

Traffic Engineering

Capital Improvement Plan

	2020 Adopted	2021 Request	Change
2021 Capital Budget	1,535,000	3,635,000	2,100,000
2021 Capital Improvement Plan	7,725,000	12,245,000	4,520,000

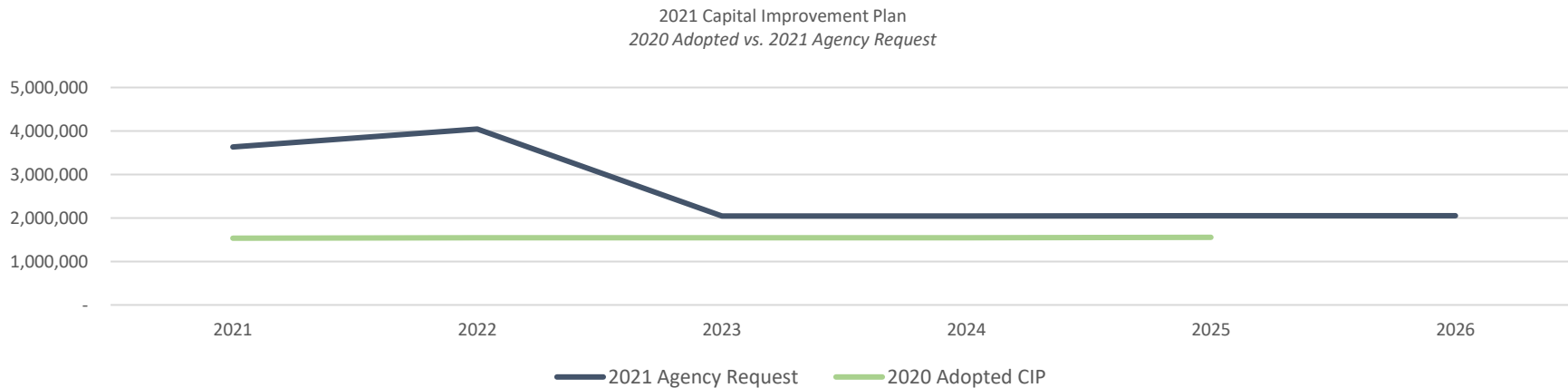
2020 Adopted
7

2021 Request
7

Project Summary: Agency Request

	2021	2022	2023	2024	2025	2026
Street Light Installation	610,000	615,000	615,000	615,000	620,000	620,000
Public Safety Radio System	50,000	50,000	50,000	50,000	50,000	50,000
Traffic Signal Installation	825,000	830,000	830,000	830,000	835,000	835,000
Traffic Safety Infrastructure	50,000	50,000	50,000	50,000	50,000	50,000
Citywide LED Conversion	1,500,000	2,000,000	-	-	-	-
Vision Zero	500,000	500,000	500,000	500,000	500,000	500,000
Temporary Traffic Control & Lighting	100,000	-	-	-	-	-
Total	\$ 3,635,000	\$ 4,045,000	\$ 2,045,000	\$ 2,045,000	\$ 2,055,000	\$ 2,055,000

Changes from 2020 CIP



Major Changes/Decision Points

- Citywide LED Conversion

Traffic Engineering

Capital Improvement Plan

	2020 Adopted	2021 Request	Change
2021 Capital Budget	1,535,000	3,635,000	2,100,000
2021 Capital Improvement Plan	7,725,000	12,245,000	4,520,000

2020 Adopted
7

2021 Request
7

\$3.5 Project added to CIP to convert all remaining Street Lights to LED

- Vision Zero
Project added to CIP-Continuation of project added to 2020 Capital Budget
- Temporary Traffic Control & Lighting
\$100k project added to CIP



Traffic Engineering Division

Yang Tao, PhD, PE, City Traffic Engineer

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Date: June 12, 2020

To: David Schmiedicke, Finance Director

From: Yang Tao, City Traffic Engineer

Subject: Traffic Engineering Division 2021 Capital Budget

Agency Goals

Traffic Engineering Division's 2021 capital budget reflects careful consideration of the City's fiscal situation in the face of growing infrastructure needs and of the negative impact of COVID-19 on the City's budget. The primary goal of our 2021 proposal is to upgrade our existing facilities where maintenance and repairs have become too costly to sustain, while improving public safety, transportation equity and sustainability.

