

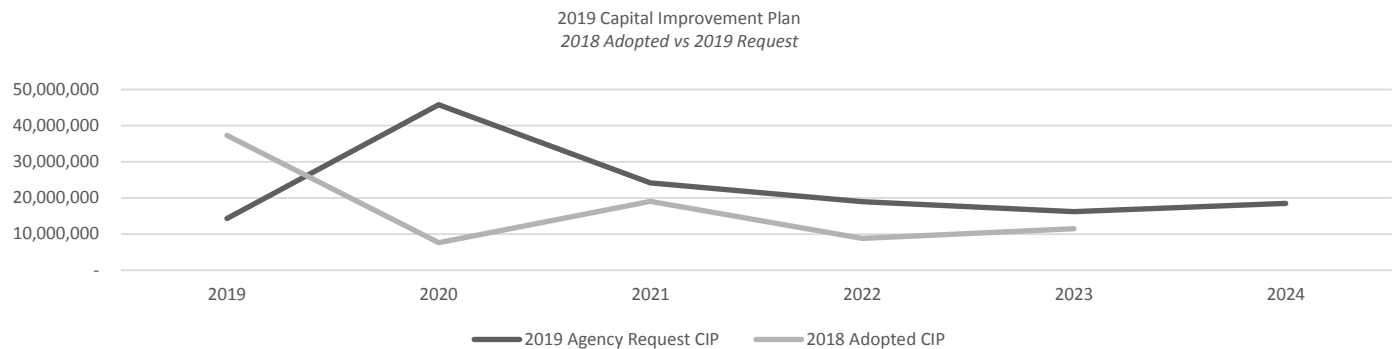
Metro Transit

Capital Improvement Plan

Project Summary

	Agency Priority	2019	2020	2021	2022	2023	2024
Bus Rapid Transit	5	-	-	-	-	200,000	-
Facilities Repairs and Improvement	2	7,032,586	8,212,581	12,812,322	11,167,811	7,828,744	9,951,304
Metro Satellite Bus Facility	4	-	30,000,000	-	-	-	-
Transit Coaches	1	7,069,666	7,281,755	7,500,203	7,725,201	8,111,471	8,517,049
Transit System Upgrades	3	195,093	301,000	3,851,000	53,550	56,228	59,039
Total		\$ 14,297,345	\$ 45,795,336	\$ 24,163,525	\$ 18,946,562	\$ 16,196,443	\$ 18,527,392

Changes from 2018 CIP



Projects Removed

- Bus Rapid Transit: Construction deferred from 2023 to a future year outside of CIP (\$3.1m)

Program Adjustments

- Facilities Repairs and Improvement: Program budget increased annually for renovations at 1101 E Wash (\$48.1m)



Department of Transportation
Metro Transit
Chuck Kamp, General Manager

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May 31, 2018

Metro Transit's capital budget for 2019 is included in the attached documents. It is a tale of two cities, on the one hand the City's share increase for buses puts us on a more solid footing for taking care of our most basic needs for revenue equipment and try to meet the needs of customers and businesses with money to pay for expanded bus service. Yet, the needs for long term facility infrastructure investment in our existing bus garage and a satellite bus garage, are both more urgent and more elusive than ever, and are preventing us from growing the system. How can the transit system and its ridership grow if it can't GROW?

A year ago, as non-engineers, our best guess for the existing bus garage upgrade costs was about \$10 million, but this year a more detailed engineering and design study is putting the cost closer to \$55 million. A more detailed engineering and design cost estimate now shows the Nakoosa facility at \$47 million, well over the original estimate. Both projects will go through value engineering analyses to get the costs as low as possible, but still meeting our basic health, safety, operational efficiency, and expansion needs.

