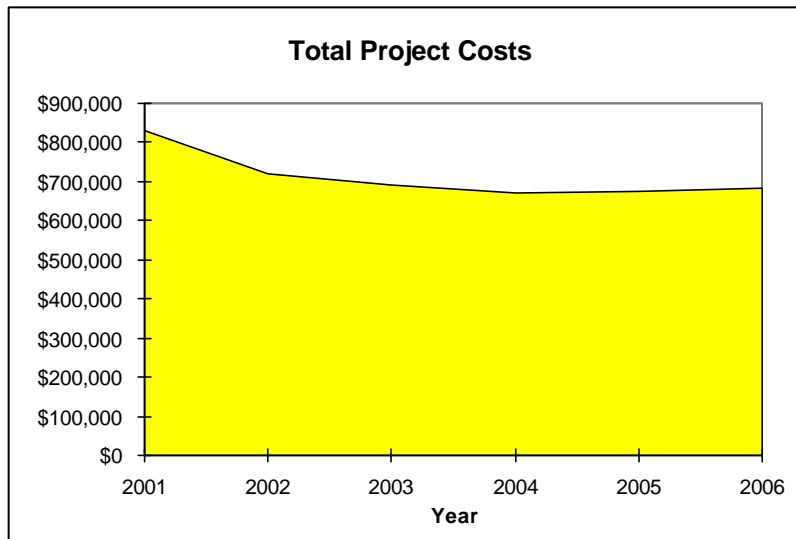


2001 Capital Budget Capital Improvement Program

Agency Name: **Traffic Engineering**

Agency Number: **57**

Project Name	Capital Budget	Future Year Estimates				
	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
1 Street Light Infrastructure Maint.	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
2 URD/UCD Street Lighting	140,000	140,000	140,000	140,000	140,000	140,000
3 Computerized Mapping System	105,000	15,000	15,000	15,000	15,000	15,000
4 Public Safety Radio System	170,000	100,000	70,000	50,000	55,000	60,000
5 Traffic Safety Infrastructure	70,000	70,000	70,000	70,000	70,000	70,000
6 Traffic Engineering Bldg Imprmnt	60,000	40,000	40,000	40,000	40,000	40,000
7 Traffic Signal Infrastructure	87,000	100,000	100,000	100,000	100,000	100,000
8 Wayfinding Sign Program	0	12,000	12,000	12,000	12,000	12,000
9 Ped/Bike Enhancements	0	30,000	30,000	30,000	30,000	30,000
10 Traffic Signal Construction	50,000	50,000	50,000	50,000	50,000	50,000
11 Street Light Infrastructure Expnsn	0	15,000	15,000	15,000	15,000	15,000
12 Semi Permanent Pavement Marking	50,000	50,000	50,000	50,000	50,000	50,000
13 Clean Sweep Sign Replacement	0	0	0	0	0	0
Total	<u>\$ 832,000</u>	<u>\$ 722,000</u>	<u>\$ 692,000</u>	<u>\$ 672,000</u>	<u>\$ 677,000</u>	<u>\$ 682,000</u>



**2001
Capital Budget
Expenditure Categories and Funding Sources**

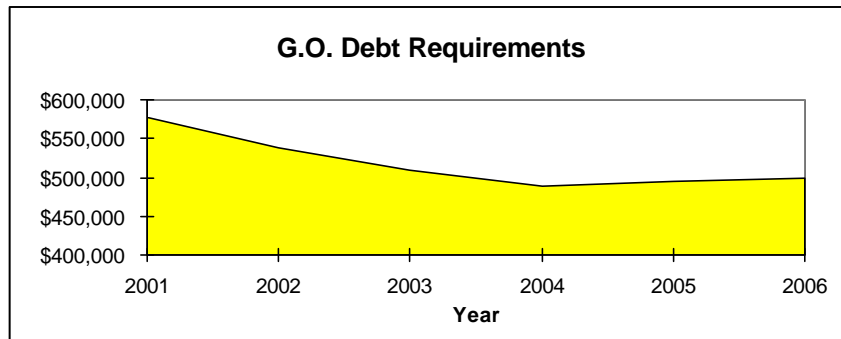
Agency Name: **Traffic Engineering**

Agency No.: 57

All Projects	Capital Budget	Future Year Estimates				
	2001	2002	2003	2004	2005	2006
Expenditures:						
Planning Studies	\$ 15,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000
Eng / Design	50,000	62,000	62,000	62,000	62,000	62,000
Land Acquisition	0	0	0	0	0	0
Land Development	0	0	0	0	0	0
Construction	290,000	291,000	266,000	256,000	261,000	261,000
Remodelling	40,000	40,000	40,000	40,000	40,000	40,000
Equipment/Furnish	437,000	324,000	319,000	309,000	309,000	314,000
Cost Applied	0	0	0	0	0	0
Other	0	0	0	0	0	0
Total Costs	\$ 832,000	\$ 722,000	\$ 692,000	\$ 672,000	\$ 677,000	\$ 682,000

