

# Metro Transit

## Capital Improvement Plan

	2020 Adopted	2021 Request	Change
2021 Capital Budget	38,356,000	30,856,000	(7,500,000)
2021 Capital Improvement Plan	82,051,000	28,899,000	(53,152,000)

2020 Adopted  
**5**

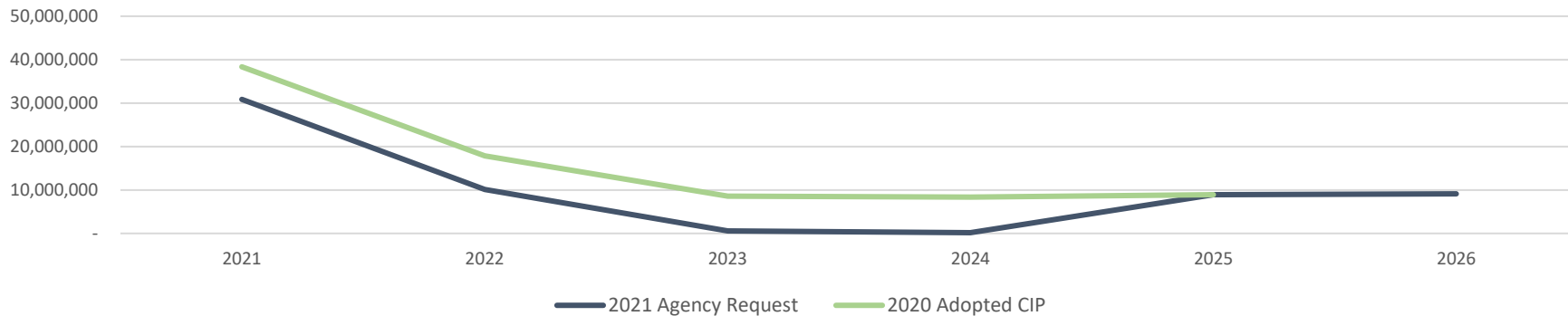
2021 Request  
**5**

### Project Summary: Agency Request

	2021	2022	2023	2024	2025	2026
Metro Satellite Bus Facility	10,000,000	-	-	-	-	-
Transit Technology System	10,000,000	-	-	-	-	-
Transit Coaches - Diesel	-	-	-	-	8,442,000	8,864,000
Facilities Repairs and Improvement	10,805,000	10,000,000	540,000	40,000	40,000	40,000
Transit System Upgrades	51,000	124,000	56,000	129,000	446,000	178,000
<b>Total</b>	<b>\$ 30,856,000</b>	<b>\$ 10,124,000</b>	<b>\$ 596,000</b>	<b>\$ 169,000</b>	<b>\$ 8,928,000</b>	<b>\$ 9,082,000</b>

### Changes from 2020 CIP

2021 Capital Improvement Plan  
2020 Adopted vs. 2021 Agency Request



### Major Changes/Decision Points

- Metro Satellite Bus Facility  
Project budget decreased by \$6m based on adjustments in project scope that reduce the amount of work needed to develop the facility

# Metro Transit

## Capital Improvement Plan

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2021 Capital Budget	38,356,000	30,856,000	(7,500,000)
2021 Capital Improvement Plan	82,051,000	28,899,000	(53,152,000)

2020 Adopted

5

2021 Request

5

- FTA grant (\$4m) added as a funding source
- Transit Technology System
  - Project separated from the Transit System Upgrades program
  - Project budget increased by approximately \$6m based on cost estimates from peer agency projects
- Transit Coaches - Diesel
  - 2021 to 2024 funding moved to Transportation BRT project budget to purchase BRT buses



Department of Transportation

## Metro Transit

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6/12/2020

To: Satya Rhodes-Conway, Mayor  
Dave Schmiedicke, Finance Director

Dear Mayor Rhodes-Conway and Mr. Schmiedicke,

I'm pleased to present Metro's proposed 2021 Capital Budget. This budget continues the initiatives of Metro envisioned in the 2020 budget, while also identifying opportunities to leverage additional federal funding in light of the more constrained fiscal environment we current find ourselves in.