The two capital funding charts included with this transmittal are last year's (2018-2022), showing the increase in city share to cover basic capital needs and replace the federal shortfalls, and this year's (2019-2023) second chart which shows how much the increase would be given the latest numbers above. Both assume that the days of 80% formula federal transit capital funds and other discretionary federal (or state, for that matter), are in the past. The upcoming VW settlement funds will be a loan, so the net new capital funds available will be small compared to the other numbers. The city's increased local commitment for buses and an initial investment in upgrading our 1101 bus garage is shown as a blue line and increases dramatically over the next several years, under any scenario where we meet our basic investment needs.

As we noted last year, difficult decisions are getting more difficult. We have eliminated in the 5 year CIP the replacement of paratransit vehicles, and this was approved last year by the Common Council. We are in final discussions with the Teamsters on the specific details on how to phase out directly operated paratransit services for at least another 5 years.

Another difficult decision being reviewed is getting the Nakoosa design concept down to an amount we can realistically afford in the next several years. We are showing a cost currently of \$30 million despite the higher estimate mentioned earlier. There is another federal grant cycle due July 19th, and if we cannot get a number that the city can afford, we will forgo an application.

The 1101 facility's value engineering process to get the cost estimate down from \$55 million will focus on basic safety, ventilation, and health needs. We will be updating this number through the budget process.

Overall then for the 5 year period, we highlight the individual and total accumulated costs of basic needs, shown below:

- ◆ Fixed Route Buses \$37,688,296

May 31, 2018

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- Facility on East Washington \$47,054,044
- Transit upgrades including REMIX for RESJI, Smartcard, TransitMaster, staff relief vehicles, grounds equipment, computer hardware \$4,456,871
- Paratransit vehicles PHASED OUT
- Total Costs 2019-2023 = \$122,499,211 vs. last 5 year CIP = \$84,325,167

We look forward to another year of robust and productive discussions on these important community investments.

Sincerely,

A handwritten signature in cursive script that reads "Chuck Kamp".

Chuck Kamp
Transit General Manager

Capital Budget Proposals

Section 1: Identifying Information

Agency

Proposal Name

Project Category

Project Number

Proposal Description

This project is for planning of the first phase of Bus Rapid Transit (BRT). The goal of a BRT system is to increase the capacity of the existing Metro system while decreasing ride times. BRT was most recently studied by the Madison Planning Organization in a 2013 report, where findings indicated ride times for the Capitol Square could be reduced by up to 35% with a BRT system. The proposed budget anticipates federal funding and a local match for planning associated with capital investment needed to launch BRT.

Proposal Type

Priority

Section 2: Project Budget

Total Project Budget

Prior Appropriation

Budget by Year

<i>Funding Source</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>	<i>2024</i>
Non-GF GO Borrowing					100,000	
Federal Sources					100,000	
Total	\$0	\$0	\$0	\$0	\$200,000	\$0
<i>Expense Type</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>	<i>2024</i>
Other					200,000	
Total	\$0	\$0	\$0	\$0	\$200,000	\$0

What is the methodology used to determine the budget for this project?

Are any fleet equipment or vehicles being purchased within this project budget?

☐ Yes ☒ No

Have matching funds been secured for any projects within the program?

☐ Yes ☒ No

Section 3: Project Justification

Is this project called for in an approved master plan?

☒ Yes ☐ No

Plan Name:

Discuss how does the proposed project meet the project requirements as defined in the plan?

What is the desired outcome of the proposed project?

The desired outcome of this project is to increase service by adding capacity up to 75% during peak to alleviate overcrowding and reducing commute times between 20-40%. Service expansion is desired to increase equity and upward mobility by connecting citizens to employment and services. An additional focus is on the economic development along the BRT corridors. One of the proposed locations is along East Washington Avenue.

How will this outcome be measured?

This outcome will be measured by comparing ridership growth, capacity and average travel times when the system is operational compared to previous data. Measuring ridership trends in underprivileged neighborhoods will identify the project's success in contributing toward upward mobility and equity. Economic development will be measured by employment opportunities along the corridors and housing availability.

Section 4: Project Scope & Status

What is the scope of project?

Developing and constructing four corridors sharing a central segment that links UW campus to downtown.