Changes from 2020 CIP

All capital programs are budgeted at the same funding level as the 2020 CIP; however, we have included in 2021 requests for funding of the following new projects:

- Implementation of Vision Zero projects on an annual basis to support the City's Vision Zero Initiative and to improve traffic safety;
- The purchase of temporary traffic control and lighting equipment to test potential new traffic control configurations and to better respond to emergency situations such as COVID-19.
- Conversion to energy efficient LED streetlighting in 2021 and 2022 Citywide to reduce energy consumption and generate long term savings in operating cost;

Prioritized List of Capital Requests

Our agency developed the capital projects through the lenses of the Citywide Elements, with careful consideration on the problems we are seeking to resolve and the way capital investment helps resolve these problems. The agency has also considered the cost effectiveness of a capital improvement in terms of improving public safety, transportation equity and sustainability in our prioritization of projects.

1. Street Light Installation
2. Traffic Signals Installation
3. Public Safety Radio System
4. Traffic Safety Infrastructure
5. Vision Zero Program
6. Temporary Traffic Control and Lighting Equipment
7. Citywide LED Lighting Conversion

Potential for Scaling Capital Requests

The new 2021 proposals could be potentially scaled back in scope and budget, but it would also reduce the projects’ benefits to the City and the public.

Vision Zero Program: Funding could be reduced. Consequently, the number of projects targeting reducing the quantity and severity of crashes would have to be reduced proportionally.

Temporary Traffic Control and Lighting Equipment: Funding could be reduced or eliminated. This would not enhance the agency’s ability to test potential new traffic control configurations and to better respond to emergencies.

Citywide LED Lighting Conversion: LED conversation could be phased in over a longer period of time; however the energy cost savings and the sustainability benefits would also be delayed.

Impact of COVID-19

COVID-19 has impacted our operating budget as staff responds to different needs associated with the response and the recovery. It hasn’t had a significant impact on our capital budget. However, more funding could help our agency to improve our ability to respond to emergencies like COVID-19. For example, one constraint we have in our “Shared Streets” program is the limited number of temporary traffic control devices that we have in inventory. A larger inventory will help us implement more projects.

The COVID-19 emergency also reminded us the importance of maintaining a reliable radio communication system for our first responders. As the industry shifts to a system as a service model, we need to look into this critical needs in the coming years.

I look forward to further discussing our capital proposal in the coming weeks.

Sincerely,



Yang Tao, PhD, PE
City Traffic Engineer

Submitted

2021 Capital Improvement Plan Capital Budget Proposal

Identifying Information

Agency	Traffic Engineering ▼	Proposal Name	Citywide LED Conversion ▼
Project Number	13065	Project Type	Project
Project Category	Other	Priority:	7 ▼

Description

This project funds the implementation of LED streetlighting citywide. The goal of this project is to replace HPS (high pressure sodium) fixtures with more energy efficient LED fixtures. Progress of this project will be measured by saving from reduced energy use. The project consists of procuring a variety of LED street light types and holistically replacing existing HPS fixtures using City crews. Initial 2021 funds include purchase of a bucket truck for dedicated use during the conversion effort. Upon completion of this project, the city's electrical costs are expected to be reduced by 30% or about \$390,000 per year. In addition, the relative longevity of LED fixtures and the reduced replacement needs would free up City electrical staff for other essential projects.

Budget Information

Total Project Budget **Prior Appropriation** \$0

Budget by Funding Source

Funding Source	2021	2022	2023	2024	2025	2026
GF GO Borrowing ▼	1,500,000	2,000,000				
Total	\$1,500,000	\$2,000,000	\$0	\$0	\$0	\$0

Insert Funding Source

Budget by Expenditure Type

Expense Type	2021	2022	2023	2024	2025	2026
Streetlighting ▼	1,500,000	2,000,000				
Total	\$1,500,000	\$2,000,000	\$0	\$0	\$0	\$0

Insert Expense Type

Explain any changes from the 2020 CIP in the proposed funding for this project.

This project is a new in 2021 (\$1.5 million) and 2022 (\$2.0 million).

Priority

Citywide Element Green and Resilient ▼

Strategy Increase the use and accessibility of energy efficiency upgrades and renewable energy. ▼

Describe how this project advances the Citywide Element:

This project would replace HPS fixtures with more energy efficient and efficient LED fixtures and provide for saving due to a reduction in energy usage. This project would replace HPS fixtures with more energy efficient and efficient LED fixtures and provide for saving due to a reduction in energy usage.