### GOALS OF AGENCY'S CAPITAL BUDGET

Metro's budget proposal ensures that we can continue to provide quality service to meet the growing transportation needs of the Madison region. Transit ridership reduces the need for expensive roadway and parking capacity, reduces greenhouse gas emissions, and enables a denser and more vibrant city.

This budget proposal addresses the quality and capacity of our facilities, upgrades our outdated technology systems, and maintains our bus replacement strategy by integrating it with the planned BRT project.

### SUMMARY OF CHANGES FROM 2020 CAPITAL IMPROVEMENT PLAN

1. The Metro Satellite Bus Facility budget was reduced by \$6,000,000. This is due to a redesign of the project plan to reduce the amount of work required to develop a functional facility. 2020 FTA formula funds have been redirected to this facility.
2. The planned Technology Upgrade project was separated from the Transit System Upgrades project line to become a standalone project. That budget was increased by \$6,000,000 to reflect a more realistic budget for the planned project scope.
3. Bus replacement expenditures, including planned FTA formula funds and previously budgeted non-GO borrowing, for 2021 through 2024 were transferred to the E-W BRT project budget under the Transportation Department. Expanding the scope of that project to include additional buses accomplishes the bus replacement for Metro while simultaneously improving the chances of a Small Starts grant award.
4. Adjustments in Federal Funding to reflect recent competitive grant awards and the latest projections in FTA formula funding. This generally reduces overall borrowing.
5. Addition of 2026 bus replacements.

### PRIORITIZED LIST OF CAPITAL REQUESTS

1. 1101 E Washington Facility Improvements

2. Metro Satellite Bus Facility
3. Technology Upgrades
4. Transit System Upgrades
5. Diesel Bus Replacement (no 2021 expenditures)

To some extent, items 1, 2, and 3 are all required to implement the BRT project. Current facilities have limited space and ability to house and perform repair work on 60 ft. articulated buses, and current technology capabilities are insufficient to operate the system effectively.

#### **POTENTIAL FOR SCALING CAPITAL REQUESTS**

There is little opportunity for scaling. The Satellite bus facility could be purchased with 2020 appropriations, but not appropriated any funds in 2021 for improvements. This would secure the property for future improvements, but the property would not be functional for Metro use until those improvements are made.

#### **IMPACT OF COVID-19 ON CAPITAL FUNDING**

Metro is fortunate to have received \$24m in CARES act funding in response to COVID-19. In coordination with the Finance Department and the Mayor, we are planning to use that funding to offset much of the City's operating subsidy in 2020, as well as the expected lost fare revenue in 2020 and 2021. If ridership largely returns to normal levels in 2022, perhaps after a vaccine is in place, then Metro likely would not experience a significant change in the amount of debt that we are able to service due to COVID-19.

I look forward to additional discussion.

Sincerely,

Justin Stuehrenberg  
Metro General Manager

## 2021 Capital Improvement Plan Capital Budget Proposal

### Identifying Information

<b>Agency</b>	<input type="text" value="Metro Transit"/>	<b>Proposal Name</b>	<input type="text" value="Facilities Repairs and Imp"/>
<b>Project Number</b>	<input type="text" value="85002"/>	<b>Project Type</b>	<input type="text" value="Program"/>
<b>Project Category</b>	<input type="text" value="Facility"/>	<b>Priority:</b>	<input type="text" value="1"/>
<b>2021 Project Number</b>	<input type="text" value="11230"/>		

### Description

This program is for major building repairs and improvements to the existing Metro Transit facility at East Washington Avenue and Ingersoll Street (1101 East Washington Avenue). The program budget reflects the recommendations of a facility study completed in 2018 for the facility. Funding in 2020 is for Phase 2: HVAC upgrades and installation of a new boiler. Funding in 2021 is for Phase 3A: maintenance bay reconfiguration. Funding in 2022 is for Phase 3B: administrative and support area upgrades. Funding is deferred beyond the CIP for Phase 3C: bus storage remodel and Phase 4: exterior building improvements.