Can this project be mapped?

☒ Yes ☐ No

What is the street address of the project?

High density population areas

Is this project on the Project's Portal?

☐ Yes ☒ No

What is the total project timespan (all years for all phases)?

Start Year: 2023

End Year: 2027

What is the current status of the project?

Planning

Planned Schedule

	2019	2020	2021	2022	2023	2024
Project Status					Planning	

Section 5: Operating Costs

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

Personnel

# of FTEs	Annual Cost	Description
20-30	3,733,000	New service will require the hiring of 20-30 additional drivers.

Non-Personnel

Major	Amount	Description
Supplies	\$750,000	Increase cost in fuel and vehicle parts
Services	\$184,000	Repairs

Notes

Notes:

Capital Budget Proposals

Section 1: Identifying Information

Agency

Proposal Name

Project Category

Project Number

Proposal Description

This program provides for major building repairs and improvements to the existing Metro Transit facility at East Washington Avenue and Ingersoll Street. In 2018, planned projects include roof repairs and completion of a facility study currently underway. The proposed budget in 2021 and 2022 anticipates replacing the existing plumbing and electrical systems at the facility. The proposed budget's GO Borrowing component is \$8.07 million higher in the 2018 CIP than the 2017 CIP due to anticipated decreases in federal funding.

Proposal Type

Priority

Section 2: Program Budget

Prior Authorization

	<i>Budget</i>	<i>Actual</i>	<i>Difference</i>
2015	250,000	0	250,000
2016	240,000	0	240,000
2017	1,513,339	276,845	1,236,494
2018	1,540,000	1,097,626	442,374
Total	3,543,339	1,374,471	2,168,868

Budget by Year

<i>Funding Source</i>	2019	2020	2021	2022	2023	2024
Non-GF GO Borrowing	7,032,586	8,212,581	12,812,322	11,167,811	7,828,744	9,951,304
Total	\$7,032,586	\$8,212,581	\$12,812,322	\$11,167,811	\$7,828,744	\$9,951,304
<i>Expense Type</i>	2019	2020	2021	2022	2023	2024
Building	7,032,586	8,212,581	12,812,322	11,167,811	7,828,744	9,951,304
Total	\$7,032,586	\$8,212,581	\$12,812,322	\$11,167,811	\$7,828,744	\$9,951,304

Does this program have matching funds?

☐ Yes ☒ No

Section 3: Minor Projects

2019

Planned Projects

<i>Project</i>	<i>Estimated Cost</i>	<i>Street Address</i>
Emergency building repair/refurbishment contingency	\$40,000	1101 E. Washington Ave.
Renovation Phase 1 Wash Bay, Fire Alarm and Electric Bus ...	\$5,781,269	1101 E. Washington Ave.
Renovation Phase 1 Wash Bay, Fire Alarm and Electric Bus ...	\$1,260,173	1101 E. Washington Ave.
Renovation Phase 2 Design HVAC Upgrade Mechanics & St...	\$711,144	1101 E. Washington Ave.

Service Level

What are the end products (asset or infrastructure type) provided by this program?

<i>Asset Type</i>	<i>Quantity</i>	<i>Description</i>
Building	square footage	Emergency building repair/refurbishment contingency
Building	square footage	

Asset Type	Quantity	Description
		Renovation Phase 1 Wash Bay, Fire Alarm and Electric Bus Upgrade Construction
Building	square footage	Renovation Phase 1 Wash Bay, Fire Alarm and Electric Bus Upgrade Equipment
Building	square footage	Renovation Phase 2 Design HVAC Upgrade Mechanics & Storage

2020

Planned Projects

Project	Estimated Cost	Street Address
Emergency building repair/refurbishment contingency	\$40,000	1101 E. Washington Ave.
Renovation Phase 2 Construction HVAC Mechanics and Storage Ar...	\$7,227,288	1101 E. Washington Ave.
Renovation Phase 3A Design Maintenance/Mechanics Workspace	\$945,293	1101 E. Washington Ave.