What is the justification for this project?

This investment in energy efficient lighting would provide for an annual savings due to reduced energy usage and maintenance/replacement costs as LED fixtures last much longer than HPS fixtures of \$390,000 and free up electrical staff for other essential electrical projects.

Project Schedule & Location

Can this project be mapped? Yes No

What is the location of the project?

Is this project on the Project's Portal? Yes No

2021 Status		
<i>Status/Phase</i>	<i>Est Cost</i>	<i>Description</i>
<input type="text" value=""/>	1500000	Phase 1 of City-wide LED light replacement
<input checked="" type="checkbox"/> Insert item		
2022 Status		
<i>Status/Phase</i>	<i>Est Cost</i>	<i>Description</i>
<input type="text" value=""/>	2000000	Phase 2 of City-wide LED light replacement
<input checked="" type="checkbox"/> Insert item		
2023 Status		
<i>Status/Phase</i>	<i>Est Cost</i>	<i>Description</i>
<input type="text" value=""/>		
<input checked="" type="checkbox"/> Insert item		
2024 Status		
<i>Status/Phase</i>	<i>Est Cost</i>	<i>Description</i>
<input type="text" value=""/>		
<input checked="" type="checkbox"/> Insert item		
2025 Status		
<i>Status/Phase</i>	<i>Est Cost</i>	<i>Description</i>
<input type="text" value=""/>		
<input checked="" type="checkbox"/> Insert item		
2026 Status		
<i>Status/Phase</i>	<i>Est Cost</i>	<i>Description</i>
<input type="text" value=""/>		
<input checked="" type="checkbox"/> Insert item		

Operating Costs

What are the estimated annual operating costs associated with the project?

Personnel

# of FTEs	Annual Cost	Description
<input type="text" value=""/>	<input type="text" value=""/>	Electrical staff would spend less time lamping streetlights and would have more time to work on other essential projects.

Non-Personnel

Major	Amount	Description
45200	390000	reduction in electricity expenses
45200	12,500	increase Fleet Service charges in 2022 for new bucket truck

Insert item

Notes

Notes:

Submitted

2021 Capital Improvement Plan Capital Budget Proposal

Identifying Information

Agency	Traffic Engineering ▼	Proposal Name	Public Safety Radio System ▼
Project Number	10420	Project Type	Program
Project Category	Transportation	Priority:	3 ▼
2021 Project Number	45024		

Description

This program is for digital emergency communication equipment. The goal of the program is to be compliant with the Dane County Emergency communication system and improve the satisfaction of 911 users. Progress will be measured by feedback from public safety officials and the public. Funding in 2020 is for routine upgrades of digital emergency communication equipment.

Budget Information

Prior Appropriation*	\$13,839,830	Prior Year Actual*	\$13,736,432
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*Based on Fiscal Years 2015-2019

Budget by Funding Source

Funding Source	2021	2022	2023	2024	2025	2026
GF GO Borrowing ▼	50,000	50,000	50,000	50,000	50,000	50,000
Total	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000

Insert Funding Source

Budget by Expenditure Type

Expense Type	2021	2022	2023	2024	2025	2026
Machinery and Equipment ▼	50,000	50,000	50,000	50,000	50,000	50,000
Total	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000

Insert Expense Type

Explain any changes from the 2020 CIP in the proposed funding for this program.

none

Priority

Citywide Element	Healthy and Safe ▼
Strategy	Improve accessibility to government agencies and services ▼
Describe how this project advances the Citywide Element:	

Project Schedule & Location

2021 Projects

Project name	Est Cost	Location
Conflict Monitor Replacement	\$50,000	Citywide

Insert item

Explain the justification for selecting projects planned for 2021:

Maintaining the emergency radio system to protect public safety and efficiency.

2022 Projects

2021 Capital Budget	Agency Requests	451
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Project Name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2022:

2023 Projects

Project Name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2023:

2024 Projects

Project name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2024:

2025 Projects

Project name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2025:

2026 Projects

Project name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2026:

Operating Costs

What are the estimated annual operating costs associated with the projects planned within this program?

