

Traffic Engineering

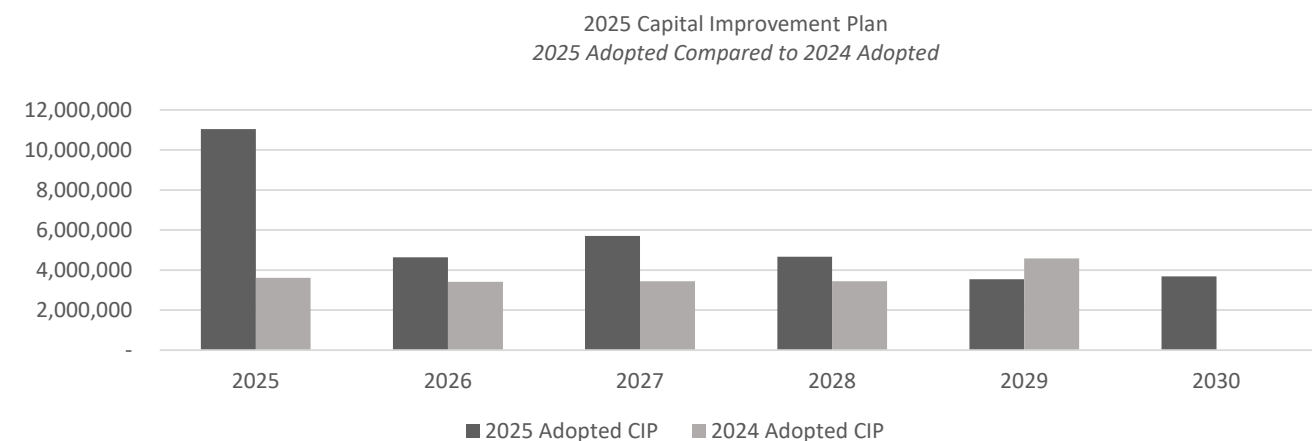
Capital Improvement Plan (CIP) Overview

Budget Phase: Adopted

Summary Table

	2025	2026	2027	2028	2029	2030
Advanced Transportation Technology and Innovation Grant: Advancing Safety and Emergency Operations	6,537,954	-	-	-	-	-
Camera Lifecycle Management	55,000	55,000	55,000	55,000	55,000	57,750
Citywide LED Conversion	157,500	-	-	-	-	-
Field Equipment Replacement	26,250	-	-	-	-	-
Public Safety Radio System	157,500	157,500	1,200,000	157,500	157,500	165,375
Safe Streets Madison	1,152,200	1,661,100	1,683,150	1,683,150	1,767,308	1,855,673
Street Light Installation	770,000	620,000	620,000	630,000	630,000	658,250
Town of Madison Annexation - Signing and Pavement Markings	50,000	-	-	-	-	-
Traffic Safety Infrastructure	78,750	78,750	78,750	78,750	82,688	86,822
Traffic Signal Installation	2,060,500	2,060,500	2,065,500	2,065,500	845,000	863,750
	\$ 11,045,654	\$ 4,632,850	\$ 5,702,400	\$ 4,669,900	\$ 3,537,496	\$ 3,687,620

Changes from 2024 Adopted CIP



Traffic Engineering

Capital Improvement Plan (CIP) Overview

Description of Major Changes

Advanced Transportation Technology and Innovation Grant: Advancing Safety and Emergency Operations

- New project to the CIP created via Common Council amendment #2.
- Includes a \$5.0 million federal award through the US Department of Transportation's Advanced Transportation Technology and Innovation program.
- The local share of the project will be supported by the City of Madison (\$200,000), State of Wisconsin (\$900,000), and the University of Wisconsin-Madison (\$400,348).

Camera Lifecycle Management

- No major changes compared to 2024 Adopted CIP.

Citywide LED Conversion

- No major changes compared to 2024 Adopted CIP.

Field Equipment Replacement

- No major changes compared to 2024 Adopted CIP.

Public Safety Radio System

- Advances \$1.2 million in General Fund GO borrowing from 2029 to 2027 for contract timing and to replace unsupported radio infrastructure.

Safe Streets Madison

- GF GO borrowing decreased \$490,000 in 2025. The agency will need less funding for new projects in 2025 as it works to deliver projects funded from prior appropriations, including \$6.6 million in federal funds from the Safe Streets and Roads for All program.

Street Light Installation

- Finance Committee amendment #8 adds \$155,000 in TID 44 increment funding to support street lighting along South Stoughton Road.

Town of Madison Annexation - Signing and Pavement Markings

- No major changes compared to 2024 Adopted CIP.

Traffic Safety Infrastructure

- No major changes compared to 2024 Adopted CIP.

Traffic Signal Installation

- Federal sources increased \$3.9 million and GF GO borrowing increased \$980,400 across 2025 to 2028 for awards through the Carbon Reduction Program. The awards will be used to improve traffic signal cabinets and purchase LED traffic signal fixtures.

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Summary of Expenditures and Revenues

2025 CIP by Expenditure Type

	2025	2026	2027	2028	2029	2030
Machinery and Equipment	8,915,954	2,351,750	3,399,250	2,356,750	1,140,188	1,173,697
Other	150,000	150,000	150,000	150,000	150,000	157,500
Street	1,052,200	1,511,100	1,533,150	1,533,150	1,617,308	1,698,173
Streetlighting	927,500	620,000	620,000	630,000	630,000	658,250
	\$ 11,045,654	\$ 4,632,850	\$ 5,702,400	\$ 4,669,900	\$ 3,537,496	\$ 3,687,620

2025 CIP by Funding Source

	2025	2026	2027	2028	2029	2030
GF GO Borrowing	2,612,300	2,742,450	3,812,000	2,779,500	2,627,496	2,758,870
County Sources	45,000	45,000	45,000	45,000	45,000	45,000
Developer Capital Funding	410,000	410,000	410,000	410,000	410,000	425,000
Federal Sources	6,018,006	980,400	980,400	980,400	-	-
Other Govt Pmt For Services	80,000	80,000	80,000	80,000	80,000	80,000
Special Assessment	275,000	275,000	275,000	275,000	275,000	278,750
State Sources	1,400,348	100,000	100,000	100,000	100,000	100,000
TIF Increment	205,000	-	-	-	-	-
	\$ 11,045,654	\$ 4,632,850	\$ 5,702,400	\$ 4,669,900	\$ 3,537,496	\$ 3,687,620

Borrowing Summary

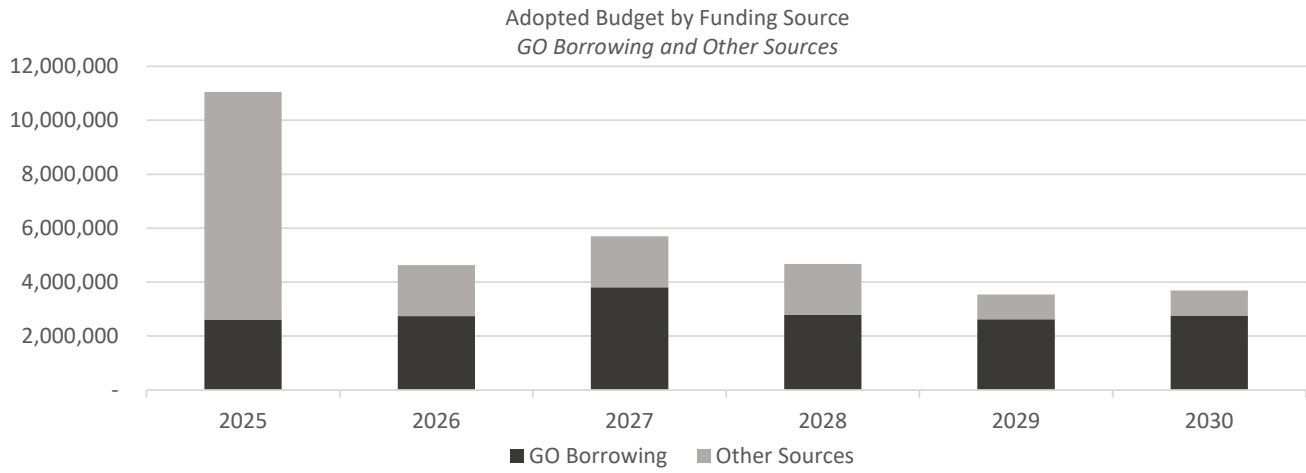
	2025	2026	2027	2028	2029	2030
General Fund GO Borrowing	2,612,300	2,742,450	3,812,000	2,779,500	2,627,496	2,758,870
Non-General Fund GO Borrowing	-	-	-	-	-	-
	\$ 2,612,300	\$ 2,742,450	\$ 3,812,000	\$ 2,779,500	\$ 2,627,496	\$ 2,758,870

Annual Debt Service

	2025	2026	2027	2028	2029	2030
General Fund GO Borrowing	339,599	356,519	495,560	361,335	341,574	358,653
Non-General Fund GO Borrowing	-	-	-	-	-	-
	\$ 339,599	\$ 356,519	\$ 495,560	\$ 361,335	\$ 341,574	\$ 358,653

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Summary of Expenditures and Revenues



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Carryforward General Obligation Borrowing

	Unused Appropriation Authority	Reauthorized GO Borrowing
14700 2024 PEDESTRIAN BICYCLE COUNTER	185,000	185,000
14356 CAMERA LIFECYCLE MANAGEMENT	53,046	55,000
13065 CITYWIDE LED LIGHTING CONVERSION	1,760,795	933,750
13835 CTH M	339	-
13779 FIELD EQUIPMENT REPLACEMENT	52,500	52,500
12730 MONONA TERRACE/JOHN NOLEN DR LIGHT	3,290,551	1,950,000
10420 PUBLIC SAFETY RADIO SYSTEM	157,543	26,250
14149 SAFE STREETS FOR ALL FEDERAL GRANT	20,000,000	4,000,000
13778 SAFE STREETS MADISON	3,806,050	2,384,420
13119 SNOW EMERGENCY ZONE EXP/CSCL	9,537	-
10418 STREET LIGHT INSTALLATION	1,826,043	300,860
14162 TOWN OF MADISON: PAVEMENT/SIGN IMPR	1,242	-
14163 TOWN OF MADISON: STREET LIGHT IMPRO	33,740	-
10767 TRAFFIC ENGINEERING INVENTORY	(2,456,440)	-
10428 TRAFFIC SAFETY INFRASTRUCTURE	112,140	39,375
10427 TRAFFIC SIGNAL INFRASTRUCTURE	4,715,814	1,172,269
13573 TWENTY IS PLENTY	133,581	306,513
12733 VISION ZERO TRAFFIC SAFETY INFRASTR	133,102	-
17071 WAYFINDING SIGNAGE	74,307	-
13066 ZERO VISION PROGRAM	126,000	1,271
	\$ 34,014,890	\$ 11,407,209

Traffic Engineering

Project & Program Details

Project	Advanced Transportation Technology and Innovation Grant: Advancing Safety and Emergency Operations	Project #	15526
Citywide Element	Land Use and Transportation	Project Type	Project

Project Description

The City of Madison will receive funding for the Advancing Safety and Emergency Operations through a Regional Connected Vehicle Corridor Project. The project targets two critical safety needs and deploys next generation traffic signal preemption for emergency vehicles and red-light running collision warning systems, through 37 signalized intersections in Madison along approximately 10 miles of US 151, a critical roadway in the region.

	2025	2026	2027	2028	2029	2030
GF GO Borrowing	200,000	-	-	-	-	-
Federal Sources	5,037,606	-	-	-	-	-
State Sources	1,300,348	-	-	-	-	-
Total	\$ 6,537,954	\$ -	\$ -	\$ -	\$ -	\$ -

Project	Camera Lifecycle Management	Project #	14356
Citywide Element	Land Use and Transportation	Project Type	Program

Project Description

This program supports the replacement and maintenance of the City's traffic cameras. The goal of the program is to provide a strong and secure traffic camera network that improves traffic flow, facilitates efficient network operations, and improves traffic safety.

	2025	2026	2027	2028	2029	2030
GF GO Borrowing	55,000	55,000	55,000	55,000	55,000	57,750
Total	\$ 55,000	\$ 55,000	\$ 55,000	\$ 55,000	\$ 55,000	\$ 57,750

Project	Citywide LED Conversion	Project #	13065
Citywide Element	Green and Resilient	Project Type	Project

Project Description

This project provides funding to convert all remaining City streetlights to LED. The goal of this project is to replace streetlight fixtures with more energy efficient LED fixtures, reducing energy usage and costs. The project's scope includes equipment costs for the replacement of all non-LED streetlight fixtures.

	2025	2026	2027	2028	2029	2030
GF GO Borrowing	157,500	-	-	-	-	-
Total	\$ 157,500	\$ -	\$ -	\$ -	\$ -	\$ -

Traffic Engineering

Project & Program Details

Project	Field Equipment Replacement	Project #	13779
Citywide Element	Effective Government	Project Type	Program

Project Description

This program is for the purchase and replacement of equipment used to support Traffic Engineering field operations, including the City's fiber optic network, signing, streetlighting and signal operations. The goal of this program is to improve efficiency and reduce delays in providing or restoring services to City agencies and partners. Funding in 2025 will be used to fund cable locators/magnetic detectors to support the City's underground facility marking programs.

	2025	2026	2027	2028	2029	2030
GF GO Borrowing	26,250	-	-	-	-	-
Total	\$ 26,250	\$ -	\$ -	\$ -	\$ -	\$ -

Project	Public Safety Radio System	Project #	10420
Citywide Element	Health and Safety	Project Type	Program

Project Description

This program is for digital radio communication equipment to serve over 5,000 users across multiple public safety, public works, and transportation agencies. The program's goal is to provide reliable 24/7 radio communication and build redundancy to ensure the continuation of operations in case of major disruptions. The program's scope is focused on purchasing equipment and the corresponding software to operate the equipment. Annual funding is associated with equipment costs to keep the system updated. Funding in 2027 is for anticipated system improvements and entering into new contracts with the system vendor.

	2025	2026	2027	2028	2029	2030
GF GO Borrowing	157,500	157,500	1,200,000	157,500	157,500	165,375
Total	\$ 157,500	\$ 157,500	\$ 1,200,000	\$ 157,500	\$ 157,500	\$ 165,375

Project	Safe Streets Madison	Project #	13778
Citywide Element	Land Use and Transportation	Project Type	Program

Project Description

The Safe Streets Madison program funds Vision Zero projects focused on eliminating serious and fatal crashes. This program also provides funding to close gaps in the pedestrian and bicycle network to ensure accessibility for people of all ages and abilities. Projects are selected using the Safe Streets prioritization metric that was approved August 2021. Typical projects include proven safety countermeasures such as Rectangular Rapid Flashing Beacons, pedestrian islands, curb extensions, improved pavement markings and signs, and new/improved bike lanes. \$490,000 of the annual budget is dedicated to lifecycle management projects.

	2025	2026	2027	2028	2029	2030
GF GO Borrowing	1,152,200	1,661,100	1,683,150	1,683,150	1,767,308	1,855,673
Total	\$ 1,152,200	\$ 1,661,100	\$ 1,683,150	\$ 1,683,150	\$ 1,767,308	\$ 1,855,673

Traffic Engineering

Project & Program Details

Project	Street Light Installation	Project #	10418
Citywide Element	Health and Safety	Project Type	Program

Project Description

This program is for improvements to outdated street lighting systems, including computer support; replacement or painting/refurbishing of older poles, fixtures, cable and other major street light equipment; and installation of new street lights. This program's goal is to provide adequate lighting on streets for motorists, pedestrians, and bicyclists. Projects planned in 2025 include adding lighting to existing paths and replacement of standard signal poles, including poles on State Street.

	2025	2026	2027	2028	2029	2030
GF GO Borrowing	175,000	180,000	180,000	190,000	190,000	199,500
County Sources	15,000	15,000	15,000	15,000	15,000	15,000
Developer Capital Funding	300,000	300,000	300,000	300,000	300,000	315,000
Other Govt Pmt For Services	30,000	30,000	30,000	30,000	30,000	30,000
Special Assessment	75,000	75,000	75,000	75,000	75,000	78,750
TIF Increment	155,000	-	-	-	-	-
State Sources	20,000	20,000	20,000	20,000	20,000	20,000
Total	\$ 770,000	\$ 620,000	\$ 620,000	\$ 630,000	\$ 630,000	\$ 658,250

Project	Town of Madison Annexation - Signing and Pavement Markings	Project #	14162
Citywide Element	Health and Safety	Project Type	Project

Project Description

The City of Madison assumed responsibility for a portion of the former Town of Madison in an annexation effective in October 2022. Traffic Engineering has reviewed the existing Town of Madison roadway signs and pavement markings in the annexation areas. The majority of the signs and pavement markings will need to be updated to meet current Manual on Uniform Traffic Control Devices standards and/or City of Madison standards and expectations. Additional signing and pavement markings will also be required to meet current standards and needs of the community. Traffic Engineering has divided the annexation areas into sub areas. A three year phased approach (2023 – 2025) is being used to update existing and to add new signing and pavement marking infrastructure to meet current standards.

	2025	2026	2027	2028	2029	2030
TIF Increment	50,000	-	-	-	-	-
Total	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -

Traffic Engineering

Project & Program Details

Project	Traffic Safety Infrastructure	Project #	10428
Citywide Element	Health and Safety	Project Type	Program

Project Description

This program is for traffic control devices , signs, traffic safety studies, and other items to respond to public safety concerns. The goal of this program is to improve traffic safety and accessibility for pedestrians, bicyclists, motorists, and transit users. A portion of funding starting in 2025 will support replacement of signs that show retroreflectivity degradation due to wear over time. The Federal Manual on Uniform Traffic Control Devices for streets and highways provides retroreflectivity standards and this funding will help bring sign inventory to these standards and enhance public safety.

	2025	2026	2027	2028	2029	2030
GF GO Borrowing	78,750	78,750	78,750	78,750	82,688	86,822
Total	\$ 78,750	\$ 78,750	\$ 78,750	\$ 78,750	\$ 82,688	\$ 86,822

Project	Traffic Signal Installation	Project #	10427
Citywide Element	Land Use and Transportation	Project Type	Program

Project Description

This program is for replacing and modernizing the City's traffic signal network. The goal of the program is to provide energy efficient and dynamic traffic signals that are readily adaptable to provide for safe, efficient traffic flow for pedestrians, bicycles and vehicles. Projects planned for 2025 include replacement and upgrade of the traffic signals at the intersection of Atwood Ave & Hudson St. Additionally, added federal funding will support traffic signal cabinet replacement and LED signal fixture upgrades at various locations.

	2025	2026	2027	2028	2029	2030
GF GO Borrowing	610,100	610,100	615,100	615,100	375,000	393,750
Federal Sources	980,400	980,400	980,400	980,400	-	-
County Sources	30,000	30,000	30,000	30,000	30,000	30,000
Developer Capital Funding	110,000	110,000	110,000	110,000	110,000	110,000
Other Govt Pmt For Services	50,000	50,000	50,000	50,000	50,000	50,000
Special Assessment	200,000	200,000	200,000	200,000	200,000	200,000
State Sources	80,000	80,000	80,000	80,000	80,000	80,000
Total	\$ 2,060,500	\$ 2,060,500	\$ 2,065,500	\$ 2,065,500	\$ 845,000	\$ 863,750

Traffic Engineering

2025 Appropriation Schedule

2025 Appropriation

Adopted Budget

	Request	Executive	GO Borrowing	Other	Total
Advanced Transportation Technology and Innovation Grant: Advancing Safety and Emergency Operations	-	-	200,000	6,337,954	6,537,954
Camera Lifecycle Management	55,000	55,000	55,000	-	55,000
Citywide LED Conversion	157,500	157,500	157,500	-	157,500
Field Equipment Replacement	26,250	26,250	26,250	-	26,250
Public Safety Radio System	157,500	157,500	157,500	-	157,500
Safe Streets Madison	1,642,200	1,152,200	1,152,200	-	1,152,200
Street Light Installation	615,000	615,000	175,000	595,000	770,000
Town of Madison Annexation - Signing and Pavement Markings	50,000	50,000	-	50,000	50,000
Traffic Safety Infrastructure	78,750	78,750	78,750	-	78,750
Traffic Signal Installation	835,000	2,060,500	610,100	1,450,400	2,060,500
	\$ 3,617,200	\$ 4,352,700	\$ 2,612,300	\$ 8,433,354	\$ 11,045,654