Service Level

What are the end products (asset or infrastructure type) provided by this program?

Asset Type	Quantity	Description
Building	square footage	Emergency building repair/refurbishment contingency
Building	square footage	Renovation Phase 2 Construction HVAC Mechanics and Storage Area
Building	square footage	Renovation Phase 3A Design Maintenance/Mechanics Workspace

2021

Planned Projects

Project	Estimated Cost	Street Address
Emergency building repair/refurbishment contingency	\$40,000	1101 E. Washington Ave.
Renovation Phase 3A Maintenance/Mechanics Workspace Constr...	\$9,596,886	1101 E. Washington Ave.
Renovation Phase 3A Maintenance/Mechanics Workspace Equip...	\$2,288,260	1101 E. Washington Ave.
Renovation Phase 3B Design Admin Operations/Dispatch	\$887,176	1101 E. Washington Ave.

Service Level

What are the end products (asset or infrastructure type) provided by this program?

Asset Type	Quantity	Description
Building	square footage	Emergency building repair/refurbishment contingency
Building	square footage	Renovation Phase 3A Maintenance/Mechanics Workspace Construction
Building	square footage	Renovation Phase 3A Maintenance/Mechanics Workspace Equipment
Building	square footage	Renovation Phase 3B Design Admin Operations/Dispatch

2022

Planned Projects

Project	Estimated Cost	Street Address
Emergency building repair/refurbishment contingency	\$40,000	1101 E. Washington Ave.
Renovation Phase 3B Admin Operations/Dispatch Construction	\$9,006,863	1101 E. Washington Ave.
Renovation Phase 3B Admin Operations/Dispatch Equipment	\$450,000	1101 E. Washington Ave.
Renovation Phase 3C Design Bus Storage	\$670,948	1101 E. Washington Ave.
Transfer Point Concrete Repairs	\$1,000,000	1101 E. Washington Ave.

Service Level

What are the end products (asset or infrastructure type) provided by this program?

<i>Asset Type</i>	<i>Quantity</i>	<i>Description</i>
Building	square footage	Emergency building repair/refurbishment contingency
Building	square footage	Renovation Phase 3B Admin Operations/Dispatch Construction
Building	square footage	Renovation Phase 3B Admin Operations/Dispatch Equipment
Building	square footage	Renovation Phase 3C Design Bus Storage
Land Improvements	square footage	Transfer Point Concrete Repairs

2023**Planned Projects**

<i>Project</i>	<i>Estimated Cost</i>	<i>Street Address</i>
Emergency building repair/refurbishment contingency	\$40,000	1101 E. Washington Ave.
Renovation Phase 3C Bus Storage Construction	\$6,811,661	1101 E. Washington Ave.
Renovation Phase 4 Design Exterior Upgrades	\$977,083	1101 E. Washington Ave.

Service Level**What are the end products (asset or infrastructure type) provided by this program?**

<i>Asset Type</i>	<i>Quantity</i>	<i>Description</i>
Building	square footage	Emergency building repair/refurbishment contingency
Building	square footage	Renovation Phase 3C Bus Storage Construction
Building	square footage	Renovation Phase 4 Design Exterior Upgrades

2024**Planned Projects**

<i>Project</i>	<i>Estimated Cost</i>	<i>Street Address</i>
Emergency building repair/refurbishment contingency	\$40,000	1101 E. Washington Ave.
Renovation Phase 4 Exterior Upgrade Construction	\$9,911,304	1101 E. Washington Ave.

Service Level**What are the end products (asset or infrastructure type) provided by this program?**

<i>Asset Type</i>	<i>Quantity</i>	<i>Description</i>
Building	square footage	Emergency building repair/refurbishment contingency
Building	square footage	Renovation Phase 4 Exterior Upgrade Construction

Section 4: Program Justification**What is the program's desired outcome for the customer?**

Facility and transfer points that provide safe environment for fleet maintenance and the protection of assets. A return on investment utilizing newer technology and materials is also desired.

