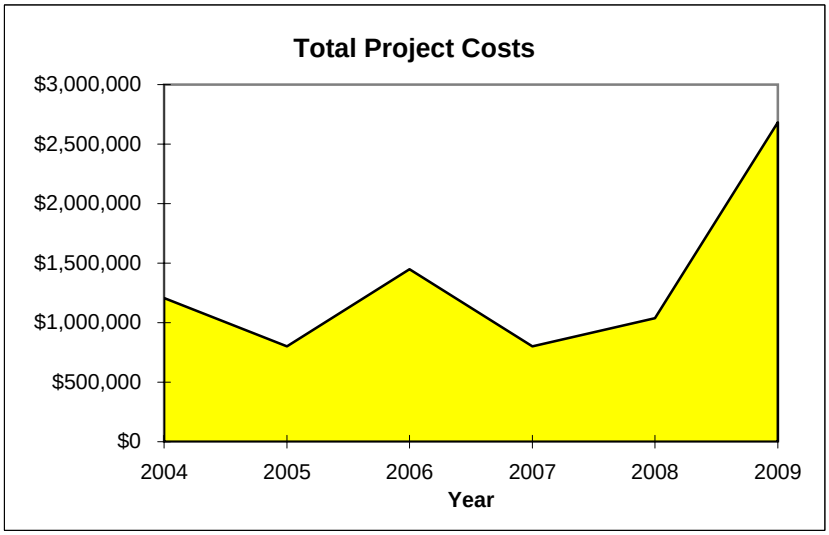
2004
Capital Budget
Capital Improvement Program

Agency Name: **Traffic Engineering** **Agency Number:** 57

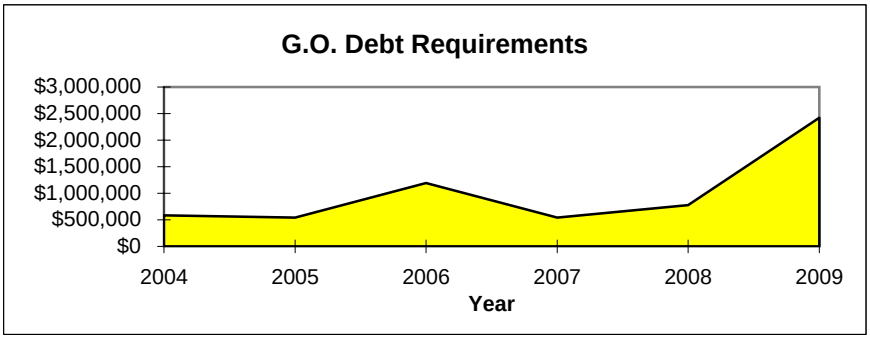
	Project Name	Capital Budget 2004	Future Year Estimates 2005	2006	2007	2008	2009
1	Street Light Infrastructure	$ 290,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000
2	URD/UCD Street Lighting	160,000	160,000	160,000	160,000	160,000	160,000
3	Computerized Mapping System	15,000	15,000	15,000	15,000	15,000	15,000
4	Public Safety Radio System	100,000	100,000	750,000	100,000	100,000	100,000
5	Traffic Safety Infrastructure	86,500	25,000	25,000	25,000	25,000	25,000
6	Traffic Engineering Bldg Impv	15,500	15,000	15,000	15,000	15,000	15,000
7	Traffic Signal Infrastructure	310,000	125,000	125,000	125,000	125,000	125,000
8	Wayfinding Sign Program	0	10,000	10,000	10,000	10,000	10,000
9	Ped/Bike Enhancements	30,000	30,000	30,000	30,000	30,000	30,000
10	Traffic Signal Construction	100,000	100,000	100,000	100,000	100,000	100,000
11	Semi-permanent Pavement Marking	80,000	80,000	80,000	80,000	80,000	80,000
12	School Walk Routes	20,000	20,000	20,000	20,000	20,000	20,000
13	Shop Expansion and Remodel	0	0	0	0	237,000	1,883,000
	Total	$ 1,207,000	$ 800,000	$ 1,450,000	$ 800,000	$ 1,037,000	$ 2,683,000



2004
Capital Budget
Expenditure Categories and Funding Sources

Agency Name: **Traffic Engineering** **Agency No.:** 57

All Projects	Capital Budget 2004	Future Year Estimates 2005	2006	2007	2008	2009
Expenditures:						
Planning Studies	$ 37,500	$ 0	$ 50,000	$ 0	$ 0	$ 0
Eng / Design	116,000	77,000	127,000	77,000	314,000	77,000
Land Acquisition	0	0	0	0	0	0
Land Development	0	0	0	0	0	0
Construction	444,000	293,000	393,000	293,000	293,000	2,176,000
Remodelling	60,000	65,000	65,000	65,000	65,000	65,000
Equipment/Furnish	549,500	365,000	815,000	365,000	365,000	365,000
Cost Applied	0	0	0	0	0	0
Other	0	0	0	0	0	0
Total Costs	$ 1,207,000	$ 800,000	$ 1,450,000	$ 800,000	$ 1,037,000	$ 2,683,000
Funding Sources:						
Available Funds	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Federal Sources	0	0	0	0	0	0
State Sources	0	0	0	0	0	0
County Contrib	0	0	0	0	0	0
Private Contrib	0	0	0	0	0	0
TIF	0	0	0	0	0	0
Revenue Bonds	0	0	0	0	0	0
Utility Reserves	0	0	0	0	0	0
Special Assessments	260,000	260,000	260,000	260,000	260,000	260,000
Other	365,000	0	0	0	0	0
Total "Other"	$ 625,000	$ 260,000	$ 260,000	$ 260,000	$ 260,000	$ 260,000
G.O. Debt	$ 582,000	$ 540,000	$ 1,190,000	$ 540,000	$ 777,000	$ 2,423,000



Capital Budget

Traffic Engineering

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

GO	$ 140,000
Other	150,000
	$ 290,000

Provides funding for the upgrade/replacement of older systems, including computer support; replacement of older poles, fixtures, cable and other major street light equipment; and installation of new street lights. Other funding is needed for material purchase for E Washington Reconstruction service and supply contract, Phase 1, for which city share is provided from the City Engineering capital budget.

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

GO	$ 0
Other	160,000
	$ 160,000

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.

GO	$ 15,000
Other	0
	$ 15,000

GIS computer hardware and software is purchased from this account. The manual street sign inventory and crash data systems have been in place for over 30 years. Traffic 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.

Public Safety Radio System Project No. **4** Fund No.

GO	$ 100,000
Other	0
	$ 100,000

This project includes $70,000 for a City radio system performance data monitoring network to allow, control, and monitor radio user database changes from shop and other remote locations. Includes the monitoring of all 7 site radio system controllers, 92 transmitters and 161 receivers for malfunction. Allows system checks remotely from shop or on-duty technician home location rather than traveling to 7 tower sites to find problems or upgrade user data bases. $30,000 is for the on-going upgrade of a radio service monitor. Two existing monitors are no longer compatible with newest models of radios due to technology upgrades and software used with new radios. Tall buildings in the CBD area have caused a radio coverage problem. Funds will be needed to diagnose and remedy this situation ($750,000 in 2006).

Traffic Safety Infrastructure Project No. **5** Fund No.

GO	$ 86,500
Other	0
	$ 86,500

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. High crash frequency intersections and corridors will be targeted with these funds. $65,000 for local share of roundabouts at Thompson Drive and STH 30.

Traffic Engineering Bldg Impv Project No. **6** Fund No.

GO	$	15,500
Other		0
	$	15,500

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. The Traffic Engineering budgeted funds will provide approximately 75% of the total cost; the remainder ($5,125) is included in the Parking Utility capital budget.

Traffic Signal Infrastructure Project No. **7** Fund No.

GO	$	125,000
Other		185,000
	$	310,000

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. A fusion splicer ($30,000) is needed to continue to install and maintain the expanding City fiber optic network, which is vital for the City's data communications and Parking Utility collection operation at ramps. Other funding is provided from outside sources and other capital budget sources: W Broadway Reconstruction, $70,000; Non-Madison Traffic signals, $40,000; E Washington Reconstruction phase 1, $75,000.

Wayfinding Sign Program Project No. **8** Fund No.

GO	$	0
Other		0
	$	0

This project converts 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, 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 or projects anticipated in 2004.

Ped/Bike Enhancements Project No. **9** Fund No.

GO	$	0
Other		30,000
	$	30,000

Typical projects include bike route signage and replacement and installation of new bike path lighting. These funds are also used for reproduction of bike route maps. Funding for 2004 may be used to collect pedestrian and bicycle data in the State Street and inner and out Capitol Loop areas. Counts have not been done since 1982. Other funding is from TIF funds.

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

GO	$	0
Other		100,000
	$	100,000

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. For 2004 a new signal funded by assessments is anticipated for the D'Onofrio and High Point intersection.

Semi-permanent Pavement Marking Project No. **11** Fund No.

GO	$	80,000
Other		0
	$	80,000

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. Thermo supplies $10,000; epoxy contract $70,000.

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

Shop Expansion and Remodel Project No. **13** Fund 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 communications section in particular can no longer service all of their customers out of our of the existing area. There is not adequate space for vehicle servicing, equipment storage or technician workbench area. The 2008 funding includes $177,000 for design and $60,000 for shop remodeling, with major building construction in the following year.

2004
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	$ 290,000	$ 290,000	$ 290,000	$ 140,000	$ 150,000	$ 290,000
2	URD/UCD Street Lighting	160,000	160,000	160,000	0	160,000	160,000
3	Computerized Mapping System	27,000	15,000	15,000	15,000	0	15,000
4	Public Safety Radio System	100,000	100,000	100,000	100,000	0	100,000
5	Traffic Safety Infrastructure	100,000	86,500	86,500	86,500	0	86,500
6	Traffic Engineering Bldg Impv	37,500	15,500	15,500	15,500	0	15,500
7	Traffic Signal Infrastructure	375,000	310,000	310,000	125,000	185,000	310,000
8	Wayfinding Sign Program	0	0	0	0	0	0
9	Ped/Bike Enhancements	60,000	30,000	30,000	0	30,000	30,000
10	Traffic Signal Construction	100,000	100,000	100,000	0	100,000	100,000
11	Semi-permanent Pavement Marking	80,000	80,000	80,000	80,000	0	80,000
12	School Walk Routes	20,000	20,000	20,000	20,000	0	20,000
13	Shop Expansion and Remodel	177,000	0	0	0	0	0
	Total	$ 1,526,500	$ 1,207,000	$ 1,207,000	$ 582,000	$ 625,000	$ 1,207,000