### Budget Information

<b>Prior Appropriation*</b>	<input type="text" value="\$10,259,142"/>	<b>Prior Year Actual*</b>	<input type="text" value="\$8,774,444"/>
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\*Based on Fiscal Years 2015-2019

### Budget by Funding Source

<i>Funding Source</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>	<i>2024</i>	<i>2025</i>	<i>2026</i>
Non-GF GO Borrowing	10,805,000	10,000,000	540,000	40,000	40,000	40,000
<b>Total</b>	<b>\$10,805,000</b>	<b>\$10,000,000</b>	<b>\$540,000</b>	<b>\$40,000</b>	<b>\$40,000</b>	<b>\$40,000</b>

### Budget by Expenditure Type

<i>Expense Type</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>	<i>2024</i>	<i>2025</i>	<i>2026</i>
Building	10,805,000	10,000,000	540,000	40,000	40,000	40,000
<b>Total</b>	<b>\$10,805,000</b>	<b>\$10,000,000</b>	<b>\$540,000</b>	<b>\$40,000</b>	<b>\$40,000</b>	<b>\$40,000</b>

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

Phases 3C for bus storage and 4 for exterior design were moved to the horizons list during the 2020 budget process.

### Priority

**Citywide Element**

**Strategy**

**Describe how this project advances the Citywide Element:**

Building upgrade will lead to a return on investment with new technology that provides a safe environment for fleet maintenance and the protection of assets, both human and equipment. Air quality is an equity issue for Shop employees that don't have environmental quality compared to other City Shop employees. Efficiencies will improve transit service as timely repairs will allow for more vehicles to be utilized reducing travel time.

### Project Schedule & Location

#### 2021 Projects

<i>Project name</i>	<i>Est Cost</i>	<i>Location</i>
<input type="text"/>	<input type="text"/>	<input type="text"/>

<i>Project name</i>	<i>Est Cost</i>	<i>Location</i>
Renovation Phase 3A Maintenance/ Mechanics Workspace Construction	\$7,322,633	1101 E Washington Ave
Renovation Phase 3A Maintenance/Mechanics Workspace Equipment	\$1,261,367	1101 E Washington Ave
Renovation Phase 3B Design Admin Operations/Dispatch	\$556,000	1101 E Washington Ave
5 Maintenance B li f t s for electric buses	\$1,500,000	1101 E Washington Ave
Building and Grounds Supervisor Position	\$80,000	1101 E Washington Ave
1% for Art	\$85,000	1101 E Washington Ave

**Explain the justification for selecting projects planned for 2021:**

The confined number of work bays limits the ability to provide preventative maintenance, consumed by active break-downs. Poor space layout, with their parts, tires, storage areas located at the far ends of the facilities, creates hours of lost time by staff. Prioritization for this phase was obtained from the Mead and Hunt facility study.

In order for Metro to comply with 100% renewable Madison \$1.5M was added to Metro's request in 2021 for five Maintenance area B lifts. These are needed to service electric buses and include the necessary fall protection associated with the electric buses as these are also serviced from the top.

**2022 Projects**

<i>Project Name</i>	<i>Est Cost</i>	<i>Location</i>
Renovation Phase 3B Admin Operations/Dispatch Construction	\$6,814,023	1101 E Washington Ave
Renovation Phase 3B Admin Operations/Dispatch Equipment	\$1,075,977	1101 E Washington Ave
Transfer Point Concrete Repairs	\$950,000	1101 E Washington Ave
Repair Gisholt Sawtooth Roof	\$1,000,000	1101 E Washington Ave
Building and Grounds Supervisor Position	\$80,000	1101 E Washington Ave
1% for Art	\$80,000	1101 E Washington Ave

**Explain the justification for selecting projects planned for 2022:**

The current configuration creates challenges to driver dispatch and stresses for Metro's drivers. A renovation to the building providing very basic amenities will produce results in creating safer drivers. There is currently a deficit in the quantity of toilet and locker room for women creating a gender equity issue.

Prioritization for this phase was obtained from the Mead and Hunt facility study.

Concrete at the transfer points has buckled in recent years resulting in costly emergency repairs.

\$1M repair for sawtooth portion of old Gisholt property roof.

**2023 Projects**

<i>Project Name</i>	<i>Est Cost</i>	<i>Location</i>
Emergency building repair/refurbishment contingency	\$40,000	1101 E Washington Ave
Solar PV	\$500,000	1101 E Washington Ave

**Explain the justification for selecting projects planned for 2023:**

In order for Metro to comply with 100% renewable Madison \$500,000 was added to Metro's request in 2023 for solar PV panels to expand the array from 150 kW to 350 kW.