The current open-air wash line is creating the largest hazard to the building. Through the wash cycle, the buses idle exhaust and the resultant debris removed from the buses creates mass air-borne pollutants. This project will move the wash bay allowing for cleaner air quality.

Inadequate ventilation, heating and cooling have been identified as the most deficient system causing hazards to the occupants within the building, even described by users as foggy. Nearly all of the mechanical units are past their useful life and inefficient, if not in complete failure.

The current facility creates noticeable 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.

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, and storage areas located at the far ends of the facilities, creates hours of lost time by staff to just traverse this extremely long building.

The building is currently designed for right-hand turn circulation for buses, which creates a blind-spot turn direction for drivers, increasing the potential for incidents. Left-hand turns are the industry standard for current bus facilities, allowing the driver clear views of their path.

One final significant challenge for the facility is related to gender equity. There is a current deficit in the quantity of toilet and locker rooms for women.

How is the outcome currently being measured?

Utility costs have been increasing because of outdated equipment and materials. The number of work related injuries and lost work time is another measure of this programs success. Extreme heat and cold increases the likelihood of injuries and reduces labor efficiency. Staff time is measured by overtime hours in Maintenance and Operations dispatch.

Notes

Notes:

Capital Budget Proposals

Section 1: Identifying Information

Agency

Proposal Name

Project Category

Project Number

Proposal Description

This project is for the construction of a satellite bus facility located at Nakoosa Trail. The new 165,000 square-foot facility will accommodate up to 70 standard buses, alleviating space constraints at Metro's existing East Washington Avenue location. The project budget anticipates a funding split of 50% federal funding and 50% GO borrowing. A specific source of federal funding is not currently secured.

Proposal Type

Priority

Section 2: Project Budget

Total Project Budget

Prior Appropriation

Budget by Year

<i>Funding Source</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>	<i>2024</i>
Non-GF GO Borrowing		15,000,000				
Federal Sources		15,000,000				
Total	\$0	\$30,000,000	\$0	\$0	\$0	\$0
<i>Expense Type</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>	<i>2024</i>
Building		30,000,000				
Total	\$0	\$30,000,000	\$0	\$0	\$0	\$0

What is the methodology used to determine the budget for this project?

Planning and Stantec worked together on developing a cost summary estimate. Cost of materials and labor were estimated for each system based on square footage.

Are any fleet equipment or vehicles being purchased within this project budget?

☐ Yes ☒ No

Have matching funds been secured for any projects within the program?

☐ Yes ☒ No

Section 3: Project Justification

Is this project called for in an approved master plan?

☒ Yes ☐ No

Plan Name:

Discuss how does the proposed project meet the project requirements as defined in the plan?

Facility expansion is a prerequisite for Bus Rapid Transit (BRT). The Madison in Motion Plan guides future transportation decisions to improve transit ridership capacity and service. The expansion facility would both relieve current overcrowding in the current bus facility and provide the capacity necessary for planned service expansions, including a 25 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 and giving low income individuals the ability to use the transit system for employment.

What is the desired outcome of the proposed project?

The desired outcome of this project is to provide a satellite facility that will accommodate a larger bus fleet to increase capacity. This will allow for service expansion and improve the customer experience by reducing travel time and congestion.

How will this outcome be measured?

The outcome will be measured by comparing ridership growth, capacity and average travel times when the new facility is operational compared to previous data.

Section 4: Project Scope & Status

What is the scope of project?

Satellite Bus Facility to alleviate overcrowding of bus storage and expand fleet capacity with electric vehicles. Metro applied for a federal TIGER grant in late 2017 but did not receive an award so this project has been moved to 2020. Metro plans to apply for federal funding again in 2018.

Can this project be mapped?

☒ Yes ☐ No

What is the street address of the project?

4141 Nakoosa Trail, Madison WI 53714

Is this project on the Project's Portal?

