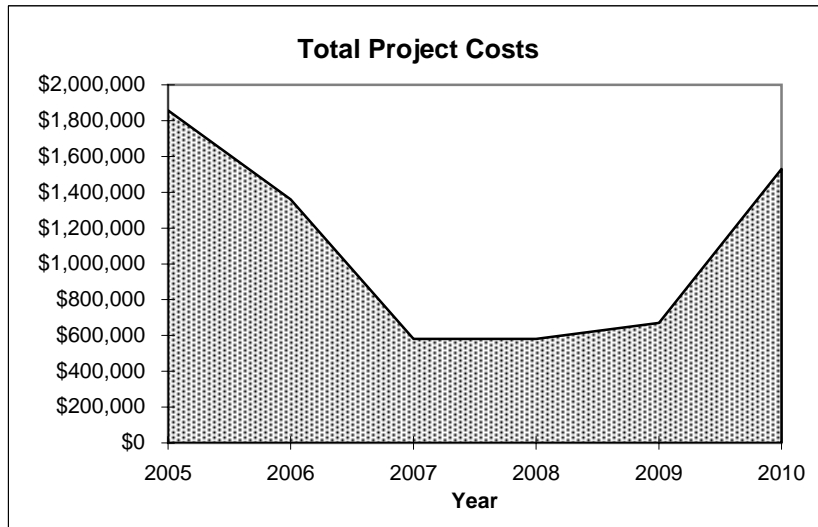


## 2005 Capital Budget Capital Improvement Program

Agency Name: **Traffic Engineering**

Agency Number: **57**

Project Name	Capital Budget		Future Year Estimates			
	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
1 Street Light Infrastructure	\$ 400,000	\$ 80,000	\$ 80,000	\$ 80,000	\$ 80,000	\$ 80,000
2 URD/UCD Street Lighting	160,000	160,000	160,000	160,000	160,000	160,000
3 Computerized Mapping System	20,000	15,000	15,000	15,000	15,000	15,000
4 Public Safety Radio System	50,000	750,000	30,000	30,000	30,000	30,000
5 Traffic Safety Infrastructure	125,000	40,000	40,000	40,000	40,000	40,000
6 Traffic Engineering Bldg Impv	250,000	20,000	20,000	20,000	20,000	20,000
7 Traffic Signal Infrastructure	299,500	95,000	95,000	95,000	95,000	95,000
8 Wayfinding Sign Program	55,000	0	10,000	10,000	10,000	10,000
9 Ped/Bike Enhancements	130,000	20,000	20,000	20,000	20,000	20,000
10 Traffic Signal Construction	0	20,000	0	0	0	0
11 Semi-permanent Pavement Marking	120,000	80,000	80,000	80,000	80,000	80,000
12 School Walk Routes	45,000	20,000	20,000	20,000	20,000	20,000
13 Shop Expansion and Remodel	0	0	0	0	90,000	950,000
14 Sign Replacements	0	50,000	0	0	0	0
15 Overhead Street Name Signs	182,000	0	0	0	0	0
16 Traffic Engineering Studies	20,000	10,000	10,000	10,000	10,000	10,000
<b>Total</b>	<b>\$ 1,856,500</b>	<b>\$ 1,360,000</b>	<b>\$ 580,000</b>	<b>\$ 580,000</b>	<b>\$ 670,000</b>	<b>\$ 1,530,000</b>