Funding Sources:						
Available Funds	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Federal Sources	0	0	0	0	0	0
State Sources	20,000	30,000	30,000	30,000	30,000	30,000
County Contrib	0	0	0	0	0	0
Private Contrib	0	1,000	1,000	1,000	1,000	1,000
TIF	0	1,000	1,000	1,000	1,000	1,000
Revenue Bonds	0	0	0	0	0	0
Utility Reserves	0	0	0	0	0	0
Special Assessments	140,000	140,000	140,000	140,000	140,000	140,000
Other	94,000	11,000	11,000	11,000	11,000	11,000
Total "Other"	\$ 254,000	\$ 183,000	\$ 183,000	\$ 183,000	\$ 183,000	\$ 183,000

G.O. Debt	\$ 578,000	\$ 539,000	\$ 509,000	\$ 489,000	\$ 494,000	\$ 499,000
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Capital Budget

Traffic Engineering

Street Light Infrastructure Maint. Project No. 1 Fund No.

(B) \$ 100,000
(C) 0
\$ 100,000

Paint or galvanize existing poles (\$20,000); upgrade/replace older systems, including computer support (\$10,000); replace older poles, fixtures, cable and other major street light equipment (\$70,000).

URD/UCD Street Lighting Project No. 2 Fund No.

(B) \$ 0
(C) 140,000
\$ 140,000

Continuing program to install street lighting in newly developed and reconstructed areas where electrical power lines are underground. Actual cost is related to the amount of new 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 Fund No.

(B) \$ 21,000
(C) 84,000
\$ 105,000

GIS computer work station for Program Specialist 2 work area: \$10,000. Local share of grant to upgrade crash-data system: \$15,000. Implement GIS sign inventory system: \$80,000.

Manual street sign inventory and crash data systems have been in place for over 20 years. Traffic Engineering uses these systems to plan changes to signage, assist staff in responses 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. While the start-up costs are substantial, the long-term benefits to public safety for processing crash data and replacing signs which have exceeded their useful life are significant. This initiative is consistent with the Mayor's desire to automate government. Other funding is from State/Federal grant funds.

Public Safety Radio System Project No. 4 Fund No.

(B) \$ 170,000
(C) 0
\$ 170,000

Third year of a four year \$7.68 M radio system replacement/upgrade. Year one \$1.14 M began in 1999 with a digital microwave infrastructure, completed in 2000. A new east-side tower facility was part of year one but was delayed until June 2001 when Water Utility will complete an east water tower site. Year two (2000) \$2.3 M upgraded City facilities, contracted for factory construction, set-up and test of the entire Police/Fire integrated radio system for seven City towers and 911 dispatch interface. Year three (2001) \$2.4M will be delivery, installation and testing of the system and migration of all MFD field equipment to the new system. Year four (2002) \$1.76M will be migration of all MPD field radios. The main purpose is to meet needs of geographic expansion, technology upgrades, replacement of aging equipment, provide better in-building radio coverage and meet upcoming FCC technology requirements for radio systems. Third year costs appear in three city budgets as follows: MPD \$1,138,000; MFD \$1,102,000; and TE \$170,000, total \$2.41 M.

Traffic Safety InfrastructureProject No. **5** Fund No.

(B) \$ 50,000
(O) 20,000
\$ 70,000

This program improves safety and accessibility for pedestrians, bicyclists, motorists and transit users. It may include geometric improvements such as realignments, construction and reconstruction of corner radii, traffic islands, median breaks, turn lanes, completion of strong yellow-green school signs, safety and other traffic control devices. Also included are the design and local share of State Highway Hazard Elimination program funded projects, signs, in-street pedestrian signs and traffic safety studies. Other funding is from State/Federal grant sources, which is typically 80 - 90% of eligible project costs.

Traffic Engineering Bldg ImprmntProject No. **6** Fund No.

(B) \$ 50,000
(O) 10,000
\$ 60,000

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. In 2001 the first priority will be HVAC improvements including the replacement of an old air conditioner with a new high energy efficient unit. Other funding is from Parking Utility fees.

An engineering study has uncovered poor quality air in the communication section of the shop. The air quality needs to be improved to enhance the safety and productivity of staff. The remedial action is estimated to cost \$20,000. Parking Utility has not been asked to participate in these costs.

Traffic Signal InfrastructureProject No. **7** Fund No.

(B) \$ 87,000
(O) 0
\$ 87,000

A continuing program to replace and modernize the existing signal system. Major work items will include: signal coordination (communications between intersections and signal system "master controllers"): \$4,000; boring tool: \$25,000, Trenching machine: \$40,000, lap top computers: \$8,000, optical time domain reflectometer: \$10,000.

Wayfinding Sign ProgramProject No. **8** Fund No.

(B) \$ 0
(O) 0
\$ 0

A multi-phased project to convert existing directional signage to the new Wayfinding signing system, first implemented in 1996. Signs are used to direct visitors and residents to Downtown, UW Campus, Expo Center, Monona Terrace, merchants, airport and parking ramps, as well as major highways. No new funding in 2001.

Ped/Bike EnhancementsProject No. **9** Fund No.

(B) \$ 0
(O) 0
\$ 0

Projects include: Bike route signage and replacement and installation of new bike path lighting at locations such as Brittingham Park and Paunack Park. These funds are also used for reproduction of bike route maps. No new funding or projects in 2001.

Traffic Signal Construction

Project No. **10** Fund No.

(B) \$ 50,000
(O) 0
\$ 50,000

Study, report on, develop plans and specifications, and install new traffic signals to accommodate the changing traffic patterns in the City. Possible installations, subject to approval by the Common Council after recommendation from the Pedestrian-Bicycle-Motor Vehicle Commission, include the following: McKenna Blvd. at a relocated Elver Park access Road, \$50,000 (B).

Street Light Infrastructure Expnsn

Project No. **11** Fund No.

(B) \$ 0
(O) 0
\$ 0

Install 15-20 new street lights in existing neighborhoods or on major streets citywide, primarily at the request of residents, the Madison Police Department, or Traffic Engineering staff study.

Semi Permanent Pavement Marking

Project No. **12** Fund No.

(B) \$ 50,000
(O) 0
\$ 50,000

In 1998 the Division purchased a thermo plastic machine to allow in-house application of semi-permanent, long-line pavement markings, rather than contracting for this service. Thermo markings have a high impact value and have a life expectancy of 10 years under certain conditions. They will be used in high traffic areas on lane lines, crosswalks and stop bars. The safety of all users can be enhanced by improved markings. Thermo supplies: \$20,000. Epoxy contract: \$20,000. Ground-in plastic: \$10,000.

Clean Sweep Sign Replacement

Project No. **13** Fund No.

(B) \$ 0
(O) 0
\$ 0

The Traffic Engineering Division installed temporary clean sweep signs throughout the sixth district with funds secured through the Streets Department. These signs prohibit parking on various streets during certain times of the week so that street sweepers can sweep to the curb. This prevents debris and other pollutants from entering City lakes. This program now appears permanent and the temporary drive post signs should be replaced with permanent post & stub signs. No new funding in 2001.

**2001
Capital Budget
Summary**

Agency Name: Traffic Engineering

Agency Number: 57

Project Name	Agency Request	CIRC	Executive	Executive		
				G.O. Debt	Other Funding	Total
1 Street Light Infrastructure Maint.	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 0	\$ 100,000
2 URD/UCD Street Lighting	140,000	140,000	140,000	0	140,000	140,000
3 Computerized Mapping System	105,000	105,000	105,000	21,000	84,000	105,000
4 Public Safety Radio System	170,000	170,000	170,000	170,000	0	170,000
5 Traffic Safety Infrastructure	70,000	70,000	70,000	50,000	20,000	70,000
6 Traffic Engineering Bldg Imprmnt	60,000	60,000	60,000	50,000	10,000	60,000
7 Traffic Signal Infrastructure	108,000	87,000	87,000	87,000	0	87,000
8 Wayfinding Sign Program	0	0	0	0	0	0
9 Ped/Bike Enhancements	0	0	0	0	0	0
10 Traffic Signal Construction	50,000	50,000	50,000	50,000	0	50,000
11 Street Light Infrastructure Expnsn	15,000	0	0	0	0	0
12 Semi Permanent Pavement Marking	50,000	50,000	50,000	50,000	0	50,000
13 Clean Sweep Sign Replacement	80,000	0	0	0	0	0
Total	<u>\$ 948,000</u>	<u>\$ 832,000</u>	<u>\$ 832,000</u>	<u>\$ 578,000</u>	<u>\$ 254,000</u>	<u>\$ 832,000</u>