☒ Yes ☐ No

Project Portal Link:

<http://www.cityofmadison.com/engineering/projects/metro-satellite-bus-barn-nakoosa-trail>

What is the total project timespan (all years for all phases)?

Start Year: 2020

End Year: 2020

What is the current status of the project?

Schematic Design

Planned Schedule

	2019	2020	2021	2022	2023	2024
Project Status	Schematic Design	Construction				

Section 5: Operating Costs

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

\$747,000

Personnel

# of FTEs	Annual Cost	Description
7	497,000	Salaries for 7 new Maintenance and Building and Ground employees.

Non-Personnel

Major	Amount	Description
Supplies	\$250,000	Gas/Electric/Other B&G

Notes

Notes:

Capital Budget Proposals

Section 1: Identifying Information

Agency

Proposal Name

Project Category

Project Number

Proposal Description

This program provides funding for the replacement of 15 fixed route diesel transit coaches annually. The goal of this program is to maintain an updated fleet of vehicles that provide 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. Planned program funding is split 50% federal and 50% local in 2018 and 2019, with formula federal funding and minor support from available carryforward discretionary federal funding. The program's budgeted GO Borrowing proposed in the 2018 CIP is \$15.6 million higher than the 2017 CIP due to an anticipated reduction in discretionary federal funding. Over the life of the CIP, the GO Borrowing proportion increases in later years to encompass the inflationary cost of buses and absence of discretionary federal funding.

Proposal Type

Priority

Section 2: Program Budget

Prior Authorization

	<i>Budget</i>	<i>Actual</i>	<i>Difference</i>
2015	6,246,780	6,246,780	0
2016	6,475,545	6,475,545	0
2017	6,620,016	6,594,885	25,131
2018	8,128,560	6,766,260	1,362,300
Total	27,470,901	26,083,470	1,387,431

Budget by Year

<i>Funding Source</i>	2019	2020	2021	2022	2023	2024
Federal Sources	3,534,833	3,155,427	3,250,088	3,090,080	2,974,206	3,122,918
Non-GF GO Borrowing	3,534,833	4,126,328	4,250,115	4,635,121	5,137,265	5,394,131
Total	\$7,069,666	\$7,281,755	\$7,500,203	\$7,725,201	\$8,111,471	\$8,517,049

<i>Expense Type</i>	2019	2020	2021	2022	2023	2024
Machinery and Equipment	7,069,666	7,281,755	7,500,203	7,725,201	8,111,471	8,517,049
Total	\$7,069,666	\$7,281,755	\$7,500,203	\$7,725,201	\$8,111,471	\$8,517,049

Does this program have matching funds?

☒ Yes ☐ No

1. Funder Name?

2. Grant Name?

3. Are these funds formally secured?

Section 3: Minor Projects

2019

Planned Projects

<i>Project</i>	<i>Estimated Cost</i>	<i>Street Address</i>
Purchase 15 diesel coaches	\$7,069,667	1101 E. Washington Ave.

Service Level

What are the end products (asset or infrastructure type) provided by this program?

<i>Asset Type</i>	<i>Quantity</i>	<i>Description</i>
Machinery and Equipment	15	This program provides funding for the replacement of 15 fixed route transit coaches on an annual basis.

2020

Planned Projects

<i>Project</i>	<i>Estimated Cost</i>	<i>Street Address</i>
Purchase 12 diesel coaches and 3 electric coaches	\$7,281,755	1101 E. Washington Ave.

Service Level

What are the end products (asset or infrastructure type) provided by this program?

<i>Asset Type</i>	<i>Quantity</i>	<i>Description</i>
Machinery and Equipment	15	This program provides funding for the replacement of 15 fixed route transit coaches on an annual basis.
		Purchase 12 diesel coaches since 3 electric coaches with federal no lo emissions grant awarded in 2017 will be delivered in 2020. No lo portion is for additional costs to upgrade to electric buses that was added to the 2018 capital through an amendment. The remaining base cost for 15 buses is in the 2020 budget request.