**2005  
Capital Budget  
Expenditure Categories and Funding Sources**

Agency Name: **Traffic Engineering**

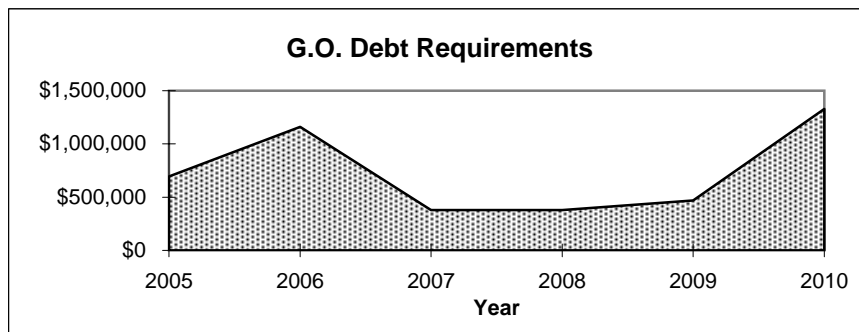
Agency No.: 57

All Projects	Capital Budget	Future Year Estimates				
	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
<b>Expenditures:</b>						
Purchased Services	\$ 105,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000
Materials & Supplies	202,000	60,000	10,000	10,000	10,000	10,000
Inter-Agency Charges	150,000	30,000	30,000	30,000	30,000	30,000
Inter-Fund Transf. out	0	0	0	0	0	0
Professional Fees	40,000	25,000	25,000	25,000	45,000	25,000
Land & Land Improve.	295,000	75,000	75,000	75,000	75,000	75,000
Building & Build Improve	250,000	20,000	20,000	20,000	90,000	970,000
Equipment and Vehicles	814,500	1,075,000	345,000	345,000	345,000	345,000
Other	0	0	0	0	0	0
<b>Total Costs</b>	<b>\$ 1,856,500</b>	<b>\$ 1,360,000</b>	<b>\$ 580,000</b>	<b>\$ 580,000</b>	<b>\$ 670,000</b>	<b>\$ 1,530,000</b>

**Funding Sources:**

Federal Sources	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
State Sources	516,500	40,000	40,000	40,000	40,000	40,000
County Contributions	0	0	0	0	0	0
Private Contributions	0	0	0	0	0	0
Revenue Bonds	0	0	0	0	0	0
Special Assessments	160,000	160,000	160,000	160,000	160,000	160,000
TIF	0	0	0	0	0	0
Carry-Forward Applied	445,000	0	0	0	0	0
Reserves Applied	0	0	0	0	0	0
Other	40,000	0	0	0	0	0
<b>Total "Other"</b>	<b>\$ 1,161,500</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>

<b>G.O. Debt</b>	<b>\$ 695,000</b>	<b>\$ 1,160,000</b>	<b>\$ 380,000</b>	<b>\$ 380,000</b>	<b>\$ 470,000</b>	<b>\$ 1,330,000</b>
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## Capital Budget

### Traffic Engineering

#### Street Light Infrastructure

Project No. 1 Acct. No. 810411

GO \$ 140,000 Provides funding for the upgrade/replacement of older systems, including computer support;  
Other 260,000 replacement of older poles, fixtures, cable and other major street light equipment; and  
\$ 400,000 installation of new street lights. Other funding (\$260,000) is from State grants and is needed for material purchase for East Washington reconstruction service and supply contract, Phase 5, for which City share is provided from the City Engineering Capital Budget.

#### URD/UCD Street Lighting

Project No. 2 Acct. No. 810412

GO \$ 0 Continuing program to install street lighting in newly developed and reconstructed areas  
Other 160,000 where electrical power lines are underground. Actual cost is related to the amount of new  
160,000 residential and commercial development. The cost is assessed directly to the property owners and funds are placed in a segregated revolving fund. No General Fund tax dollars are used in this program.

#### Computerized Mapping System

Project No. 3 Acct. No. 810413

GO \$ 15,000 GIS computer hardware and software is purchased from this account. The manual street  
Other 5,000 sign inventory and crash data systems have been in place for over 30 years. Traffic  
\$ 20,000 Engineering uses these tools to plan changes to traffic controls, assist staff in responding to questions from customers and program safety improvements. The current systems are cumbersome and difficult to maintain. The amount of labor necessary to maintain files and maps is becoming prohibitive. The new systems include GIS-based sign inventory and crash data software and hardware. The long-term benefits to public safety for processing crash data and replacing signs, which have exceeded their useful life, are significant. This project is consistent with the City's e-government initiative. Other funds are carry forward from previous years.

#### Public Safety Radio System

Project No. 4 Acct. No. 810414

GO \$ 30,000 \$30,000 is for the on-going upgrade of a radio service monitor. Two existing monitors are no  
Other 20,000 longer compatible with newest models of radios due to technology upgrades and software  
\$ 50,000 used with new radios. In 2006, \$750,000 is budgeted to address radio coverage problems due to the construction of large buildings. Other funding is from available funds.

#### Traffic Safety Infrastructure

Project No. 5 Acct. No. 810415

GO \$ 25,000 This program improves safety and accessibility for pedestrians, bicyclists, motorists and  
Other 100,000 transit users. It may include geometric improvements such as realignments, construction and  
125,000 reconstruction of corner radii, traffic islands, median breaks, turn lanes, safety and other traffic control devices. Also included is the design and local share of State Highway Hazard Elimination program funded projects, signs, in-street pedestrian signs and traffic safety studies. High crash frequency intersections and corridors will be targeted with these funds. Other funding is from available funds.

**Traffic Engineering Bldg Impv** Project No. **6** Acct. No. 810416

GO	\$	200,000	This is a continuing program for various building improvements and repair projects at the Traffic Engineering and Parking Field Operations facility at 1120 Sayle Street. An engineering study has determined that the shop heating system needs major repairs: an estimated \$300,000 for the installation of a new hot water heating system. It is in the long-term interest to replace the current system. The Traffic Engineering funds will provide approximately 75% of the total cost; the remainder is included in the Parking Utility Capital Budget. Other funding is from available funds.
Other		<u>50,000</u>	
	\$	<u>250,000</u>	

**Traffic Signal Infrastructure** Project No. **7** Acct. No. 810417

GO	\$	139,500	A continuing program to replace and modernize the existing signal system. Major work items will include upgrades to existing signals, controllers, system master controllers, signal coordination (communications between intersections and signal system "master controllers"), computer software, conflict monitors, Light Emitting Diode (LED) signals, signal heads, cable and other signal equipment. Other funding is provided from outside sources and other capital budget sources: Non-Madison traffic signals, \$40,000; E Washington Reconstruction Phase 5, \$120,000 (state grant).
Other		<u>160,000</u>	
	\$	<u>299,500</u>	

**Wayfinding Sign Program** Project No. **8** Acct. No. 810475

GO	\$	0	This project converts existing directional signage to the Wayfinding signing system, first implemented in 1996. Signs are used to direct visitors and residents to Downtown, UW Campus, Alliant Center, Monona Terrace, merchants, airport, and parking facilities as well as major highways. Signs are generally larger and more distinctive than normal signage. Project partners often pay their proportional share of the costs. No new funding is provided in 2005. This project authorizes the carry over of existing funds.
Other		<u>55,000</u>	
	\$	<u>55,000</u>	

**Ped/Bike Enhancements** Project No. **9** Acct. No. 810418

GO	\$	0	Typical projects include bike route signage, bike racks and replacement and installation of new bike path lighting. These funds are also used for reproduction of bike route maps. Other funding is from available funds.
Other		<u>130,000</u>	
	\$	<u>130,000</u>	

**Traffic Signal Construction** Project No. **10** Acct. No.

GO	\$	0	Study, report on, develop plans and specifications and install new traffic signals to accommodate the changing traffic patterns in the City. Funding for specific locations is requested on a case-by-case basis. New traffic signals are often funded through traffic signal assessment districts. No new funding for 2005.
Other		<u>0</u>	
	\$	<u>0</u>	

**Semi-permanent Pavement Marking** Project No. 11 Acct. No. 810436

GO \$ 80,000  
Other 40,000  
\$ 120,000

Semi-permanent pavement markings in thermo, epoxy or ground-in plastic have a high impact value and have a life expectancy of 10 years under certain conditions. They will be used in high traffic areas, especially on new asphalt, concrete pavements, lane lines, crosswalks and stop bars. The safety of all users can be enhanced by improved markings. Semi-permanent pavement marking supplies \$20,000; epoxy contract \$60,000. The current epoxy contract is a 3 year, \$217,000 contract. Other funding is carry over from 2004 (\$40,000).

**School Walk Routes** Project No. 12 Acct. No. 810420

GO \$ 20,000  
Other 25,000  
\$ 45,000

Neighborhood groups and others have identified recommended school walk routes as a high priority item. Pedestrian refuge islands and related facilities may be built at key locations along the routes, allowing children a safer place to wait for passing traffic. The islands would also serve as calming devices. Certain crosswalks along these routes may be installed with semi-permanent materials and some would be changed to "zebra" crosswalks for higher impact value. Other funding is from available funds.

**Shop Expansion and Remodel** Project No. 13 Acct. No.

GO \$ 0  
Other 0  
\$ 0

The Shop at 1120 Sayle Street has become too small to meet growing equipment, personnel and programmatic needs. A long-term goal has been to demolish the deteriorating building area near Wingra Creek and create a green space and bike trail. This is consistent with the neighborhood plan. The replacement building would be reconstructed in the existing right-of-way of Van Deusen Street, closing that street to through traffic. The communication section in particular can no longer service all of their customers out of the existing area. There is inadequate space for vehicle servicing, equipment storage or technician workbench area. The 2009 funding includes \$20,000 for design and \$70,000 for shop remodeling, with major building construction the following year. This project will be supported in part by the Parking Utility.

**Sign Replacements** Project No. 14 Acct. No.

GO \$ 0  
Other 0  
\$ 0

There has been rapid growth of the corporate limits/street mileage, an increase in use of street sweeping signs and an increase in the number of bus stop changes. Signs installed in the winter must be on drive post due to the frozen ground. To keep up with the need for more signs, the sign section has installed thousands of temporary signs on drive posts. These posts require additional maintenance due to their lack of bases, causing them to lean. This causes valuable resources to be diverted from our routine sign maintenance/installation business. To stop this cycle of increased maintenance the temporary signs need to be placed on permanent poles/bases.

**Overhead Street Name Signs**Project No. **15** Acct. No. 810482

GO \$ 45,500  
 Other 136,500  
\$ 182,000

The State of Wisconsin has a grant program to enhance the visibility of traffic signs and roadway markings in an effort to assist older drivers and pedestrians. The larger street name signs envisioned in this program are mounted on over head mast arms at signalized intersections. The program requires 25% matching funds. The current mast arms are structurally inadequate to hold these larger street name signs. These structures can be replaced for approximately \$182,000, which would require City matching funds of \$45,500.

**Traffic Engineering Studies**Project No. **16** Acct. No. 810476

GO \$ 0  
 Other 20,000  
\$ 20,000

Planning, engineering and programming of both short and long range transportation improvements around the Capitol Square, outer ring and central business district. The project would document and prioritize problem areas with neighborhood and business involvement and recommend improvements. The study will look at traffic volumes/conditions, street use (current and potential) and parking issues. One issue to be reviewed may be the potential reestablishment of parking on the Capitol Square and the removal of buses and the impact of these changes on the outer loop. There is no new funding; this authorizes carry over of previous years funding.

**2005  
Capital Budget  
Summary**

**Agency Name: Traffic Engineering**

**Agency Number: 57**

Project Name	Agency Request	CIRC	Executive	Adopted		
				G.O. Debt	Other Funding	Total
1 Street Light Infrastructure	\$ 400,000	\$ 400,000	\$ 400,000	\$ 140,000	\$ 260,000	\$ 400,000
2 URD/UCD Street Lighting	160,000	160,000	160,000	0	160,000	160,000
3 Computerized Mapping System	25,000	20,000	20,000	15,000	5,000	20,000
4 Public Safety Radio System	50,000	50,000	50,000	30,000	20,000	50,000
5 Traffic Safety Infrastructure	186,500	125,000	125,000	25,000	100,000	125,000
6 Traffic Engineering Bldg Impv	221,600	250,000	250,000	200,000	50,000	250,000
7 Traffic Signal Infrastructure	320,000	299,500	299,500	139,500	160,000	299,500
8 Wayfinding Sign Program	55,000	55,000	55,000	0	55,000	55,000
9 Ped/Bike Enhancements	130,000	130,000	130,000	0	130,000	130,000
10 Traffic Signal Construction	0	0	0	0	0	0
11 Semi-permanent Pavement Marking	120,000	120,000	120,000	80,000	40,000	120,000
12 School Walk Routes	45,000	45,000	45,000	20,000	25,000	45,000
13 Shop Expansion and Remodel	0	0	0	0	0	0
14 Sign Replacements	50,000	0	0	0	0	0
15 Overhead Street Name Signs	182,000	182,000	182,000	45,500	136,500	182,000
16 Traffic Engineering Studies	20,000	20,000	20,000	0	20,000	20,000
<b>Total</b>	<u>\$ 1,965,100</u>	<u>\$ 1,856,500</u>	<u>\$ 1,856,500</u>	<u>\$ 695,000</u>	<u>\$ 1,161,500</u>	<u>\$ 1,856,500</u>