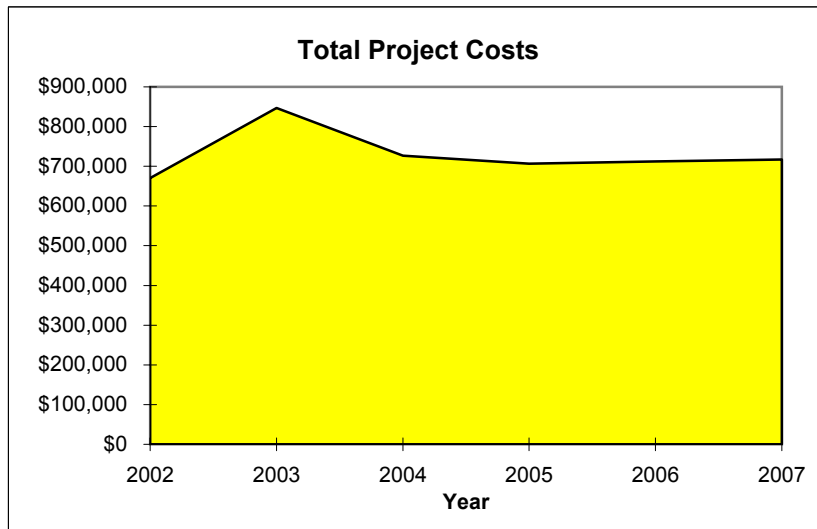


**2002
Capital Budget
Capital Improvement Program**

Agency Name: **Traffic Engineering**

Agency Number: **57**

Project Name	Capital Budget		Future Year Estimates			
	2002	2003	2004	2005	2006	2007
1 Street Light Infrastructure Maint.	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000
2 URD/UCD Street Lighting	140,000	140,000	140,000	140,000	140,000	140,000
3 Computerized Mapping System	15,000	15,000	15,000	15,000	15,000	15,000
4 Public Safety Radio System	150,000	100,000	70,000	50,000	55,000	60,000
5 Traffic Safety Infrastructure	25,000	25,000	25,000	25,000	25,000	25,000
6 Traffic Engineering Bldg Impv	20,000	20,000	20,000	20,000	20,000	20,000
7 Traffic Signal Infrastructure	80,000	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	0	50,000	50,000	50,000	50,000	50,000
11 Street Light Infrastructure Exp	0	15,000	15,000	15,000	15,000	15,000
12 Semi Permanent Pavement Marking	80,000	80,000	80,000	80,000	80,000	80,000
13 School Walk Routes	20,000	80,000	50,000	50,000	50,000	50,000
14 Capitol Square Study	20,000	60,000	0	0	0	0
Total	\$ 670,000	\$ 847,000	\$ 727,000	\$ 707,000	\$ 712,000	\$ 717,000

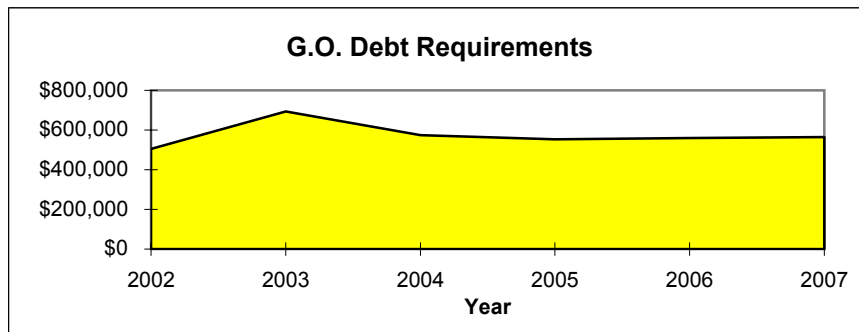


**2002
Capital Budget
Expenditure Categories and Funding Sources**

Agency Name: **Traffic Engineering**

Agency No.: 57

All Projects	Capital Budget	Future Year Estimates				
	2002	2003	2004	2005	2006	2007
Expenditures:						
Planning Studies	\$ 20,000	\$ 60,000	\$ 0	\$ 0	\$ 0	\$ 0
Eng / Design	69,000	77,000	77,000	77,000	77,000	77,000
Land Acquisition	0	0	0	0	0	0
Land Development	0	0	0	0	0	0
Construction	256,000	371,000	316,000	306,000	311,000	311,000
Remodelling	5,000	5,000	5,000	5,000	5,000	5,000
Equipment/Furnish	320,000	334,000	329,000	319,000	319,000	324,000
Cost Applied	0	0	0	0	0	0
Other	0	0	0	0	0	0
Total Costs	\$ 670,000	\$ 847,000	\$ 727,000	\$ 707,000	\$ 712,000	\$ 717,000
Funding Sources:						
Available Funds	\$ 20,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Federal Sources	0	0	0	0	0	0
State Sources	0	10,000	10,000	10,000	10,000	10,000
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	5,000	1,000	1,000	1,000	1,000	1,000
Total "Other"	\$ 165,000	\$ 153,000	\$ 153,000	\$ 153,000	\$ 153,000	\$ 153,000
G.O. Debt	\$ 505,000	\$ 694,000	\$ 574,000	\$ 554,000	\$ 559,000	\$ 564,000



Capital Budget

Traffic Engineering

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

GO \$ 120,000 Paint or galvanize existing poles (\$20,000); upgrade/replace older systems, including
Other 0 computer support (\$10,000); replace older poles, fixtures, cable and other major street light
\$ 120,000 equipment (\$80,000), and pole trailer (\$10,000).

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

GO \$ 0 Continuing program to install street lighting in newly developed and reconstructed areas
Other 140,000 where electrical power lines are underground. Actual cost is related to the amount of new
\$ 140,000 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 Fund No.

GO \$ 15,000 GIS computer hardware and software is purchased from this account. Local share of grant to
Other 0 upgrade crash-data system. The manual street sign inventory and crash data systems have
\$ 15,000 been in place for over 30 years. Traffic Engineering uses these tools to plan changes to
traffic controls, 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 project is
consistent with the Mayor's e-government initiative.

Public Safety Radio System Project No. 4 Fund No.

GO \$ 150,000 Fourth year of \$7.68M Public Safety radio system replacement/upgrade. Year one ('99)
Other 0 \$1.14M was digital microwave infrastructure upgrades, completed in '01. Year two ('00)
\$ 150,000 \$2.3M upgraded City facilities, contracted for construction, set-up and test of the entire
Police/Fire integrated radio system for 7 City towers and 911 dispatch interface. Year three
(01) \$2.4M is installation and testing of the system. Migration of all Madison Fire Dep't field
equipment begins in Dec. '01. In 2002, \$1.76M includes migration of all Madison Police Dep't
field radios. Upgrades will meet needs of City geographic expansion, technology upgrades,
update 12-18 year old equipment, provide better in-building radio coverage and meet
upcoming FCC technology requirements. Total 2002 infrastructure costs of \$1,910,000
appear in two City budgets as follows: Police \$1.76M; Traffic Engineering \$150,000.

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

GO \$ 25,000
 Other 0
\$ 25,000

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, 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. \$10,000 may be used for DMI/travel time measuring device per the success indicator recommendations.

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

GO \$ 15,000
 Other 5,000
\$ 20,000

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 2002, repairs will include the roof, parking lot and service yard. Other funding is from Parking Utility funds.

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

GO \$ 80,000
 Other 0
\$ 80,000

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"), as follows: Computer software \$10,000; Laptop computers \$8,000; Conflict monitors \$30,000; and Light Emitting Diode (LED) signals, signal heads, cable and other signal equipment \$32,000.

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

GO \$ 0
 Other 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 facilities as well as major highways. No new funding in 2002.

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

GO \$ 0
 Other 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 anticipated in 2002.

Traffic Signal Construction

Project No. **10** Fund No.

GO \$ 0
Other 0
\$ 0

Study, report on, develop plans and specifications, and install new traffic signals to accommodate the changing traffic patterns in the City. Installations are subject to approval by the Common Council after recommendation from the Pedestrian-Bicycle-Motor Vehicle Commission. No new funding in 2002.

Street Light Infrastructure Exp

Project No. **11** Fund No.

GO \$ 0
Other 0
\$ 0

Install 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. No new funds in 2002.

Semi Permanent Pavement Marking

Project No. **12** Fund No.

GO \$ 80,000
Other 0
\$ 80,000

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, especially on new asphalt, concrete pavements, lane lines, crosswalks and stop bars. The safety of all users can be enhanced by improved markings. Funding includes: Thermo supplies \$20,000, Epoxy contract \$40,000, Ground-in plastic \$20,000.

School Walk Routes

Project No. **13** Fund No.

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

Recommended school walk routes have been identified as a high priority item by neighborhood groups and others. Pedestrian refuge islands and related facilities will be built at key locations along the routes, allowing children a safer place to wait for passing traffic. The islands will also serve as calming devices. Potential or typical locations include Sixth and Johnson Streets.

Capitol Square Study

Project No. **14** Fund No.

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

Planning, engineering and programming of both short & long range transportation improvements around the Capitol Square and outer ring. 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. Other funding is from available funds.

**2002
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.	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000	\$ 0	\$ 120,000
2 URD/UCD Street Lighting	140,000	140,000	140,000	0	140,000	140,000
3 Computerized Mapping System	15,000	15,000	15,000	15,000	0	15,000
4 Public Safety Radio System	150,000	150,000	150,000	150,000	0	150,000
5 Traffic Safety Infrastructure	25,000	25,000	25,000	25,000	0	25,000
6 Traffic Engineering Bldg Impv	20,000	20,000	20,000	15,000	5,000	20,000
7 Traffic Signal Infrastructure	80,000	80,000	80,000	80,000	0	80,000
8 Wayfinding Sign Program	0	0	0	0	0	0
9 Ped/Bike Enhancements	0	0	0	0	0	0
10 Traffic Signal Construction	0	0	0	0	0	0
11 Street Light Infrastructure Exp	0	0	0	0	0	0
12 Semi Permanent Pavement Marking	80,000	80,000	80,000	80,000	0	80,000
13 School Walk Routes	50,000	20,000	20,000	20,000	0	20,000
14 Capitol Square Study	60,000	20,000	20,000	0	20,000	20,000
Total	<u>\$ 740,000</u>	<u>\$ 670,000</u>	<u>\$ 670,000</u>	<u>\$ 505,000</u>	<u>\$ 165,000</u>	<u>\$ 670,000</u>