2021

Planned Projects

<i>Project</i>	<i>Estimated Cost</i>	<i>Street Address</i>
Purchase 15 diesel coaches	\$7,500,203	1101 E. Washington Ave.

Service Level

What are the end products (asset or infrastructure type) provided by this program?

<i>Asset Type</i>	<i>Quantity</i>	<i>Description</i>
Machinery and Equipment	15	This program provides funding for the replacement of 15 fixed route transit coaches on an annual basis.

2022

Planned Projects

<i>Project</i>	<i>Estimated Cost</i>	<i>Street Address</i>
Purchase 15 diesel coaches	\$7,725,201	1101 E. Washington Ave.

Service Level

What are the end products (asset or infrastructure type) provided by this program?

<i>Asset Type</i>	<i>Quantity</i>	<i>Description</i>
Machinery and Equipment	15	This program provides funding for the replacement of 15 fixed route transit coaches on an annual basis.

2023

Planned Projects

<i>Project</i>	<i>Estimated Cost</i>	<i>Street Address</i>
Purchase 15 diesel coaches	\$8,111,471	1101 E. Washington Ave.

Service Level

What are the end products (asset or infrastructure type) provided by this program?

<i>Asset Type</i>	<i>Quantity</i>	<i>Description</i>
Machinery and Equipment	15	This program provides funding for the replacement of 15 fixed route transit coaches on an annual basis.

2024

Planned Projects

<i>Project</i>	<i>Estimated Cost</i>	<i>Street Address</i>
Purchase 15 diesel coaches	\$8,517,049	1101 E. Washington Ave.

Service Level

What are the end products (asset or infrastructure type) provided by this program?

<i>Asset Type</i>	<i>Quantity</i>	<i>Description</i>
Machinery and Equipment	15	

<i>Asset Type</i>	<i>Quantity</i>	<i>Description</i>
		This program provides funding for the replacement of 15 fixed route transit coaches on an annual basis.

Section 4: Program Justification

What is the program's desired outcome for the customer?

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. 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. We will not be capable of reducing environmental impact as required, through the increased use of electric buses without this purchase.

How is the outcome currently being measured?

One measure is the number of vehicles available for peak service so that travel time is reduced. The number of trouble calls is monitored and decreases as older vehicles are replaced. Newer vehicles are more fuel efficient making fuel usage and the cost to operate each vehicle per mile useful measurements. Newer vehicles have enhanced safety features that can be measured by the number of accidents or injuries.

Notes

Notes:

Capital Budget Proposals

Section 1: Identifying Information

Agency

Proposal Name

Project Category

Project Number

Proposal Description

This program is for 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. In 2018, the program will provide funding to update the fire alarm system. In 2021, Metro will replace the existing TransitMaster software. The proposed budget's GO Borrowing component is \$3.55 million higher in the 2018 CIP than the 2017 CIP due to anticipated decreases in federal funding.

Proposal Type

Priority

Section 2: Program Budget

Prior Authorization

	<i>Budget</i>	<i>Actual</i>	<i>Difference</i>
2015	480,820	178,097	302,723
2016	340,000	165,368	174,632
2017	904,089	31,205	872,884
2018	197,477	0	197,477
Total	1,922,386	374,670	1,547,716

Budget by Year

<i>Funding Source</i>	2019	2020	2021	2022	2023	2024
Non-GF GO Borrowing	79,019	301,000	3,851,000	53,550	56,228	59,039
Federal Sources	116,074					
Total	\$195,093	\$301,000	\$3,851,000	\$53,550	\$56,228	\$59,039
<i>Expense Type</i>	2019	2020	2021	2022	2023	2024
Machinery and Equipment	195,093	301,000	3,851,000	53,550	56,228	59,039
Total	\$195,093	\$301,000	\$3,851,000	\$53,550	\$56,228	\$59,039

Does this program have matching funds?