**2024 Projects**

<i>Project name</i>	<i>Est Cost</i>	<i>Location</i>
Emergency building repair/refurbishment contingency	\$40,000	1101 E Washington Ave

Explain the justification for selecting projects planned for 2024:

**2025 Projects**

<i>Project name</i>	<i>Est Cost</i>	<i>Location</i>
Emergency building repair/refurbishment contingency	\$40,000	1101 E Washington Ave

Explain the justification for selecting projects planned for 2025:

Ongoing replacement cycle of overhead garage doors and other mechanicals.

**2026 Projects**

<i>Project name</i>	<i>Est Cost</i>	<i>Location</i>
Emergency building repair/refurbishment contingency	\$40,000	1101 E Washington Ave

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**

<i># of FTEs</i>	<i>Annual Cost</i>	<i>Description</i>
		It is anticipated that labor overtime will decrease as repairs will become more predictive in nature.

**Non-Personnel**

<i>Major</i>	<i>Amount</i>	<i>Description</i>
54		Utility costs have been increasing because of outdated equipment and materials. Costs are anticipated to decrease with more efficient equipment.

**Notes**

Notes:

## 2021 Capital Improvement Plan Capital Budget Proposal

### Identifying Information

<b>Agency</b>	<input type="text" value="Metro Transit"/>	<b>Proposal Name</b>	<input type="text" value="Metro Satellite Bus Facili"/>
<b>Project Number</b>	10950	<b>Project Type</b>	Project
<b>Project Category</b>	Facility	<b>Priority:</b>	<input type="text" value="2"/>

### Description

This project is for the construction of a satellite bus facility. The goal of the project is to provide a new facility that alleviates space constraints at Metro's existing East Washington Avenue location in preparation of Bus Rapid Transit (BRT). The facility space will accommodate Metro's future fleet goal of 285 buses. The project budget assumes land purchase in 2020 and construction in 2021.

### Budget Information

**Total Project Budget**  **Prior Appropriation**

### Budget by Funding Source

<i>Funding Source</i>	2021	2022	2023	2024	2025	2026
Non-GF GO Borrowing	5,921,387					
Federal Sources	4,078,613					
<b>Total</b>	<b>\$10,000,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

### Budget by Expenditure Type

<i>Expense Type</i>	2021	2022	2023	2024	2025	2026
Building	10,000,000					
<b>Total</b>	<b>\$10,000,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

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

Reduction in cost of \$6m based on adjustments in project scope to reduce costs.

### Priority

**Citywide Element**

**Strategy**

#### Describe how this project advances the Citywide Element:

Facility expansion is a prerequisite for Bus Rapid Transit (BRT) and expanding service to peripheral areas. The expansion facility would both relieve current overcrowding in the current bus facility and provide the capacity necessary for planned service expansions, including a 15 mile Bus Rapid Transit System proposal that has been adopted by the Common Council. The increased service will also serve to meet Racial Equity and Social Justice Initiative by reducing travel times, reducing overcrowding and giving low income individuals the ability to use the transit system for employment.

#### What is the justification for this project?

Relief of overcrowding at current facility will allow Transit system to increase capacity to reduce travel times and expand service.

The BRT project will require housing of BRT buses, which is planned for this location.

### 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



<b>2021</b>	<b>Status</b>			
	<i>Status/Phase</i>		<i>Est Cost</i>	<i>Description</i>
			8050000	It is anticipated that approximately 40 buses will be moved to alleviate overcrowding at the 1245 E.
<b>2022</b>	<b>Status</b>			
	<i>Status/Phase</i>		<i>Est Cost</i>	<i>Description</i>
<b>2023</b>	<b>Status</b>			
	<i>Status/Phase</i>		<i>Est Cost</i>	<i>Description</i>
<b>2024</b>	<b>Status</b>			
	<i>Status/Phase</i>		<i>Est Cost</i>	<i>Description</i>
<b>2025</b>	<b>Status</b>			
	<i>Status/Phase</i>		<i>Est Cost</i>	<i>Description</i>
<b>2026</b>	<b>Status</b>			
	<i>Status/Phase</i>		<i>Est Cost</i>	<i>Description</i>

### Operating Costs

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

#### Personnel

# of FTEs	Annual Cost	Description
10	872,000	Salaries and benefits for 1 Planner, 3 C-Mechanics, 1 Building and Grounds Foreperson, 1 Operations Supervisor, and 4 Transit Operators. This plan assumes relocating 24 buses from 1101 and permanent operation at the new facility.

#### Non-Personnel

Major	Amount	Description
54	\$408,000	Oscar Mayer will have 136,000 (SF) square feet. Engineering generally estimates \$2/SF for gas, electric and water or \$272,000. The estimate for custodial supplies, waste management and other costs is \$1/SF or \$136,000.

### Notes

Notes:

v 05/04/2020

## 2021 Capital Improvement Plan Capital Budget Proposal

### Identifying Information

<b>Agency</b>	Metro Transit	<b>Proposal Name</b>	Transit Coaches - Diesel
<b>Project Number</b>	85001	<b>Project Type</b>	Program
<b>Project Category</b>	Transportation	<b>Priority:</b>	5
<b>2021 Project Number</b>	11224		

### Description

This program is for the replacement of 15 fixed route diesel transit coaches annually. The goal of this program is to maintain an updated fleet of vehicles for Metro Transit's fixed route service. All transit coaches purchased through this program meet both EPA Emissions Standards and Americans with Disabilities Act (ADA) requirements. This program is for the replacement of 15 fixed route diesel transit coaches annually. The goal of this program is to maintain an updated fleet of vehicles for Metro Transit's fixed route service. All transit coaches purchased through this program meet both EPA Emissions Standards and Americans with Disabilities Act (ADA) requirements.

### Budget Information

**Prior Appropriation\*** \$35,475,136 **Prior Year Actual\*** \$33,493,583  
\*Based on Fiscal Years 2015-2019

### Budget by Funding Source

Funding Source	2021	2022	2023	2024	2025	2026
Non-GF GO Borrowing	0				3,830,455	4,114,189
Federal Sources	0				4,611,545	4,749,811
<b>Total</b>	\$0	\$0	\$0	\$0	\$8,442,000	\$8,864,000

### Budget by Expenditure Type

Expense Type	2021	2022	2023	2024	2025	2026
Machinery and Equipment	0				8,442,000	8,864,000
<b>Total</b>	\$0	\$0	\$0	\$0	\$8,442,000	\$8,864,000

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

Metro is in the process of performing a route study where the results will be used in determining the appropriate quantity and types of buses for BRT. Current plans are to stack 2020 CIP funding from 2021-2024 to purchase buses for the BRT fleet acquisitions. Therefore, funding in these years has been shifted to the BRT project within the Transportation budget.

### Priority

**Citywide Element** Land Use and Transportation

**Strategy** Improve transit service, especially to peripheral employment and residential locations, with a focus on reducing the travel time for transit depend

#### Describe how this project advances the Citywide Element:

Loss of the ability to provide for current service levels are projected to impact those routes which are more vulnerable due to ridership, but more necessary to ensure equitable transit to all parts of the City. Structural inequities present in the community could be exacerbated by the loss of these critical transit services. Metro will not be capable of reducing environmental impact as required through 100% renewable Madison Resolution adopted by Council. Additional funding is needed for buses, chargers and batteries to comply.

### Project Schedule & Location

#### 2021 Projects

Project name	Est Cost	Location
2021 Capital Budget		Agency Requests
		279

Project name	Est Cost	Location
	\$0	0

**Explain the justification for selecting projects planned for 2021:**

By replacing 15 buses per year, Metro will be able to maintain a replacement cycle from 12 to 15 years for 40 foot buses. Weekly usage for buses that are further along in their useful life cycle is decreased. Vehicle usage is reduced from 250 miles per day to approximately 100 miles per day and typically driven only on school days instead of seven days per week. This has been moved to the Department of Transportation budget for the BRT fleet acquisition.

**2022 Projects**

Project Name	Est Cost	Location
Purchase 15 diesel coaches		1101 E Washington Ave.

**Explain the justification for selecting projects planned for 2022:**

By replacing 15 buses per year, Metro will be able to maintain a replacement cycle from 12 to 15 years for 40 foot buses. Weekly usage for buses that are further along in their useful life cycle is decreased. Vehicle usage is reduced from 250 miles per day to approximately 100 miles per day and typically driven only on school days instead of seven days per week.

This has been moved to the Department of Transportation budget for the BRT fleet acquisition.

**2023 Projects**

Project Name	Est Cost	Location
Purchase 15 diesel coaches		1101 E Washington Ave.

**Explain the justification for selecting projects planned for 2023:**

By replacing 15 buses per year, Metro will be able to maintain a replacement cycle from 12 to 15 years for 40 foot buses. Weekly usage for buses that are further along in their useful life cycle is decreased. Vehicle usage is reduced from 250 miles per day to approximately 100 miles per day and typically driven only on school days instead of seven days per week.

This has been moved to the Department of Transportation budget for the BRT fleet acquisition.

**2024 Projects**

Project name	Est Cost	Location
Purchase 15 diesel coaches		1101 E Washington Ave.

**Explain the justification for selecting projects planned for 2024:**

By replacing 15 buses per year, Metro will be able to maintain a replacement cycle from 12 to 15 years for 40 foot buses. Weekly usage for buses that are further along in their useful life cycle is decreased. Vehicle usage is reduced from 250 miles per day to approximately 100 miles per day and typically driven only on school days instead of seven days per week.

This has been moved to the Department of Transportation budget for the BRT fleet acquisition.

**2025 Projects**

Project name	Est Cost	Location
Purchase 15 diesel coaches	\$8,442,000	1101 E Washington Ave.

**Explain the justification for selecting projects planned for 2025:**

By replacing 15 buses per year, Metro will be able to maintain a replacement cycle from 12 to 15 years for 40 foot buses. Weekly usage for buses that are further along in their useful life cycle is decreased. Vehicle usage is reduced from 250 miles per day to approximately 100 miles per day and typically driven only on school days instead of seven days per week.

**2026 Projects**

Project name	Est Cost	Location
Purchase 15 diesel coaches	\$8,864,000	1101 E Washington Ave.

**Explain the justification for selecting projects planned for 2026:**

By replacing 15 buses per year, Metro will be able to maintain a replacement cycle from 12 to 15 years for 40 foot buses. Weekly usage for buses that are further along in their useful life cycle is decreased. Vehicle usage is reduced from 250 miles per day to approximately 100 miles per day and typically driven only on school days instead of seven days per week.

**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**

<i>Major</i>	<i>Amount</i>	<i>Description</i>

**Notes**

**Notes:**

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v 05/04/2020

## 2021 Capital Improvement Plan Capital Budget Proposal

### Identifying Information

<b>Agency</b>	Metro Transit	<b>Proposal Name</b>	Transit System Upgrades
<b>Project Number</b>	85003	<b>Project Type</b>	Program
<b>Project Category</b>	Other	<b>Priority:</b>	4
<b>2021 Project Number</b>	11236		

### Description

This program is for Metro Transit's equipment and software enhancements. The program's goal is to improve the efficiency of Metro Transit's operations by updating the system tools used for the services provided. Funding in 2020 is for two support vehicles and a study to plan for the future upgrade of the Transit Master System. Increased program funding in 2021 is for the hardware and software replacement associated with Metro's Transit Master System upgrade.

### Budget Information

**Prior Appropriation\*** \$1,740,786 **Prior Year Actual\*** \$1,650,330

\*Based on Fiscal Years 2015-2019

### Budget by Funding Source

<i>Funding Source</i>	2021	2022	2023	2024	2025	2026
Non-GF GO Borrowing	51,000	124,000	56,000	129,000	446,000	178,000
<b>Total</b>	<b>\$51,000</b>	<b>\$124,000</b>	<b>\$56,000</b>	<b>\$129,000</b>	<b>\$446,000</b>	<b>\$178,000</b>

### Budget by Expenditure Type

<i>Expense Type</i>	2021	2022	2023	2024	2025	2026
Machinery and Equipment	51,000	124,000	56,000	129,000	446,000	178,000
<b>Total</b>	<b>\$51,000</b>	<b>\$124,000</b>	<b>\$56,000</b>	<b>\$129,000</b>	<b>\$446,000</b>	<b>\$178,000</b>

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

Transit Technology System stand alone project was created for the replacement of bus hardware and software.

### 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:

Vehicle hardware/software effectiveness is measured with incident data provided by law enforcement and Metro to enhance public safety. A successful measure is that there is never downtime in the communication system. Another measure is the frequency of polling for bus location and ridership that is now once a minute. The goal is for this to be accomplished once per ten seconds.

### Project Schedule & Location

#### 2021 Projects

<i>Project name</i>	<i>Est Cost</i>	<i>Location</i>
Support Vehicles	\$51,000	1101 E Washington Ave

Project name	Est Cost	Location
Fleet Expansion & Runningway Enhancements		

**Explain the justification for selecting projects planned for 2021:**

Replacement vehicles are used to transport drivers to relief points. Vehicles need to be reliable so that relief drivers have the ability to be punctual when relieving mainline drivers.

**2022 Projects**

Project Name	Est Cost	Location
Support Vehicles	\$54,000	1101 E Washington Ave
Utility truck	\$70,000	1101 E Washington Ave

**Explain the justification for selecting projects planned for 2022:**

Replacement vehicles are used to transport drivers to relief points. Vehicles need to be reliable so that relief drivers have the ability to be punctual when relieving mainline drivers. Building and Grounds equipment such as utility trucks must be reliable and safe in order to support the operational infrastructure. Currently, four of the seven utility trucks are over fifteen years old beyond their seven year useful life. Supervisor vehicles are used by road supervisors and for emergency calls.

**2023 Projects**

Project Name	Est Cost	Location
Support Vehicles	\$56,000	1101 E Washington Ave

**Explain the justification for selecting projects planned for 2023:**

Replacement vehicles are used to transport drivers to relief points. Vehicles need to be reliable so that relief drivers have the ability to be punctual when relieving mainline drivers. Building and Grounds equipment must be reliable and safe in order to support the operational infrastructure. Supervisor vehicles are used by road supervisors and for emergency calls.

**2024 Projects**

Project name	Est Cost	Location
Support Vehicles	\$59,000	1101 E Washington Ave
Utility Truck	\$70,000	1101 E Washington Ave

**Explain the justification for selecting projects planned for 2024:**

Replacement vehicles are used to transport drivers to relief points. Vehicles need to be reliable so that relief drivers have the ability to be punctual when relieving mainline drivers. Building and Grounds equipment such as utility trucks must be reliable and safe in order to support the operational infrastructure. Currently, four of the seven utility trucks are over fifteen years old beyond their seven year useful life. Supervisor vehicles are used by road supervisors and for emergency calls.

**2025 Projects**

Project name	Est Cost	Location
Support Vehicles	\$61,000	1101 E Washington Ave
Scrubbers (two)	\$140,000	1101 E Washington Ave
Sweeper	\$200,000	1101 E Washington Ave
Forklift	\$45,000	1101 E Washington Ave

**Explain the justification for selecting projects planned for 2025:**

Replacement vehicles are used to transport drivers to relief points. Vehicles need to be reliable so that relief drivers have the ability to be punctual when relieving mainline drivers. Building and Grounds equipment must be reliable and safe in order to support the operational infrastructure. Two scrubbers and a forklift will be well beyond their useful life. The current sweeper will be at its useful life. Supervisor vehicles are used by road supervisors and for emergency calls.

**2026 Projects**

Project name	Est Cost	Location
support vehicles	\$64,000	1101 E Washington Ave
Utility Truck	\$74,000	1101 E Washington Ave

<i>Project name</i>	<i>Est Cost</i>	<i>Location</i>
Buildings and Grounds other equipment replacement	\$40,000	1101 E Washington Ave

**Explain the justification for selecting projects planned for 2026:**

Replacement vehicles are used to transport drivers to relief points. Vehicles need to be reliable so that relief drivers have the ability to be punctual when relieving mainline drivers. Building and Grounds equipment such as utility trucks must be reliable and safe in order to support the operational infrastructure. Currently, four of the seven utility trucks are over fifteen years old beyond their seven year useful life. Supervisor vehicles are used by road supervisors and for emergency calls.

**Operating Costs**

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

**Personnel**

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

**Non-Personnel**

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

**Notes**

Notes:

## 2021 Capital Improvement Plan Capital Budget Proposal

### Identifying Information

<b>Agency</b>	<input type="text" value="Metro Transit"/>	<b>Proposal Name</b>	<input type="text" value="Transit Technology Syster"/>
<b>Project Number</b>	13120	<b>Project Type</b>	Project
<b>Project Category</b>	Other	<b>Priority:</b>	<input type="text" value="3"/>

### Description

This project funds the technological components used for real-time fleet telematics, security, communications, vehicle location, farebox collection and ridership data. The goal of this project is to integrate a comprehensive transit technology solution for all major bus hardware and software components. Progress will be measured by increased frequency of polling for bus location, reliable and consistent reporting for ridership and farebox data and minimized downtime in the communications and security systems .

### Budget Information

**Total Project Budget**  **Prior Appropriation**

### Budget by Funding Source

<i>Funding Source</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>	<i>2024</i>	<i>2025</i>	<i>2026</i>
GF GO Borrowing	10,000,000					
<b>Total</b>	<b>\$10,000,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

### Budget by Expenditure Type

<i>Expense Type</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>	<i>2024</i>	<i>2025</i>	<i>2026</i>
Machinery and Equipment	10,000,000					
<b>Total</b>	<b>\$10,000,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

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

This project has been separated from the transit upgrades program. The budget has been increased by \$6M based on cost estimates from recent projects completed by peer agencies.

### Priority

**Citywide Element**

**Strategy**

#### Describe how this project advances the Citywide Element:

Vehicle hardware/software effectiveness is measured with incident data provided by law enforcement and Metro to enhance public safety. A successful measure is that there is minimized downtime in the communication system. Another measure is the frequency of polling for bus location and ridership that is now once a minute. The goal is for this to be accomplished once per ten seconds.

#### What is the justification for this project?

Vehicle hardware and software is used for vehicle location and data recording to track vehicles. The system allows Metro to operate much more efficiently and respond to changes in the system in real time. Messaging also occurs between dispatch, drivers, and rider vehicle location applications. The system currently being used by Metro is beyond its useful life and is no longer being manufactured and is becoming difficult to obtain. This is causing reliability issues of the system. There are also elements of technology that can be used to improve the customer experience, such as enhanced real time location data and fare collection.

### Project Schedule & Location

Can this project be mapped?  
2021 Capital Budget

Yes  No

Agency Requests



What is the location of the project?  
 Is this project on the Project's Portal?

1101 E Washington Ave, Madison WI 53703  
 Yes  No

**2021 Status**

Status/Phase	Est Cost	Description
	10000000	Bus Hardware/Software technological updates

**2022 Status**

Status/Phase	Est Cost	Description

**2023 Status**

Status/Phase	Est Cost	Description

**2024 Status**

Status/Phase	Est Cost	Description

**2025 Status**

Status/Phase	Est Cost	Description

**2026 Status**

Status/Phase	Est Cost	Description

**Operating Costs**

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

**Personnel**

# of FTEs	Annual Cost	Description

**Non-Personnel**

Major	Amount	Description
54	\$600,000	It is anticipated there will be an ongoing maintenance agreement costs associated with the hardware/software replacement of the TransitMaster System. These are not new costs, as there are maintenance costs for the existing system.

**Notes**

Notes:

City of Madison 2020 Authorized Projects  
 Summary Status

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Agency : Metro Transit

# of Projects on Schedule

4
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# of Projects Delayed

1
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Project	2020 Budget	Status	Notes
Metro Satellite Bus Facility	12,893,000	Delayed -- will be started in 2020 but not completed	Expectation that this phase will be completed in 2021
Transit Coaches - Diesel	5,825,000	On schedule	
Facilities Repairs and Improvement	8,440,000	On schedule	
Transit System Upgrades	221,000	On schedule	Metro is going through an RFI process before determining if a consultant for the ITS project specs is needed.
Transit Coaches - Electric	1,456,000	On schedule	
<b>TOTAL</b>	<b>\$ 28,835,000</b>		