Personnel

# of FTEs	Annual Cost	Description
<input type="text"/>	<input type="text"/>	<input type="text"/>

Non-Personnel

Major	Amount	Description
<input type="text"/>	<input type="text"/>	N/A

Insert item

Notes

Notes:

Submitted

2021 Capital Improvement Plan Capital Budget Proposal

Identifying Information

Agency	Traffic Engineering ▼	Proposal Name	Street Light Installation ▼
Project Number	10418	Project Type	Program
Project Category	Transportation	Priority:	1 ▼
2021 Project Number	45012		

Description

This program is for upgrades or replacements 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. The goal of the program is to provide adequate lighting on streets for motorists, pedestrians and bicyclists. Progress will be measured by the number of street light outages and emergency repairs. Planned projects in 2020 include an LED lighting conversion at East Washington Avenue and High Point Road.

Budget Information

Prior Appropriation*	\$1,651,161	Prior Year Actual*	\$341,944
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*Based on Fiscal Years 2015-2019

Budget by Funding Source

Funding Source	2021	2022	2023	2024	2025	2026
GF GO Borrowing ▼	170,000	175,000	175,000	175,000	180,000	180,000
Developer Capital Funding ▼	300,000	300,000	300,000	300,000	300,000	300,000
State Sources ▼	20,000	20,000	20,000	20,000	20,000	20,000
Other Govt Pmt For Services ▼	30,000	30,000	30,000	30,000	30,000	30,000
County Sources ▼	15,000	15,000	15,000	15,000	15,000	15,000
Special Assessment ▼	75,000	75,000	75,000	75,000	75,000	75,000
Total	\$610,000	\$615,000	\$615,000	\$615,000	\$620,000	\$620,000

Insert Funding Source

Budget by Expenditure Type

Expense Type	2021	2022	2023	2024	2025	2026
Streetlighting ▼	610,000	615,000	615,000	615,000	620,000	620,000
Total	\$610,000	\$615,000	\$615,000	\$615,000	\$620,000	\$620,000

Insert Expense Type

Explain any changes from the 2020 CIP in the proposed funding for this program.

None

Priority

Citywide Element	Neighborhoods and Housing ▼
Strategy	Create complete neighborhoods across the city where residents have access to transportation options and resources needed for daily living ▼
Describe how this project advances the Citywide Element:	
The purposes of street lighting are to assist drivers, pedestrians, and cyclists in avoiding traffic hazards. Many business and residents believe that lighting helps prevent crime and helps resident feel safer. MPD has requested new lighting in high pedestrian use area to aid in crowd control.	

Project Schedule & Location

2021 Projects

2021 Capital Budget	Agency Requests	453
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Project name	Est Cost	Location
2021 Lighting Replacements/State Street replacement poles	\$120,000	Replacing decorative deteriorating poles on State Street and Capitol Square
Paint street light poles to preserve poles that are deteriorated and may have corroded	\$50,000	East Washington Ave Corridor

Insert item
Explain the justification for selecting projects planned for 2021:
 These projects will improve public safety for neighborhoods and business areas.

2022 Projects

Project Name	Est Cost	Location

Insert item
Explain the justification for selecting projects planned for 2022:
 These projects will improve public safety for neighborhoods and business areas and reduce energy use.

2023 Projects

Project Name	Est Cost	Location

Insert item
Explain the justification for selecting projects planned for 2023:

2024 Projects

Project name	Est Cost	Location

Insert item
Explain the justification for selecting projects planned for 2024:

2025 Projects

Project name	Est Cost	Location

Insert item
Explain the justification for selecting projects planned for 2025:

2026 Projects

Project name	Est Cost	Location

Insert item
Explain the justification for selecting projects planned for 2026:

Operating Costs

What are the estimated annual operating costs associated with the projects planned within this program?

Personnel

# of FTEs	Annual Cost	Description

Non-Personnel

Major	Amount	Description
45200		The replacement/repair of streetlight poles would potentially reduce daily maintenance and repair/replacement of individual poles. The dollar amount of savings is unknown. This is a public safety issue. This will also result in a long term cost saving by preserving existing infrastructure.

Insert item

Notes

Notes:

Submitted

2021 Capital Improvement Plan Capital Budget Proposal

Identifying Information

Agency	Traffic Engineering ▼	Proposal Name	Temporary Traffic Control & Lighting ▼
Project Number	13067	Project Type	Project
Project Category	Other	Priority:	6 ▼

Description

This project funds the purchase of additional equipment to test new traffic patterns before implementing expensive permanent traffic control measure and to support responses to future emergencies such as the current COVID-19 pandemic. The goal of this purchase would be to help staff see if new measures are effective at improving public safety and are acceptable to the public. Progress would be measured by the efficient implementation of effective traffic safety measures that would improve public safety and be accepted by City resident. The equipment would be temporary curbs and other barriers and a trailer to transport these items. In addition, this project fund the purchase of two portable light towers to be used during emergency and special events. The goal of this purchase would be to provide greater safety for police officers and the general public especially during emergency situations. Progress would be measured by the use of this equipment during emergency/non-emergency situations.

Budget Information

Total Project Budget **Prior Appropriation**

Budget by Funding Source

Funding Source	2021	2022	2023	2024	2025	2026
GF GO Borrowing ▼	100,000					
Total	\$100,000	\$0	\$0	\$0	\$0	\$0

Insert Funding Source

Budget by Expenditure Type

Expense Type	2021	2022	2023	2024	2025	2026
Machinery and Equipment ▼	100,000					
Total	\$100,000	\$0	\$0	\$0	\$0	\$0

Insert Expense Type

Explain any changes from the 2020 CIP in the proposed funding for this project.

New 2021 Project (\$100,000)

Priority

Citywide Element Healthy and Safe ▼

Strategy

Describe how this project advances the Citywide Element:

This project would allow TE staff to evaluate the potential effectiveness of traffic control devices, in term of improving public safety, before permanent installation and to support responses to future emergencies such as the current COVID-19 pandemic. This project would also purchase temporary to be deployed during emergency events where lighting would be considered essentials for City staff and the public safety.

What is the justification for this project?

This project funds the purchase of additional equipment to test new traffic patterns before implementing expensive permanent traffic control measure and to support response to future emergencies such as the current COVID-19 pandemic. In addition, the testing allows for public input during this test period where resident can see the measures in effect. The temporary tower lighting is essential for public safety in emergency situations especially in situations where equipment might not be available for rental. MPD have requested these lights during the recent State Street events to protect MPD and the public during the recent protests.

Project Schedule & Location

Can this project be mapped? Yes No

What is the location of the project?

Is this project on the Project's Portal? Yes No

2021	Status		
	<i>Status/Phase</i>	<i>Est Cost</i>	<i>Description</i>
	<input type="text"/>	100000	Purchase temporary traffic control & lighting
<input checked="" type="checkbox"/>	Insert item		
2022	Status		
	<i>Status/Phase</i>	<i>Est Cost</i>	<i>Description</i>
	<input type="text"/>		
<input checked="" type="checkbox"/>	Insert item		
2023	Status		
	<i>Status/Phase</i>	<i>Est Cost</i>	<i>Description</i>
	<input type="text"/>		
<input checked="" type="checkbox"/>	Insert item		
2024	Status		
	<i>Status/Phase</i>	<i>Est Cost</i>	<i>Description</i>
	<input type="text"/>		
<input checked="" type="checkbox"/>	Insert item		
2025	Status		
	<i>Status/Phase</i>	<i>Est Cost</i>	<i>Description</i>
	<input type="text"/>		
<input checked="" type="checkbox"/>	Insert item		
2026	Status		
	<i>Status/Phase</i>	<i>Est Cost</i>	<i>Description</i>
	<input type="text"/>		
<input checked="" type="checkbox"/>	Insert item		

Operating Costs

What are the estimated annual operating costs associated with the project?

Personnel

# of FTEs	Annual Cost	Description
<input type="text"/>	<input type="text"/>	<input type="text"/>

Non-Personnel

Major	Amount	Description
<input type="text"/>	<input type="text"/>	<input type="text"/>

Insert item

Notes

Notes:

Submitted

2021 Capital Improvement Plan Capital Budget Proposal

Identifying Information

Agency	Traffic Engineering ▼	Proposal Name	Traffic Safety Infrastructure ▼
Project Number	10428	Project Type	Program
Project Category	Transportation	Priority:	4 ▼
2021 Project Number	45036		

Description

This program is for traffic control devices and the design of the local share of the State Highway Hazard Elimination program, signs, and traffic safety studies. The goal of the program is to improve traffic safety and accessibility for pedestrians, bicyclists, motorists and transit users. Progress is measured by analyzing crash and traffic data using federal standards and professional expertise to determine if improvements are successful and/or if other improvements are required.

Budget Information

Prior Appropriation* **Prior Year Actual***

*Based on Fiscal Years 2015-2019

Budget by Funding Source

Funding Source	2021	2022	2023	2024	2025	2026
GF GO Borrowing ▼	50,000	50,000	50,000	50,000	50,000	50,000
Total	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000

Insert Funding Source

Budget by Expenditure Type

Expense Type	2021	2022	2023	2024	2025	2026
Land Improvements ▼	50,000	50,000	50,000	50,000	50,000	50,000
Total	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000

Insert Expense Type

Explain any changes from the 2020 CIP in the proposed funding for this program.

None

Priority

Citywide Element

Strategy

Describe how this project advances the Citywide Element:

Project Schedule & Location

2021 Projects

Project name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2021:

2022 Projects

2021 Capital Budget	Agency Requests	457
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Project Name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2022:

2023 Projects

Project Name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2023:

2024 Projects

Project name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2024:

2025 Projects

Project name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2025:

2026 Projects

Project name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2026:

Operating Costs

What are the estimated annual operating costs associated with the projects planned within this program?

Personnel

# of FTEs	Annual Cost	Description
<input type="text"/>	<input type="text"/>	<input type="text"/>

Non-Personnel

Major	Amount	Description
<input type="text"/>	<input type="text"/>	<input type="text"/>

Insert item

Notes

Notes:

Submitted

2021 Capital Improvement Plan Capital Budget Proposal

Identifying Information

Agency	Traffic Engineering ▼	Proposal Name	Traffic Signal Installation ▼
Project Number	10427	Project Type	Program
Project Category	Transportation	Priority:	2 ▼
2021 Project Number	45030		

Description

This program is for replacing and modernizing the City's traffic signal network. The goal of the program is to provide energy efficient dynamic traffic signals that are readily adaptable to provide for safe, efficient traffic flow for vehicles, bicycles, and pedestrians. Progress is measured by analyzing traffic and crash data using industry standards and best practices. Projects planned in 2020 include at transit signal priority pilot. Amendment #10, adopted by the Common Council, increased 2020 funding for the program by \$280,000 to install a traffic signal at Prairie Road and Raymond Road.

Budget Information

Prior Appropriation* **Prior Year Actual***

*Based on Fiscal Years 2015-2019

Budget by Funding Source

Funding Source	2021	2022	2023	2024	2025	2026
GF GO Borrowing ▼	355,000	360,000	360,000	360,000	365,000	365,000
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
State Sources ▼	80,000	80,000	80,000	80,000	80,000	80,000
Special Assessment ▼	200,000	200,000	200,000	200,000	200,000	200,000
Total	\$825,000	\$830,000	\$830,000	\$830,000	\$835,000	\$835,000

Insert Funding Source

Budget by Expenditure Type

Expense Type	2021	2022	2023	2024	2025	2026
Machinery and Equipment ▼	825,000	830,000	830,000	830,000	835,000	835,000
Total	\$825,000	\$830,000	\$830,000	\$830,000	\$835,000	\$835,000

Insert Expense Type

Explain any changes from the 2020 CIP in the proposed funding for this program.

None

Priority

Citywide Element

Strategy

Describe how this project advances the Citywide Element:

Modernizing signal infrastructure and management system helps maintain/improve mobility of existing transportation infrastructure. Equipment upgrades are also necessary for compatibility with the City's traffic signal management system.

Project Schedule & Location

2021 Projects

2021 Capital Budget

Agency Requests

459

Project name	Est Cost	Location
Packers and Aberg Traffic Signal	\$250,000	Packer Ave and Aberg Ave.
Controller Cabinet upgrades	\$105,000	Citywide

Insert item

Explain the justification for selecting projects planned for 2021:

Improve traffic efficiency and public safety and upgrading traffic signal cabinets to be compatible with the City's traffic signal management system.

2022 Projects

Project Name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2022:

2023 Projects

Project Name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2023:

2024 Projects

Project name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2024:

2025 Projects

Project name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2025:

2026 Projects

Project name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2026:

Operating Costs

What are the estimated annual operating costs associated with the projects planned within this program?

Personnel

# of FTEs	Annual Cost	Description

Non-Personnel

Major	Amount	Description
45500	3000	Additional traffic signal equipment does slightly increase our electrical usage, however our past years experience has shown that the new equipment is more energy efficient resulting in a net zero to near zero energy cost increase. It is estimate the the annual operational costs of a new signal is roughly \$3,000.

Insert item

Save

Submit

Notes

Notes:

Save and Close

Submitted

2021 Capital Improvement Plan Capital Budget Proposal

Identifying Information

Agency	Traffic Engineering ▼	Proposal Name	Vision Zero ▼
Project Number	13066	Project Type	Program
Project Category	Other	Priority:	5 ▼
2021 Project Number	<input type="text"/>		

Description

This program funds the implementation of countermeasures with the goal to reduce the severity and frequency of crashes at specific locations with emphasis on locations with high severity crashes. Progress will be measured by the reduction of serious crashes/fatalities. Countermeasures to include, but not limited to, the installation of signage, traffic signals, pavement markings and/or permanent reconstruction to change street geometry. Funding from this project may also be used to hire a consultant to analyze the city's crash history, determine appropriate locations, recommend countermeasures, conduct initial engineering work, and apply for Highway Safety Improvement Program (HSIP) funding. Traffic Engineering will develop the project list to be approved by Transportation Commission or the Common Council.

Budget Information

Prior Appropriation* **Prior Year Actual***

*Based on Fiscal Years 2015-2019

Budget by Funding Source

Funding Source	2021	2022	2023	2024	2025	2026
GF GO Borrowing ▼	500,000	500,000	500,000	500,000	500,000	500,000
Total	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000

Insert Funding Source

Budget by Expenditure Type

Expense Type	2021	2022	2023	2024	2025	2026
Machinery and Equipment ▼	500,000	500,000	500,000	500,000	500,000	500,000
Total	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000

Insert Expense Type

Explain any changes from the 2020 CIP in the proposed funding for this program.

This is a new program as the prior Vision Zero project was funding for 2020 projects.

Priority

Citywide Element Land Use and Transportation ▼

Strategy Implement new technologies to more efficiently use existing transportation infrastructure. ▼

Describe how this project advances the Citywide Element:

This project funds the implementation of countermeasures that reduce the severity and frequency of crashes at specific locations with emphasis on locations with high severity crashes and improves traffic safety and efficiency.

Project Schedule & Location

2021 Projects

Project name	Est Cost	Location
Replace current traffic signal structures with pole structures, monotube signal arms and over-the-lane signals.	\$125,000	First St & E Washington Ave
Replace current traffic signal structures with pole structures, monotube signal arms and over-the-lane signals.	\$125,000	Mineral Point Rd & Gammon Rd

2021 Capital Budget

Agency Requests

461

Project name	Est Cost	Location
Install signage to reduce speed limit from 40 mph to 35 or 30. Convert all crosswalks to continental crosswalks .	\$100,000	Mineral Point Rd Corridor [Whitney Way-Beltline Hwy]
Reconstruct median on Highland Ave to remove left turn opening and provide larger protected pedestrian area.	\$75,000	Highland Ave & Regent St & Speedway

Insert item

Explain the justification for selecting projects planned for 2021:

Final project list will be approved by the Transportation Commission.

2022 Projects

Project Name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2022:

2023 Projects

Project Name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2023:

2024 Projects

Project name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2024:

2025 Projects

Project name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2025:

2026 Projects

Project name	Est Cost	Location

Insert item

Explain the justification for selecting projects planned for 2026:

Operating Costs

What are the estimated annual operating costs associated with the projects planned within this program?

Personnel

# of FTEs	Annual Cost	Description

Non-Personnel

Major	Amount	Description

Insert item

Notes

Notes:

City of Madison 2020 Authorized Projects

Summary Status

Agency : Traffic Engineering

of Projects on Schedule

6

of Projects Delayed

1

Project	2020 Budget	Status	Notes
Street Light Installation	595,000	On schedule	
Public Safety Radio System	50,000	On schedule	
Traffic Signal Installation	1,100,000	On schedule	
Traffic Safety Infrastructure	50,000	On schedule	
Blackhawk Water Tower Relocation	350,000	On schedule	
Monona Terrace/John Nolen Drive Lighting Study	75,000	Delayed -- will be started in 2020 but not completed	
Vision Zero Traffic Safety	350,000	On schedule	
TOTAL	\$ 2,570,000		