☒ Yes ☐ No

1. Funder Name?

2. Grant Name?

3. Are these funds formally secured?

Section 3: Minor Projects

2019

Planned Projects

<i>Project</i>	<i>Estimated Cost</i>	<i>Street Address</i>
Support Vehicles	\$50,000	1101 E. Washington Ave.
Transit Enhancements (shelter upgrades)	\$145,093	Bus Stops

Service Level

What are the end products (asset or infrastructure type) provided by this program?

<i>Asset Type</i>	<i>Quantity</i>	<i>Description</i>
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Asset Type	Quantity	Description
Machinery and Equipment	2 vehicles	Replacement vehicles for drivers traveling to relief points and road supervisors.
Machinery and Equipment	Unknown	1% of 5307 federal grant is required for use in transit enhancements where a 20% local commitment is required on this project. Study is ongoing for location of bus stop upgrades.

2020

Planned Projects

Project	Estimated Cost	Street Address
Support Vehicles	\$51,000	1101 E. Washington Ave.
Real-Time paratransit information exchange	\$150,000	1101 E. Washington Ave.
RFP Study for Hardware/Software Replacement of TransitMaster S...	\$100,000	1101 E. Washington Ave.

Service Level

What are the end products (asset or infrastructure type) provided by this program?

Asset Type	Quantity	Description
Machinery and Equipment	2 vehicles	Replacement vehicles for drivers traveling to relief points and road supervisors.
Machinery and Equipment	1 software pa...	Real-Time paratransit information exchange to assist with paratransit contractor services.
Other	1 study	RFP Study for Hardware/Software Replacement of TransitMaster System. Study will evaluate current needs and develop an RFP for necessary equipment and software as current hardware is becoming obsolete.

2021

Planned Projects

Project	Estimated Cost	Street Address
Support Vehicles	\$51,000	1101 E. Washington Ave.
RFP Study and Hardware/Software Replacement of TransitMaster ...	\$3,800,000	1101 E. Washington Ave.

Service Level

What are the end products (asset or infrastructure type) provided by this program?

Asset Type	Quantity	Description
Machinery and Equipment	2 vehicles	Replacement vehicles for drivers traveling to relief points and road supervisors.
Machinery and Equipment	215 units	Hardware/Software Replacement of TransitMaster System

2022

Planned Projects

Project	Estimated Cost	Street Address
Support Vehicles	\$53,550	1101 E. Washington Ave.

Service Level

What are the end products (asset or infrastructure type) provided by this program?

Asset Type	Quantity	Description
Machinery and Equipment	2 vehicles	Replacement vehicles for drivers traveling to relief points and road supervisors.

2023

Planned Projects

Project	Estimated Cost	Street Address
Support Vehicles	\$56,228	1101 E. Washington Ave.

Service Level

What are the end products (asset or infrastructure type) provided by this program?

Asset Type	Quantity	Description
Machinery and Equipment	2 vehicles	Replacement vehicles for drivers traveling to relief points and road supervisors.

2024

Planned Projects

Project	Estimated Cost	Street Address
Support Vehicles	\$59,039	1101 E. Washington Ave.

Service Level

What are the end products (asset or infrastructure type) provided by this program?

Asset Type	Quantity	Description
Machinery and Equipment	2 vehicles	Replacement vehicles for drivers traveling to relief points and road supervisors.

Section 4: Program Justification

What is the program's desired outcome for the customer?

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. Transit enhancements add comfort to the customer experience. Vehicle hardware and software is used for vehicle location and data recording to track vehicles in an emergency situation. The system allows Metro to interact with law enforcement in order to provide a higher level of public safety. Messaging also occurs between dispatch, drivers, and rider vehicle location applications.

How is the outcome currently being measured?

Downtime and repair costs measure the effectiveness of the hardware and software replacement. Vehicle reliability and maintenance costs measure the success of the vehicle replacement program. 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 that is now once a minute. The goal is for this to be accomplished once per second.

Notes

Notes: