Finance and Capital Committee

Information Item III-A

October 26, 2023

Metro Financial Planning: FY2025 Service, Fares, and Capital Planning Update

Washington Metropolitan Area Transit Authority

Board Action/Information Summary

○ Action ◉ Information	Document Number: 205633	Resolution: ○ Yes ◉ No

Presentation Name:

Service, Fares, and Capital Planning Update

Project Manager:

Tom Webster

Project Department:

Planning and Performance

Purpose/Key Highlights:

- **Metro's service improvements and fare policies are working.** Ridership and customer satisfaction are increasing as customers experience the benefits of the FY2024 service changes. The Metro Lift income-qualified fare program has enrolled over 5,000 customers.
- **Metro must plan for severe service cuts as well as targeted cuts/fare increases in the FY2025 operating budget.** Severe service cuts would devastate ridership, set back the region, and still leave a future budget gap. Targeted service cuts (including six-car trains, turnbacks, and bus route cuts) and fare increases can shrink the budget gap but not close it. Additional investment is needed to avoid severe service cuts and the transit death spiral.
- **Metro has made significant progress on the system's state of good repair, but the capital program is at risk without further investment.** Inflation eroded the value of Metro's capital funding over time and increased preventive maintenance transfers accelerate the projected capital program deficit.

Interested Parties:

None

Background:

This information item will update the Board of Directors on recent ridership trends, introduce potential FY2025 service and fare concepts, and provide an update on capital investment activities and outlook.

Future financial planning for FY2025 advances Metro's Strategic Transformation Plan goals of service excellence, talented teams, regional opportunity and partnership, and sustainability. Related metrics such as ridership, frequent service, crowding, destination access, and fare evasion also inform fare and service planning.

FY2024 service changes strengthened Metro's regional network by increasing frequency and service, providing access to more destinations, and optimizing the use of Metro's existing assets. Compared to pre-pandemic, the FY2024 approved budget allocates more bus and rail service across off-peak, late-night, and weekends, better meeting customers' travel behavior. The Green and Yellow Line optimization provides 97% of trips with similar or higher all-day frequency. The Metrobus Frequent Service Network with 37 all-day lines has increased off-peak and weekend ridership. At the same time, Metro has discontinued higher cost and lower productivity routes.

Metro ridership continues to grow across modes, with Metrorail at 59 percent of pre-pandemic levels (54 percent on weekdays and 87 percent on weekends), Metrobus at 90% of pre-pandemic levels (87% on weekdays and 105% on weekends), and MetroAccess at 62% of pre-pandemic levels. As a result of customers returning, more buses are experiencing crowded conditions. In September 2023, 8.2 percent of Metrobus passenger-minutes were in crowded conditions compared to 5.5 percent in 2022 and 2.7 percent in 2021. Despite ridership's upward trend, Federal employee ridership continues to lag in recovery. There are 92,000 fewer federal employee trips on an average weekday, and the estimated federal employee share of total ridership is 6 percent compared to 12 percent pre-pandemic. Average daily parking transactions are down 60 percent, with parking utilization currently at 22 percent compared to 74 percent pre-pandemic.

Over the past four fiscal years, Metro has implemented significant fare technology and policy changes, including launching mobile SmarTrip in FY2021, instituting free rail-bus transfers and $2 flat weekend Metrorail fares in FY2022, expanding $2 flat fares to late-night periods in FY2023, and eliminating the Metrorail peak and off-peak fare difference, aligning base bus and rail fares, and capping MetroAccess fares at $4 in FY2024. Metro also launched Metro Lift, a program providing 50 percent off fares for customers enrolled in the Supplemental Nutrition Assistance Program (SNAP). Since June 20, 2023, over 5,000 customers have been approved and over 120,000 trips have been taken. Over 70 percent of customers enroll online. In-person enrollment has been increasing due to pop-up events at Social/Human Service offices, grocery stores, Metrorail stations, and bus bays.

Remaining FY2024 approved budget items to be implemented are 6-minute Green and Yellow Line all-day service (6-minute all day weekday service will start at the end of December), 7.5-minute Orange Line peak service, expanded peak periods and all 8-car trains, the 24-hour bus network in the District of Columbia (expected in December) and the Senior SmarTrip card fee waiver (expected in December).

FY2023 capital accomplishments include investments that improve safety, state of good repair, reliability, modernization, access and customer experience such as the new Potomac Yard Metrorail station, the Yellow Line tunnel rehabilitation, Orange Line station platform rehabilitation, 33 escalator replacements, and Silver Line expansion. The approved FY2024-FY2029 Capital Budget and CIP anticipates $12.4 billion in investments. FY2024 ongoing capital initiatives focus on state of good repair and modernization needs. Track rehabilitation, railcar rehabilitation, bus vehicle replacement, Northern Bus Garage, and Bladensburg Bus Garage, faregate upgrades, new customer digital signage, and zero emission bus are examples of these initiatives.

Discussion:

Service and Fares
Previously, staff detailed ways Metro can reduce the projected FY2025 budget deficit through financial management, internal efficiencies, preventive maintenance, and federal revenue recovery. Three scenarios were developed to reduce the projected $750 million deficit through different levels of preventive maintenance transfers, resulting in a revised FY2025 deficit forecast of between $365 and $650 million, without including potential service and fare optimization. To prepare for multiple scenarios and contingencies, Metro is advancing planning on potential severe service cuts to close the projected budget gap as well as service efficiency concepts and smaller scale incremental service cuts.

Severe service cuts are particularly challenging, given Metro's cost structure. Most of the rail system's costs are driven by the footprint of the system and the quality of service delivered. Large categories of work (accounting for approximately 78% of Metrorail's FY2023 operating budget) include work that does not change with service levels, such as railyard operations, elevator and escalator maintenance, station cleaning, signal system maintenance, police patrols, and administration.

Because of those large fixed costs, closing a very large budget gap is not feasible with service cuts alone. Severe service cuts must effectively shrink the size of the system in order to reduce the number of assets that need to be operated and maintained. Potential rail and bus severe cut concepts include stopping all service at 9 pm, dramatically reducing rail headways to every 20 to 30 minutes, bus service either cutting all but the 37 lines of the Frequent Service Network, or retaining more bus lines but cutting service frequency across the board, turning back trains at several locations, and closing stations, either full time or during lower use periods. Severe cut scenarios will likely need to use some combination of these concepts, depending on the size of the

budget gap.

Regardless of the specific scenario, severe cuts of this scale will trigger the transit death spiral: service cuts will lower ridership and revenue, and will not address the budget gap in future years. Meanwhile, the layoffs required to cut costs will limit Metro's capacity to deliver service in the future, even if funding is restored. The region will see not just decreased and less useful service for customers, but worsening traffic congestion and more pollution.

Service efficiency and targeted service cuts can also enable Metro to operate efficiently while continuing to prioritizing maintaining good, frequent service in the busiest parts fo the system – the key to generating ridership. Potential targeted service cuts could include adjusting the span of peak service, closing or un-staffing station entrances, decreasing budgeted headways on portions of the FY2024 budgeted service yet to be implemented, adjusting train length to include a mix of 6-car and 8-car trains, implementing turnbacks on the Red, Blue, or Silver lines, closing the rail system 1 hour earlier (at midnight) on Friday and Saturday nights, or eliminating service on the lowest productivity bus lines. A potential combination of those targeted service cuts could save approximately $25 to $30 million annually.

Those service efficiencies could also be packaged with targeted service improvements, including either opening the rail system one hour earlier (at 6am) on Saturdays and Sunday mornings, or closing one hour later (at 2am) on Fridays and Saturday nights. Potential bus service additions could include capacity increases on crowded routes, as well as creating overnight bus service to Dulles International and Reagan National airports. Together, the service additions could cost approximately $14.5 to $16 million annually.

Current MetroAccess service and fare policies surpass federal minimum requirements. This includes providing trips to some customers traveling outside of the federally mandated ADA service area as well as trips equivalent to Metrobus routes no longer in service (approximately 9.5 percent of total MetroAccess trips are estimated to be outside of the minimum required service area). To provide affordable transportation for customers, MetroAccess fares are capped at $4 instead of the potential $12 maximum and Abilities-Ride trips are free of charge. Together, these policies have an estimated $19.8 million cost to provide.

Metro is analyzing the impacts of different fare increase percentages on the existing fare structure. For example, a 12.5% increase would result in a base fare of $2.25 on bus and rail, a rail $2.25 flat fare on weekends and late-nights, a rail maximum fare of $6.75, and a MetroAccess fare cap of $4.50. Modeling shows an increase in revenue with fare increases but on a diminishing scale as more customers get priced out of the system. Parking rates could be increased by the same percentage as a potential fare increase, or could be adjusted based on current utilization figures to target crowding at specific facilities while incentivizing more usage at others.

Given the size of the budget gap, the level of Preventative Maintenance transfer, and potential service cuts, Metro has outlined five potential scenarios as illustrative concepts for budget development, covering a spectrum between no service cuts or fare increases (requiring the most additional subsidy to balance the budget) to scenarios with severe service cuts, significant layoffs, and fare increases (with no additional subsidy required).

Customer impacts would vary widely; the severe service cut scenarios would require substantial reductions in rail and bus service, frequency, and hours of operation, up to a 60% cut in service. Fares would need to increase, and MetroAccess service would be pared back to the minimum regulatory requirements. The targeted service cut scenario involves the targeted service efficiency cuts and fare increase concepts, as well as additional subsidy from the jurisdictions.

Capital Outlook
Significant progress has been made to reduce Metro's state of good repair backlog and maintain assets in a safe, fully functional, and performing condition due to the regional capital dedicated funding approved in 2018. Overdue state of good repair needs are estimated to have decreased from $6.4 billion in FY2016 to $4.1 billion in FY2024 as new bus and railcars have been acquired, as assets have been rehabilitated through the platform rehabilitation projects, and as track and structural components essential for safe and reliable operations have been addressed.

However, the estimated $11 billion in capital funding projected for FY2025-FY2030 is less than the $17 billion in total identified program needs. While the draft $11 billion program addresses critical overdue needs, it results in a declining capacity for state of good repair and modernization investments, as dedicated funding debt capacity is exhausted. As the available capital funding starts to decrease, Metro becomes unable to address more and more state of good repair needs, increasing the backlog and jeopardizing the safety and reliability of the system through recurring asset failures. Increasing preventive maintenance transfers would erode dedicated funding faster and shift the debt ceiling earlier, from FY2029 to FY2028 or earlier. The purchasing power of capital funding received from both PRIIA and dedicated funding has also decreased significantly in the past three years due to inflation.

The funding capacity constraint will result in reduced capacity for state of good repair and modernization investments, including priorities such as the Heavy Rail and Overhaul Facility, 8000-Series fleet of the Future, Zero Emission Buses and Garages, development of Next Generation Automation and Signaling, and planning for the Blue/Orange/Silver Corridor improvements. Additional preventive maintenance transfers will further reduce this capacity.

Funding Impact:

There is no funding impact from providing this information item.

Previous Actions:

No prior actions.

Next Steps:

FY2025 budget development sessions and stakeholder and community engagement.

Recommendation:

Information Only

Metro Financial Planning: FY2025 Service, Fares, and Capital Planning Update

Finance and Capital Committee
October 26, 2023

Executive Summary

Current Ridership

Metro's service improvements and fare policies are working:

- **Ridership and customer satisfaction are increasing**
- Customers benefitting from FY2024 service changes
- Metro Lift providing reduced fares for thousands of customers

FY2025 Operating

Metro must plan for both severe service cuts and targeted cuts/fare increases:

- Severe **service cuts would devastate ridership**, set back the region, and still leave a future budget gap
- Targeted service cuts – including six-car trains, turnbacks, and bus route cuts – and fare increases **can shrink the gap, but not close it**
- Additional **investment is needed to avoid severe cuts** and transit death spiral

Capital Outlook

Great progress on state of good repair, but capital program is at risk without further investment:

- Capital deficit projected for FY2028 with increased preventive maintenance transfers
- **Priority investments are at risk**, including state of good repair, the rail fleet of the future and zero-emission buses
- Inflation eroded the value of Metro's capital funding over time

Service and Fare Update

Strategically Aligned Fare and Service Policy

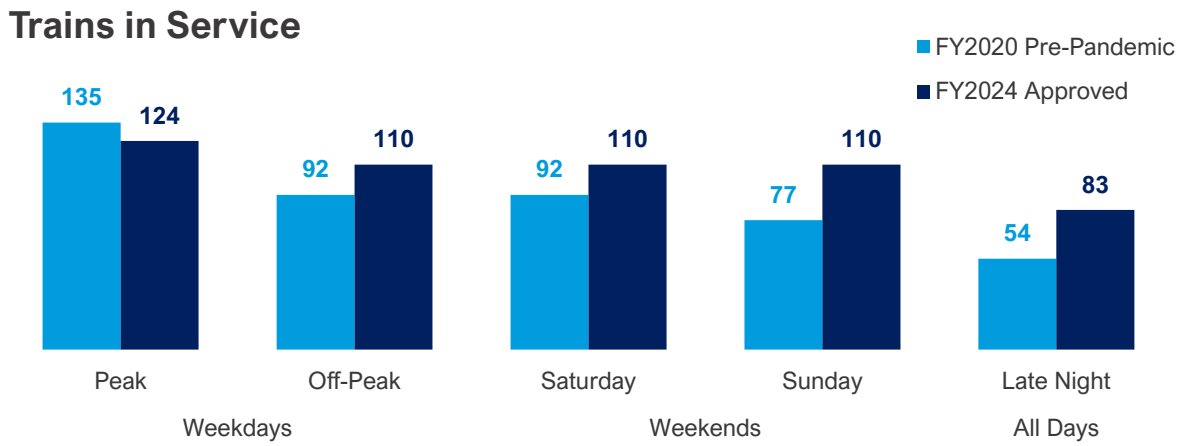
Your Metro STP Goals

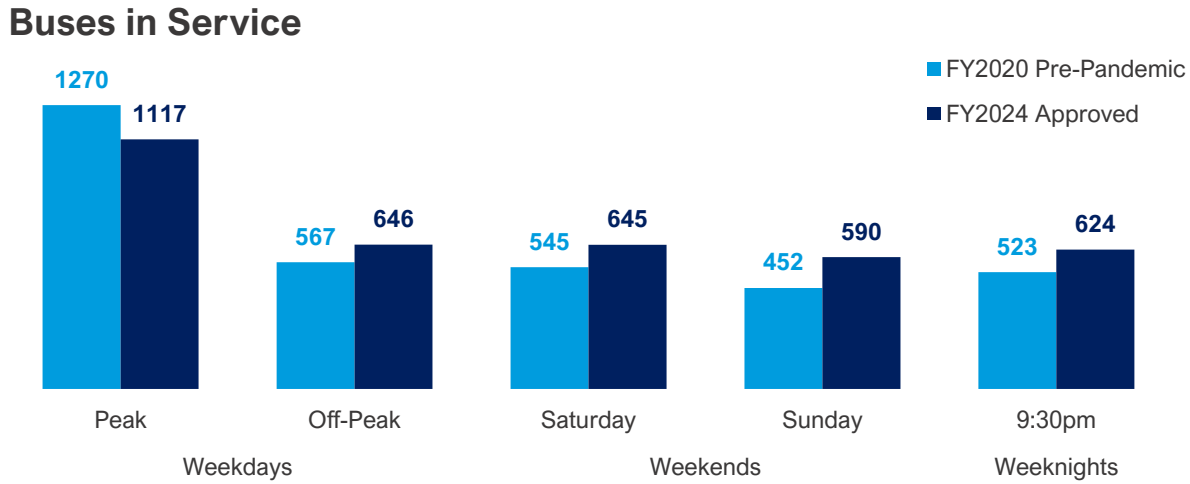
Related Metrics

- Ridership
- Rail Frequent Service
- Bus Frequent Service
- Crowding
- Destination Access
- Percent of Transit Mode Share
- Reduced Fare Program Enrollment
- Fare Evasion

Metro is Adapting to How Customers Travel

Frequent service all day better meets customers' needs throughout the week

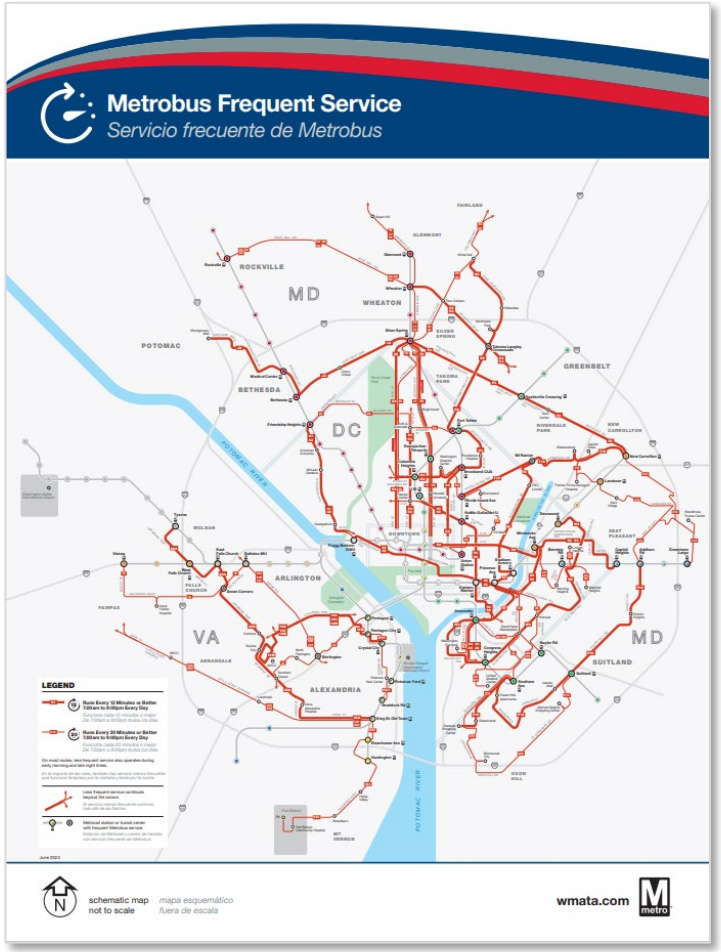




Adapted Bus Service to Grow Ridership & Gain Efficiency

Discontinued some peak-only and low productivity services

- Launched frequent service network*
  - 21 bus lines with 12 minutes or better service
  - 16 bus lines with 20 minutes or better service
- Growing off-peak and weekend ridership
  - Bus ridership **90% of pre-pandemic overall; 105% of pre-pandemic on weekends****
- Discontinued service includes:
  - Higher cost overlay service during peak hours providing additional one-seat rides to areas retaining bus coverage
  - Elimination of lower productivity routes



*7am to 9pm, 7 days a week
**September 2023 ridership compared to September 2019

Optimization Example: Green and Yellow Line

37% of trips use the Yellow or Green Line – most benefit from increased all day service

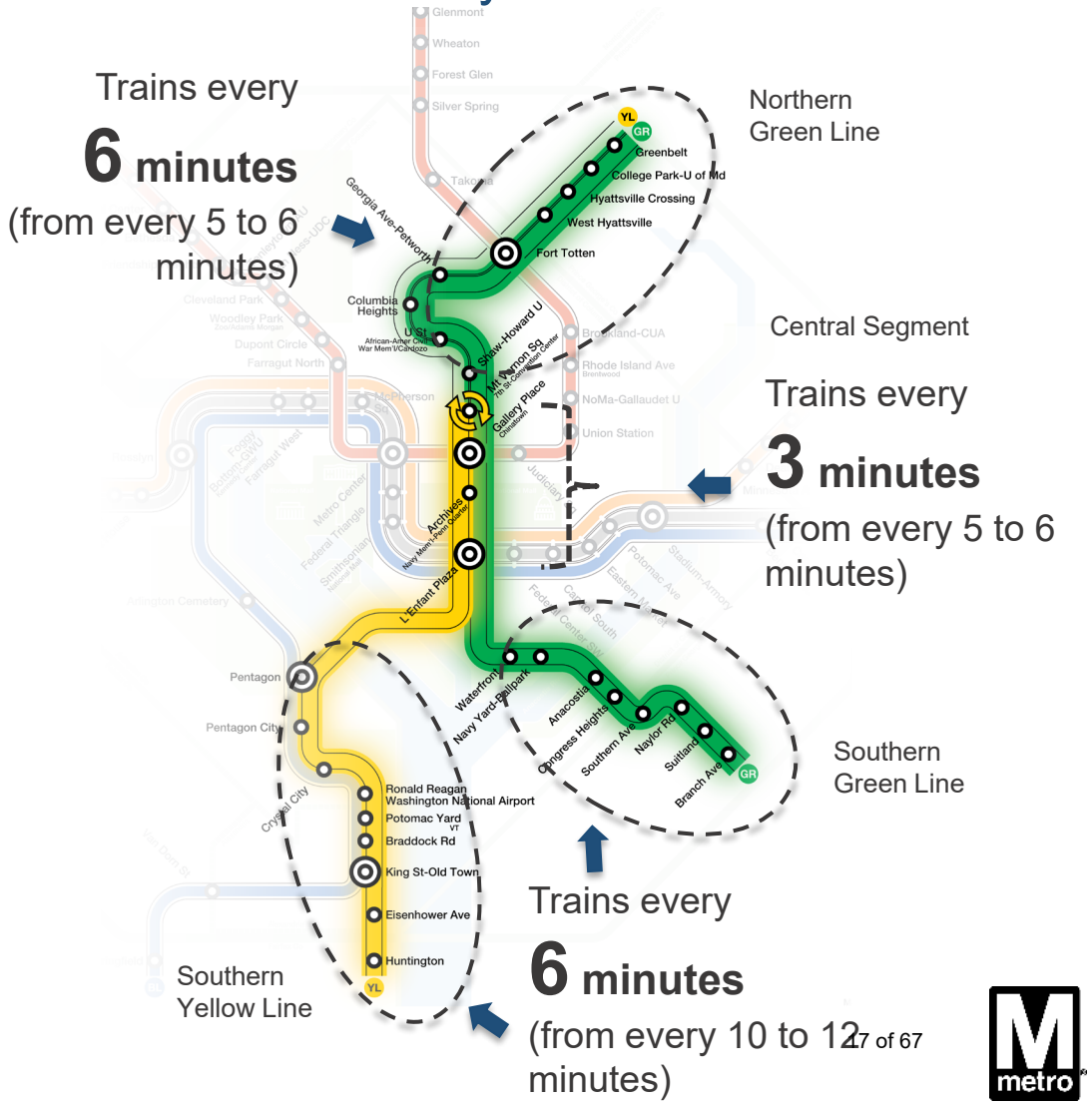
Ridership growing across full system, especially by customers making transfers between lines with shorter wait times

97% of Green/Yellow trips benefit from similar or higher all-day frequency

- 59% are to or from the central part of the system
- 28% are within the same end of a line
- 7% are between northern and southern Green Line, benefitting from better all day Green Line service
- 3% are between southern Yellow Line and southern Green Line, with shorter transfers at L'Enfant Plaza

Just 3% of Green/Yellow trips have a new required transfer at Mt Vernon Sq

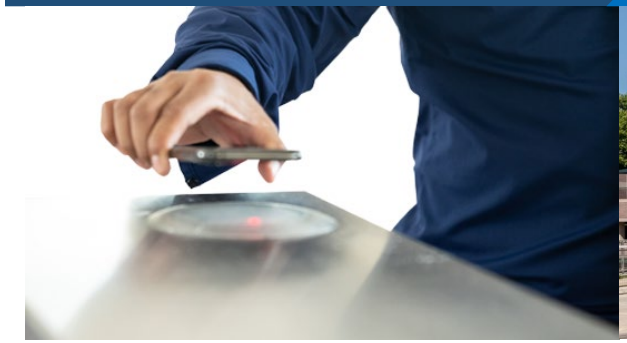
- Less than projected impact (5%)



Analysis of trips between Sep. 4 to Sep. 22, 2023. Partially implemented service plan: GR/YL every 6 min during peak and 8 min off-peak and late night

Modernizing Fare Technology and Policy

FY2021



- Mobile SmarTrip launched

FY2022

- Free rail-bus transfers ($2 discount)
- Weekend $2 flat Metrorail fares
- Lower 7-Day Regional Bus Pass Price ($15 to $12)

FY2023

- Late-night $2 flat Metrorail fares
- Decreased monthly unlimited pass price (price of 32 trips, previously 36)

FY2024

- Eliminated Metrorail peak and off-peak fare differences, standardized mileage charge
- Aligned Metrorail and Metrobus base fare
- Reduced Fare Program for Customers in SNAP
- Capped MetroAccess Fares at $4

Over 5,000 Approved Metro Lift Program Enrollees

Metro Lift enrollment **launched June 20**

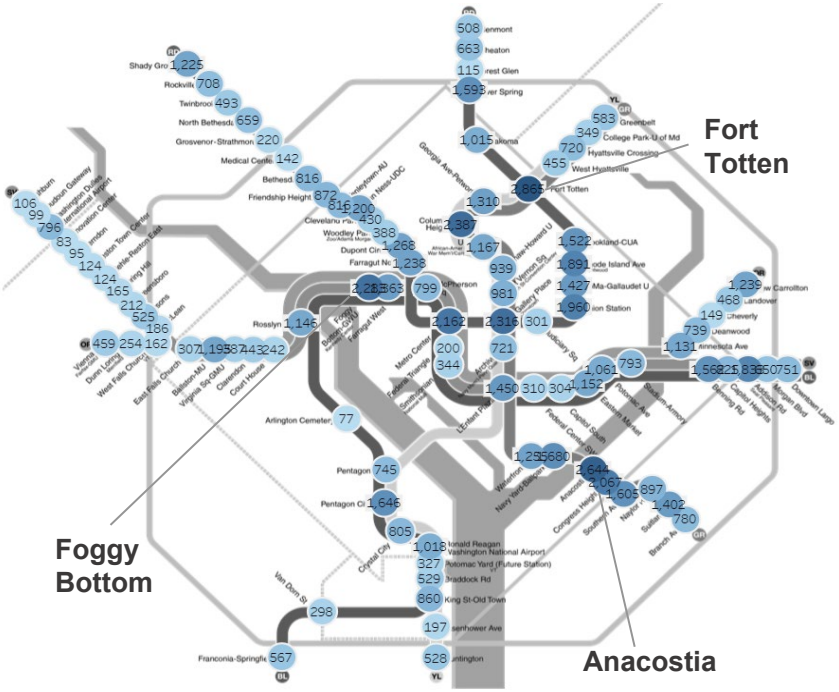
- 70% of customers have enrolled online
- In-person enrollment driven by pop-up events at Social/Human Service offices, grocery stores, Metrorail stations and bus bays

Over **130,000** trips taken to date

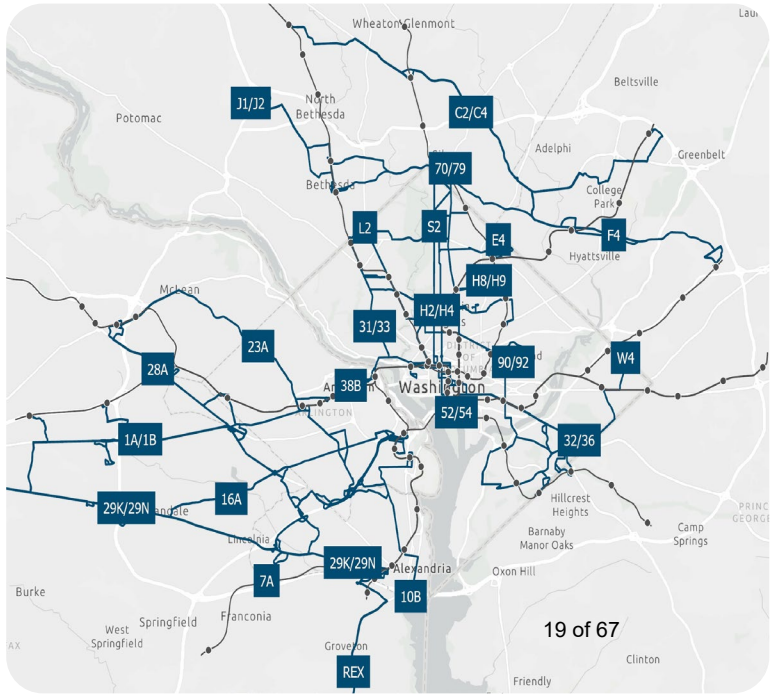
- Used at all 98 rail stations and on 150 bus routes

Pop-up Events

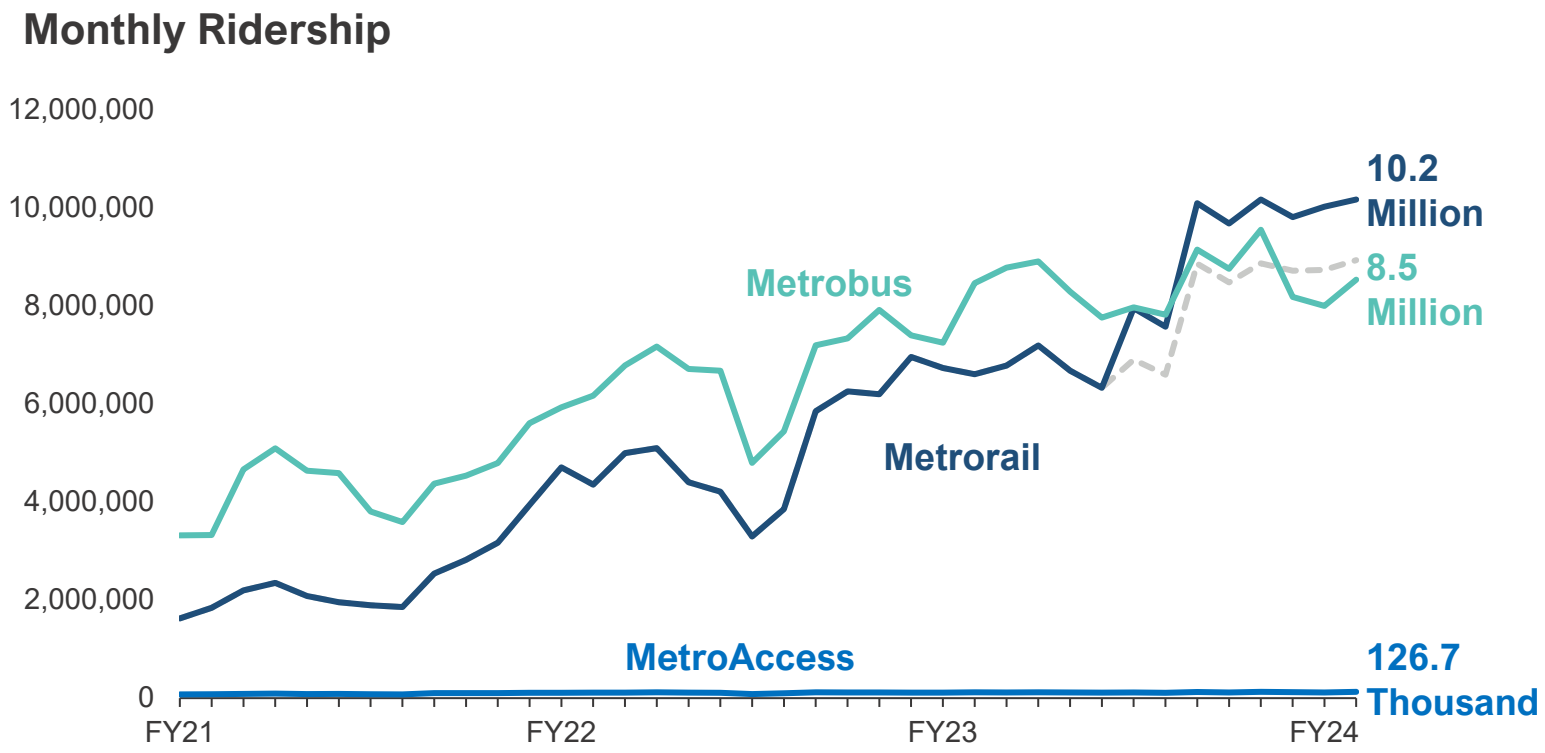
Top Rail Stations



Top 25 Bus Routes



Ridership is Growing



Source: Bus Ridership from Automatic Passenger Counters (APCs). Rail Ridership from taps until January 2023, when Metro began using faregate sensors to count total entries, including non-tap ridership.

Metrorail

- Ridership at **59%** of pre-pandemic levels overall – **54%** on weekdays, **87%** on weekends

Metrobus

- Ridership at **90%** of pre-pandemic levels overall – **87%** on weekdays, **105%** on weekends

MetroAccess

- Ridership recovered to **62%** of pre-pandemic levels
- Serving a higher share of trips through convenient, lower cost Abilities-Ride program

Note: September 2023 total ridership compared with September 2019

Reducing Fare Evasion

Reducing fare evasion addresses a top customer concern, increases system safety and security, and recovers revenue

System Investment

- Retrofitted faregates with higher barriers have reduced measured fare evasion by approximately 70%
- 11 stations have been retrofitted to date, 87 remaining stations to be completed by Summer 2024

Enforcement

- Restarted fare evasion enforcement in November 2022, over 4,200 citations/enforcement actions in 2023
- Supporting jurisdictional efforts to close loopholes, e.g., Metro Safety Amendment Act of 2023

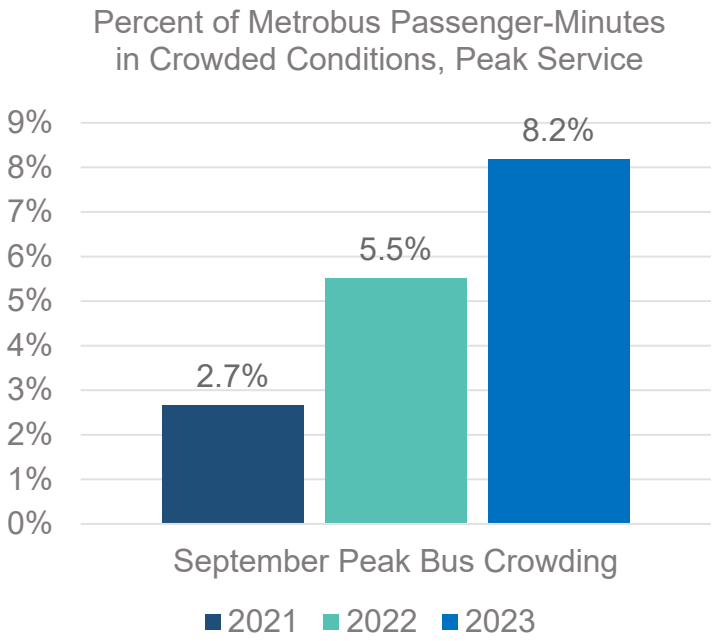
Fare Policy

metro Lift
Income-Qualified Fare Program

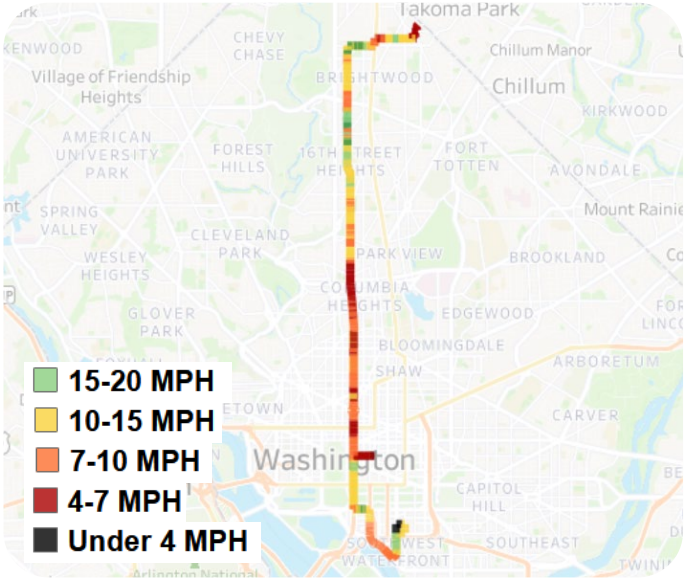
- Reduced fare program for customers enrolled in SNAP launched in June 2023
- Free bus to rail transfers launched in 2021 provide credit for fare paid on transfer

Buses are Getting Crowded

As customers return, crowding is increasing. More customers are experiencing uncomfortable conditions or are unable to board.



Example: 21.6% of the 54's (14th Street Line) peak passenger-minutes were in crowded conditions in Sept. 2023; made worse by congestion



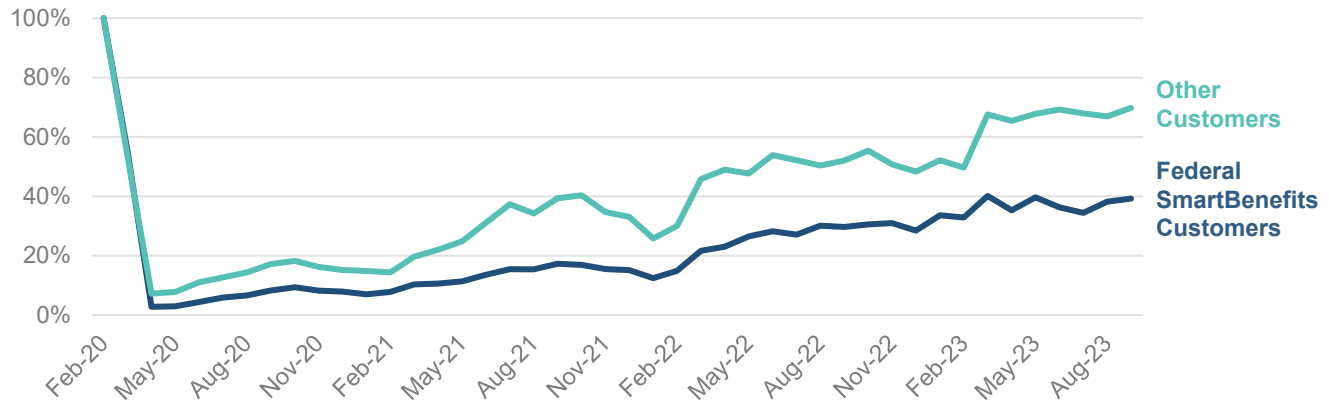
*Includes Bus Speeds on the 52/54 on weekdays in September 2023. Average speed of 6.9 mph in congestion.

Crowding is defined as 100% of seated capacity on most routes and 120% on Metro's busiest routes.

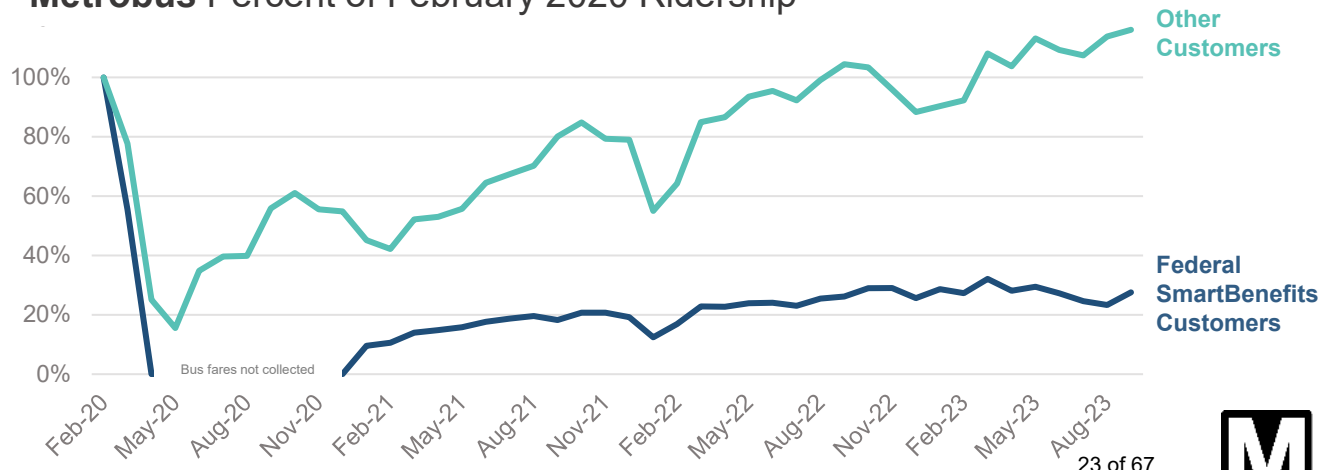
Federal Employees Slower To Return

- Federal employee ridership increasing but slower than other customers
- Estimated federal employee share of total ridership now 6% compared to 12% pre-pandemic
  - Rail: 11% currently compared to 17% pre-pandemic
  - Bus: 1% currently compared to 5% pre-pandemic
- 92,000 fewer federal employee trips on an average weekday

Metrorail Percent of February 2020 Ridership



Metrobus Percent of February 2020 Ridership



FY2025: Key Decisions

Fares and Service

Fares

Service Levels

Concepts for today's discussion:

1. Severe service cuts to close budget gap
2. Targeted service efficiencies, incremental cuts & fare changes

Ways Metro Can Reduce Deficit

FY2023-2024 Financial Management:

Closely manage operating expenses to maximize potential carryover

Internal Efficiencies:

Opportunities to further reduce operating costs and increase productivity in FY2025 and beyond

Preventive Maintenance:

Costs for operating maintenance that can be reimbursed by the capital budget subject to FTA approval

Federal Revenue Recovery:

Potential replacement for Federal SmartBenefits revenue

FY2025 Potential Scenarios

PRELIMINARY

	$ in Millions	Scenario A Historic PM	Scenario B FY2024 PM	Scenario C Max PM
	FY2025 Deficit	**$750**	**$750**	**$750**
FY2024 Forecast	Operational Efficiency FY23 – FY24 (one-time)	- $95	- $95	- $95
	FY2024 Revenue Forecast Adjustment*	+ $45	+ $45	+ $45
FY2025 Initiatives	Cost Efficiency Task Force (recurring)**	- $50	- $50	- $50
	Preventive Maintenance Transfer Options	- $0	- $139	- $285
	Total Preventive Maintenance	[$60]	[$199]	[$345]
	Revised FY2025 Deficit Forecast*	**$650**	**$510**	**$365**
October Discussion	Potential Service Cuts	**TBD**	**TBD**	**TBD**
	Potential Fare Increases	**TBD**	**TBD**	**TBD**
	Potential Inflation Reduction	- $23	- $23	- $23
	Potential Federal SmartBenefits Replacement	- $50	- $50	- $50
	Potential Deficit w/ Federal Replacement	**$577**	**$437**	**$292**

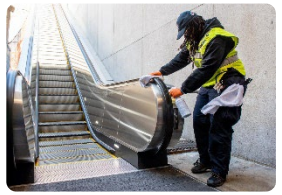
* $45M Revenue Forecast Adjustment - includes $65M average fare and trip adjustment (rev. decrease) offset by $20M fare evasion recovery (rev. increase)
** Amount above annual 3 percent growth cap from FY2024-2025
Note: Totals may not sum due to independent rounding

A severe budget cut reduces Metro's capacity to operate and maintain a quality system

Metro's costs primarily driven by system footprint and quality delivered to customers

Work that does not vary directly based on service levels:

Operations & Maintenance
Bus Garages | Railyards | Track | Structures | Stations | Signals | Escalators/Elevators | Fare Collection | Maintenance Equipment and Vehicles



Police & Security

Administrative Support
Management | IT | Communications Human Resources | Planning | Finance

- **Dirtier Trains & Stations**
- **Reduced Elevator & Escalator Availability**
- **Decreased Reliability**
- **Reduced Police Presence/Patrols**
- **More administrative & compliance risk**
- **Degraded Customer Service**

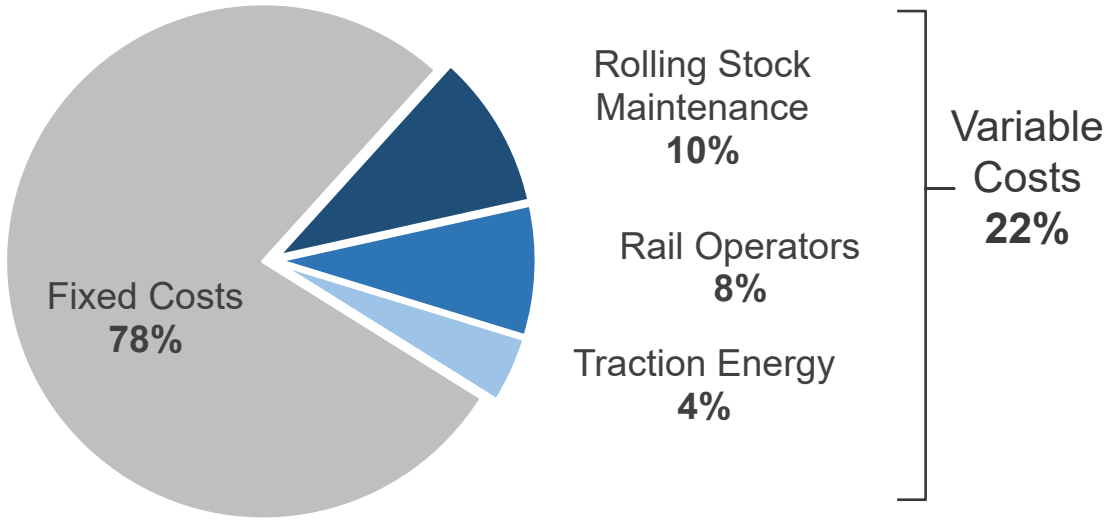
Challenging Math of Service Reductions

Fixed vs. Variable Cost Structure

Closing the budget gap with service cuts alone is not feasible: most Metrorail costs do not vary with service levels

FY2023 Metrorail Costs

Share of $1.3B Rail Operating Budget



- Metrorail costs are primarily operating and maintaining system assets
- As a result, modifying service levels has relatively small budget impact
  - For example, FY2024 budget includes 11% more rail service for 1.4% incremental operating expense increase
  - Conversely, service cuts contribute relatively small direct savings

Severe Service Cut Concepts: Rail and Bus

To dramatically reduce costs and staffing, the size of the system must shrink

How do you shrink the size of the system?

Severe service cut scenarios must use some combination of these types of options, depending on the total size of the cut

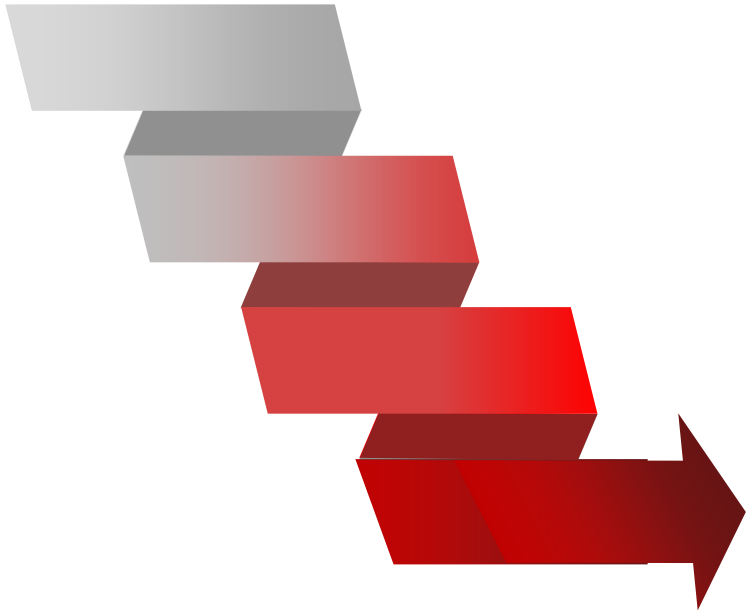
Category	Potential Rail Service Cuts	Potential Bus Service Cuts
Reduce Hours of Operation	Close entire system at 9pm, 7 days a week	Stop all bus service at midnight
	Close entire rail system on Sat. or Sun.	Stop all bus service at 9pm
Reduce Service	Reduce peak service to 20 min on all lines	Cut all bus routes except for the 37 lines on the Frequent Service Network
	Reduce off-peak service to every 30 min	Reduce service on the Frequent Service Network while maintaining some service on 30-40 more lines
	Service pattern changes & turnbacks	Cut all remaining peak-only commuter routes
		Truncate all routes with a possible rail connection
Close Facilities	Close 20 to 25 stations full time or weekends	Close 2 of Metro's 9 bus garages
	Close railyards	

Severe Cuts Trigger the Transit Death Spiral

More congestion, more pollution, and reduced economic competitiveness and quality-of-life

Large service cuts hurt customers and the region…

- Cutting service makes system less useful, reducing ridership
- Lower ridership will decrease revenue
- **Budget gap remains for future years**



…and will limit Metro's ability to deliver service in the future

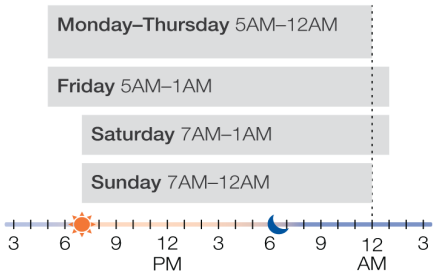
- Layoffs reduce Metro's capability to deliver service
- Lost capacity will limit Metro's service for years
- **Even with restored funding, Metro's service will be limited for years to come**

Service Optimization Concepts for FY2025

Agile Metrorail Service

Maximize the value of the network and service delivered by most efficiently using available resources:

- Analyze duration of peak periods to adapt to how and when customers travel
- Analyze 4-, 6-, 8-car train service
- Analyze hours of operation and multi-station entrance needs



Better Bus Network Redesign

as called for in the 2017 LaHood Study

The Year One Network is transformative bus service

- Reallocates resources and meets regional goals for bus service by adapting the network to how customers travel now
- Constrained to FY2024 service levels and is the first step to implement the visionary network
- Is equitable

Board Policy Guides Rail Service & Investment Planning

Metrorail Service Standards

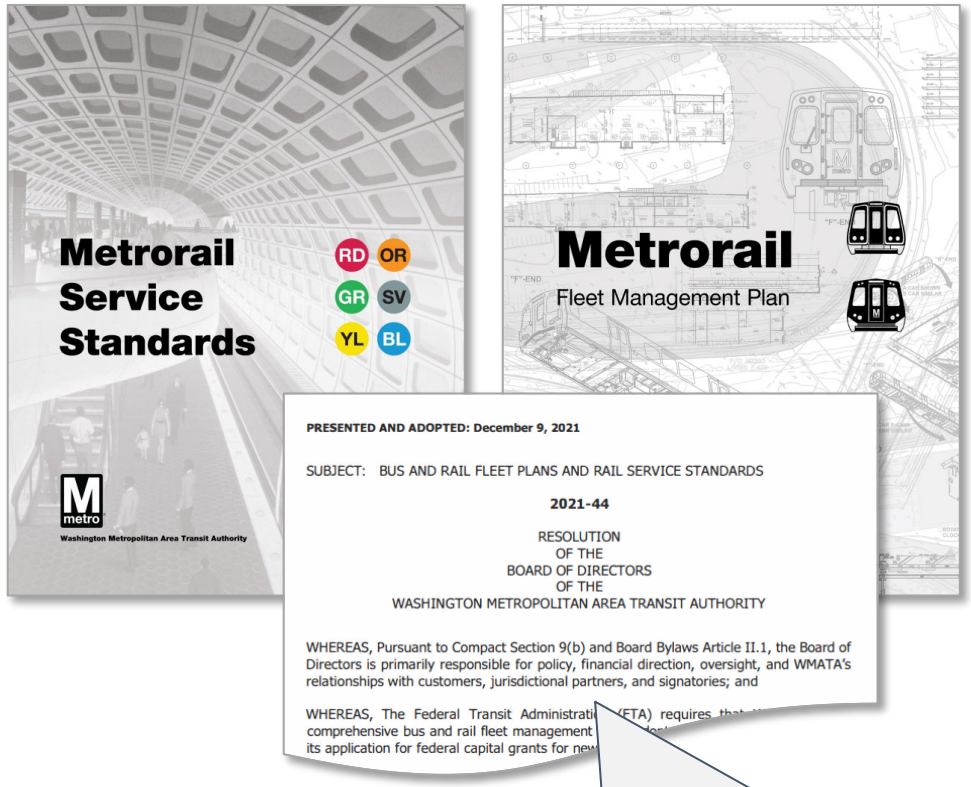
- Set minimum frequencies for rail service & standards for passenger loading

Eight-Car Trains

- Provide higher capacity and a predictable customer experience: more seats for customers, enable use of entire station platform

Metrorail System Design

- Station design: 600’ platforms
- Railcar design: 7000-series configuration
- Infrastructure constraints



“Train Length – Metrorail will strive to operate 100% eight-car trains”
- Board Resolution 2021-44

Considerations for Service Delivery

Good, frequent service is key to generating ridership

- Frequent service in the core
- Efficient transfers
- Reliable, on-time departures at end of lines

Examine opportunities to **operate efficiently while maintaining good service** and limiting customer impacts

Lower Customer Impacts

Higher Customer Impacts

Shorter trains

- Maintains service frequency
- Saves on traction power
- Fewer railcars need to be maintained for daily service

Adjust hours of service

- Reduce operating hours/costs
- Opening and closing times and peak service periods

Service reductions

- Longer headways
- Turnbacks
- Closed stations/entrances

Potential Targeted Service Cut Concepts

Concept	Category		Potential Service Adjustments
A	**Peak Span**	A1	Limit peak service to 7-9am and 4-6pm
		A2	Limit peak service to 6-9am and 3-6pm
B	**Entrances**	B1	Reduce staffing at some station entrances
		B2	10 entrances closed or unstaffed
C	**Headways**	C1	Decrease OR Line peak service to every 10 min
		C2	Decrease OR Line off-peak service to every 12 min
		C3	Decrease GR and YL Line weekend service to every 8 min
D	**Train Length**	D1	100% 6-car trains on BL, YL, and SV
E	**Service Patterns**	E1	RD line turnbacks (Grosvenor and Silver Spring) – every other train
		E2	SV line turnbacks (Stadium-Armory) – all trains
		E3	BL line turnbacks (Stadium-Armory) – all trains
		E4	BL line turnbacks (Arlington Cemetery) – all trains
		E5	SV line turnbacks (Wiehle Ave) – every other train
F	**Hours of Operation**	F1	Close 1 hour earlier (12am) on Fri and Sat nights
G	**Bus Services**	G1	Eliminate lowest productivity lines

Adapt Peaks to When the Most Customers are Riding

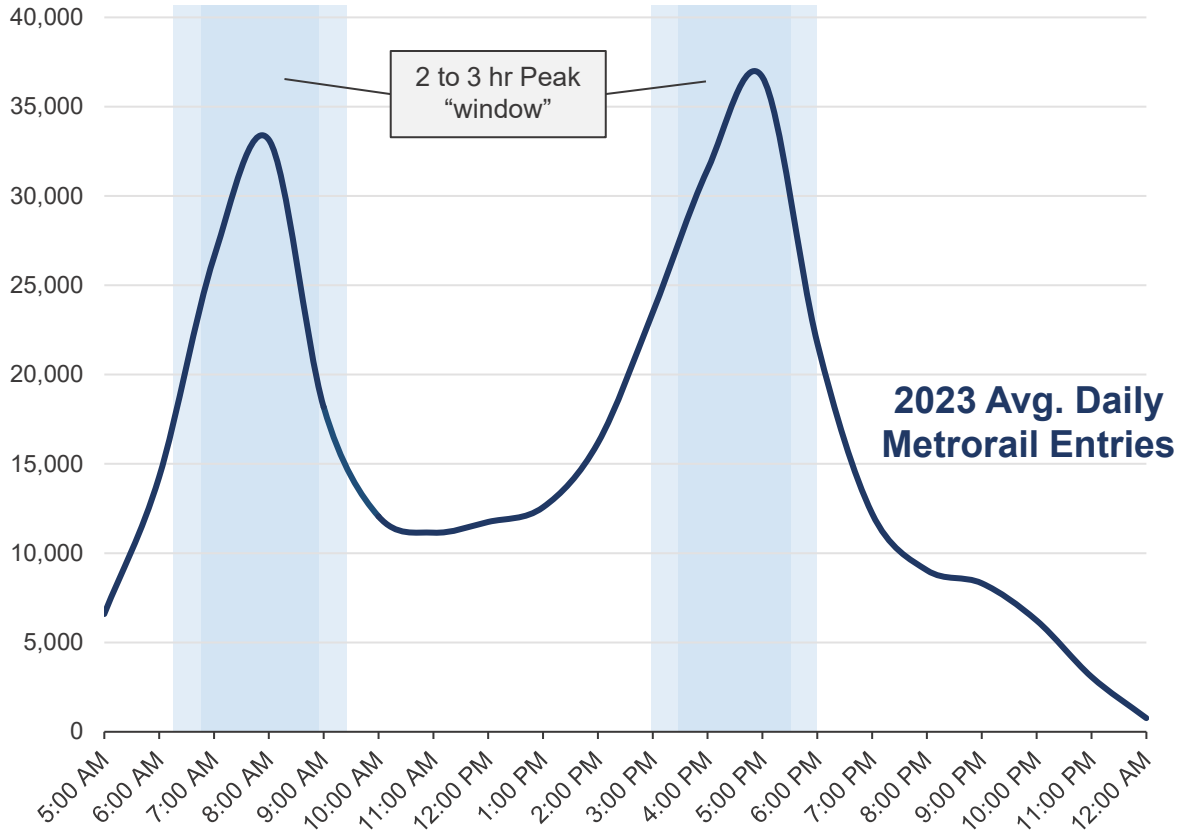
A

Concepts:

- Adjust the duration of peak service to match customer demand
  - Pre-pandemic: 4 to 5 hours
  - Concept: 2 to 3 hours

Key Considerations:

- Flexibility to adapt service to match ridership trends
  - No more peak/off-peak fares
  - Lower passenger loads
  - Better service all day until 9:30pm



Estimated Net Savings ($M)	(2 to 3.5)

Reduce Staffing at Some Station Entrances

B

Concept:

- Reduce staffing at some station mezzanines and entrances where there is now redundancy during low demand periods, such as nights and weekends

Key Considerations:

- Accessibility & elevator locations
- Destination access, bus transfers
- Opportunity to utilize new video surveillance capabilities

Example of station entrances that could be unstaffed during low-use time periods

Station	Line	Entrance	After 9 pm	Weekend
Farragut North	RD	SW corner of Conn. Ave and L St. NW	X	X
Farragut West	BL OR SV	17th and Eye St. NW	X	X
Judiciary Sq.	RD	4th and D St. NW	X	X
L'Enfant Plaza	BL OR SV GR YL	7th and D St. SW	X	X
Smithsonian	BL OR SV	National Mall	X	

Estimated Net Savings ($M)	B1 (0.5) Limited Night/Weekend	B2 (5) 10 entrances fully closed/no staffing

Change Service Headways

C

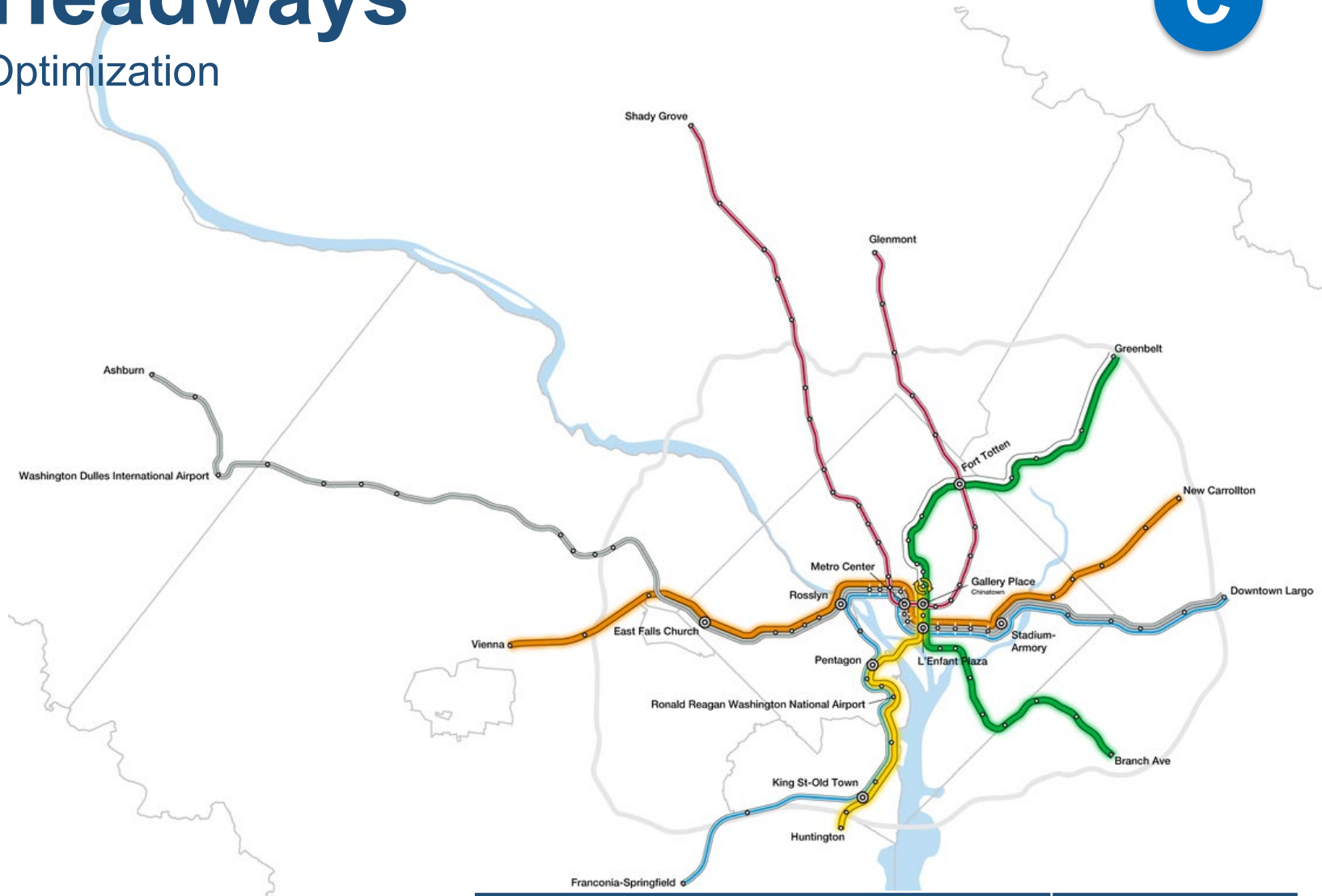
Delay or roll back FY2024 Service Optimization

Concepts:

- Delay FY2024 Service Optimization elements yet to be implemented:
  - Orange Line peak service
  - Green and Yellow line weekend service (weekday all day 6 minute service starts in December service pick)
- Roll back FY2024 Service changes already implemented

Key Considerations:

- Growing ridership; potential crowding
- Equity impacts



Estimated Net Savings ($M)	(2 to 8)

4-, 6-, and 8-car Trains

D

Use shorter trains to reduce railcar miles & traction power costs

Concept:

- Use shorter trains to reduce railcar miles and traction power costs without reducing service

Two Approaches for Operating Shorter Trains:

'Cut' trains at mid-day or late night:

Metro previously reduced train lengths mid-day and late night – last in FY2011

- Adds costs: requires more operators and deadhead time
- Limited savings: Can only reduce car miles during limited hours of the day

Run shorter trains all day long:

Metro currently operates a mix of 6-car and 8-car trains all day

- Operate one or more lines with all 6-car trains; Simple, consistent operations, optimize yards for service
- Decrease peak vehicle and fleet size requirement, reducing maintenance demands and costs

Estimated Net Savings ($M)	(up to 8)

Service Patterns & Turnbacks

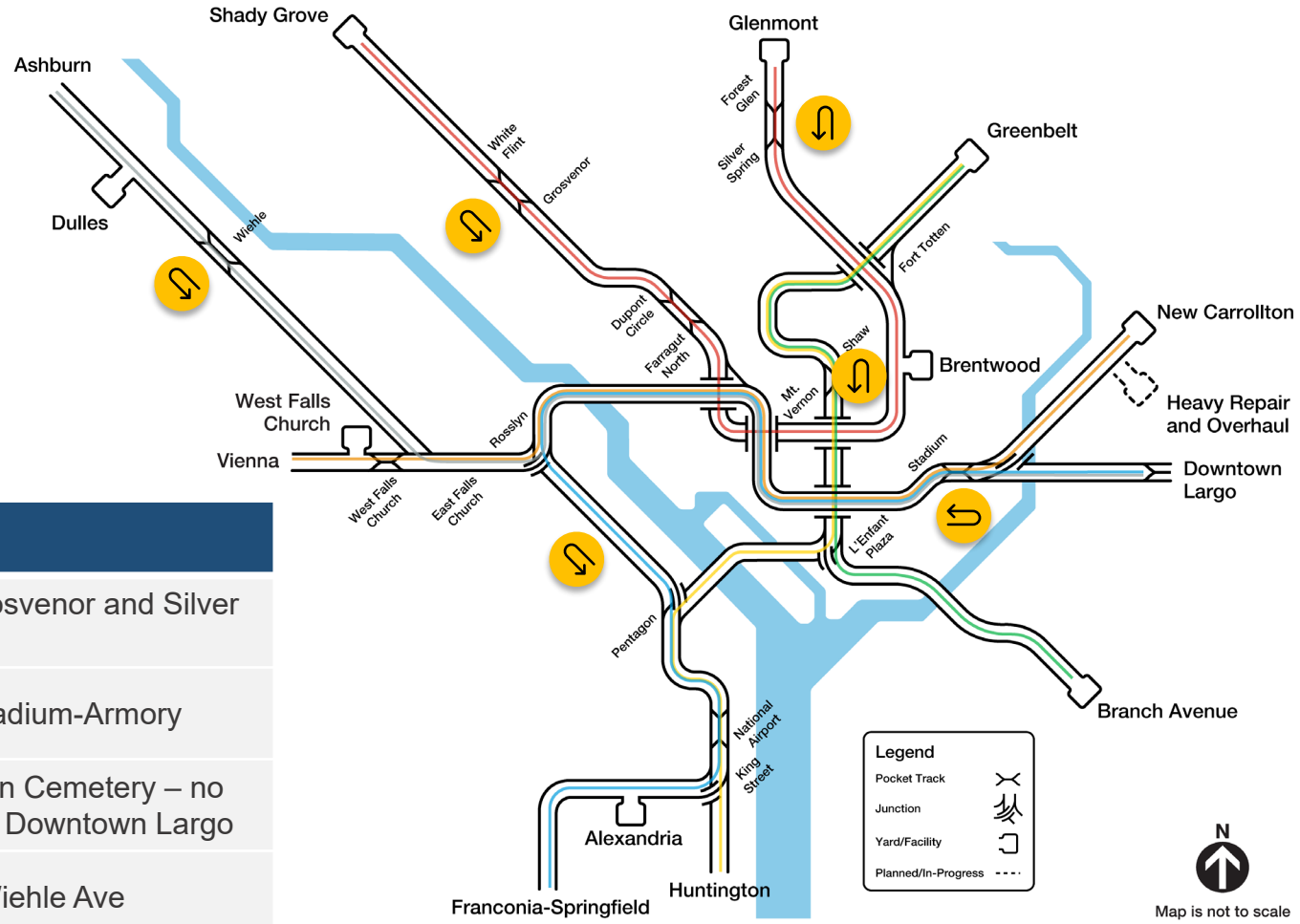
E

Use Metrorail's infrastructure to reduce railcar miles

Concept: Turn back trains to reduce railcar miles while preserving service in the core

Key Considerations: limited locations to turn trains; risks to service delivery; service frequency reductions beyond the turnbacks

Concept	Line	Potential Turnbacks
E1	RD	Half of all Red Line trains turn at Grosvenor and Silver Spring
E2 & E3	BL or SV	Blue **OR** Silver Line trains turn at Stadium-Armory
E4	BL	Blue Line trains terminate at Arlington Cemetery – no service between Arlington Cem. and Downtown Largo
E5	SV	Half of all Silver Line trains turn at Wiehle Ave



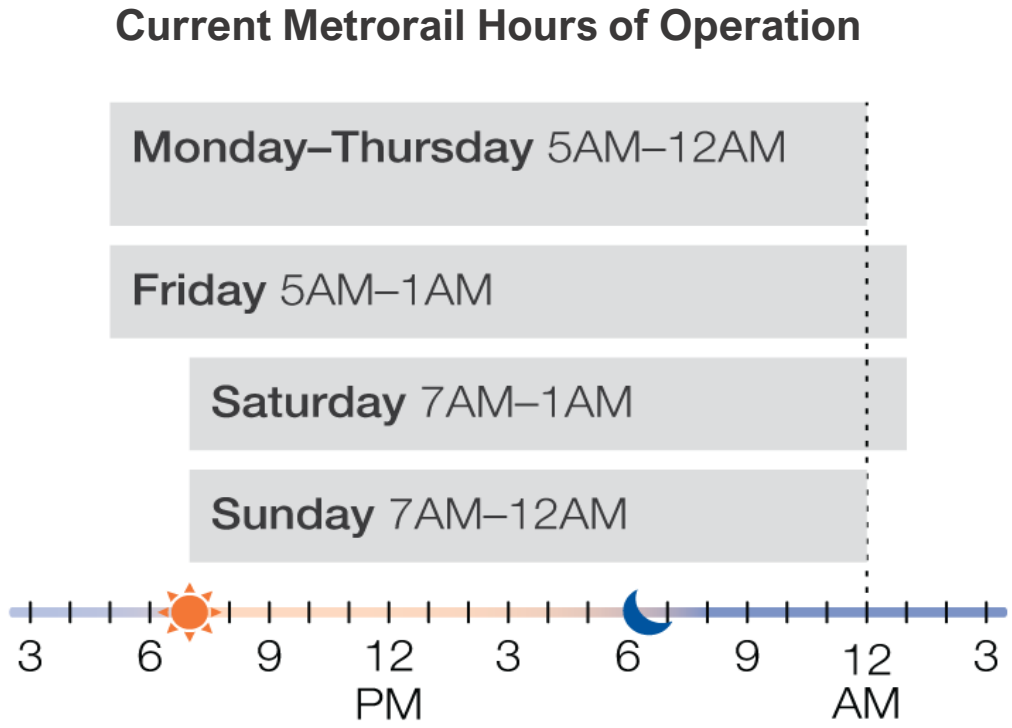
Estimated Net Savings ($M)	(2 to 7)

Close Earlier on Friday and Saturday Nights

F

Concept: Adjust Metro's hours of operation

Key Considerations: Equity impacts, operating cost savings, service for special events



Concept	Change in Weekly Hours of Service
Close Earlier: 12am 7 days a week	-2

Estimated Net Savings ($M)	(3)

Potential Bus Optimization & Reductions

G

Service Adjustment Concepts:

- Better Bus Network Redesign Year 1 Network
  - Assumes same level of resources as FY2024
  - Eliminates remaining low-performing routes (e.g. 3Y)
- Cut or Eliminate lowest performing lines
- Shorten routes where rail connection possible, requiring more transfers
  - Shorten routes to avoid costly high-congestion areas
- Consolidate limited stop and regular local services
- Examine routes with complementary services provided by other bus operators

14 Lowest Performing Lines

17B,M	1C	26A
17G,K	18G,J	W14
2B	3F,Y	18P
22A,F / 28F	Z7	8W
11Y	P18	

Productivity analysis based on a combination of operating cost and utilization

Estimated Net Savings ($M)	(10)

Potential Targeted Service Cut Concepts

Concept	Category		Potential Targeted Service Reductions	Ridership Change (M)	Trips Positively Impacted	Trips Negatively Impacted	Estimated Net Savings ($M)	Preliminary Equity Scan: Potential Finding
A	**Peak Span**	A1	Limit peak service to 7-9am and 4-6pm	(0.8)	0	20.1	(3.5)	No
		A2	Limit peak service to 6-9am and 3-6pm	(0.3)	0	8.6	(2)	No
B	**Entrances**	B1	Reduce staffing at some station entrances	-	0	-	(0.5)	n/a
		B2	10 entrances closed or unstaffed	-	0	-	(5)	n/a
C	**Headways**	C1	Decrease OR Line peak service to every 10 min	-	-	4.6	(3)	No
		C2	Decrease OR Line off-peak service to every 12 min	-	-	7.8	(2)	No
		C3	Decrease GR and YL Line weekend service to every 8 min	(0.6)	0	9.9	(3)	**Yes**
D	**Train Length**	D1	100% 6-car trains on BL, YL, and SV	n/a	n/a	n/a	(8)	n/a
E	**Service Patterns**	E1	RD line turnbacks (Grosvenor and Silver Spring)	(1.3)	0	10.9	(2)	No
		E2	SV line turnbacks (Stadium-Armory)	(0.5)	0	4.1	(4)	**Yes**
		E3	BL line turnbacks (Stadium-Armory)	(0.5)	0	3.9	(4)	**Yes**
		E4	BL line turnbacks (Arlington Cemetery)	(3.0)	0	34.6	(7)	No
		E5	SV line turnbacks (Wiehle-Reston East)	(1.2)	0	28.0	(2)	No
F	**Hours of Operation**	F1	Close 1 hr earlier (12am) on Fri and Sat nights	(0.2)	0	0.2	(3)	No
G	**Bus Services**	G1	Eliminate lowest productivity lines	(1.4)	0	1.4	(10)	No
			Potential Savings Range:				(25) to (30)	

BL/SV turnbacks cannot be combined

PRELIMINARY ESTIMATES

Potential Targeted Service Improvement Concepts

Concept	Category		Potential Service Improvements	Ridership Change (M)	Trips Positively Impacted (M)	Trips Negatively Impacted (M)	Estimated Net Cost ($M)	Preliminary Equity Scan: Potential Finding
F	**Hours of Operation**	F2	Close 1 hr later (2am) on Fri and Sat nights, or	0.2	0.2	0	3	No
		F3	Open 1 hr earlier (6am) on Sat and Sun mornings	0.2	0.2	0	3	No
G	**Bus Services**	G2	Capacity increases on crowded routes	0.5	8.4	0	10	No
		G3	Airport overnight service	0.1 to 0.2	0.1 to 0.2	0	1.5 to 3	**Yes***
			Potential Cost Range:				14.5 to 16	
	Better Bus Network Redesign		Year 1 Network				Resource Neutral	
	Automatic Train Operation		Improved train run times and reliability from automatic door and trains operations				(5 to 10)	

**Implementation will likely include other network changes, which could offset impacts*

PRELIMINARY ESTIMATES

MetroAccess

- 36,500 customers enrolled in MetroAccess, 1.39 million MetroAccess trips taken in FY2023
  - Approximately 20% of customers who use MetroAccess account for around 70% of the trips; 53% of enrolled customers took a trip in FY2023
  - Metro also coordinated 566,000 Abilities-Ride trips (free to customers)
- 9.5% of trips[1] are trips beyond the legally required service area[2]
  - Taken by approximately 5,100 customers

Current MetroAccess Policy	Cost of Providing
Trips Outside the ADA Service Area	$14.2M
Free Abilities-Ride	$3.6M
$4 Fare Cap[3]	$2.0M
Total	**$19.8M**

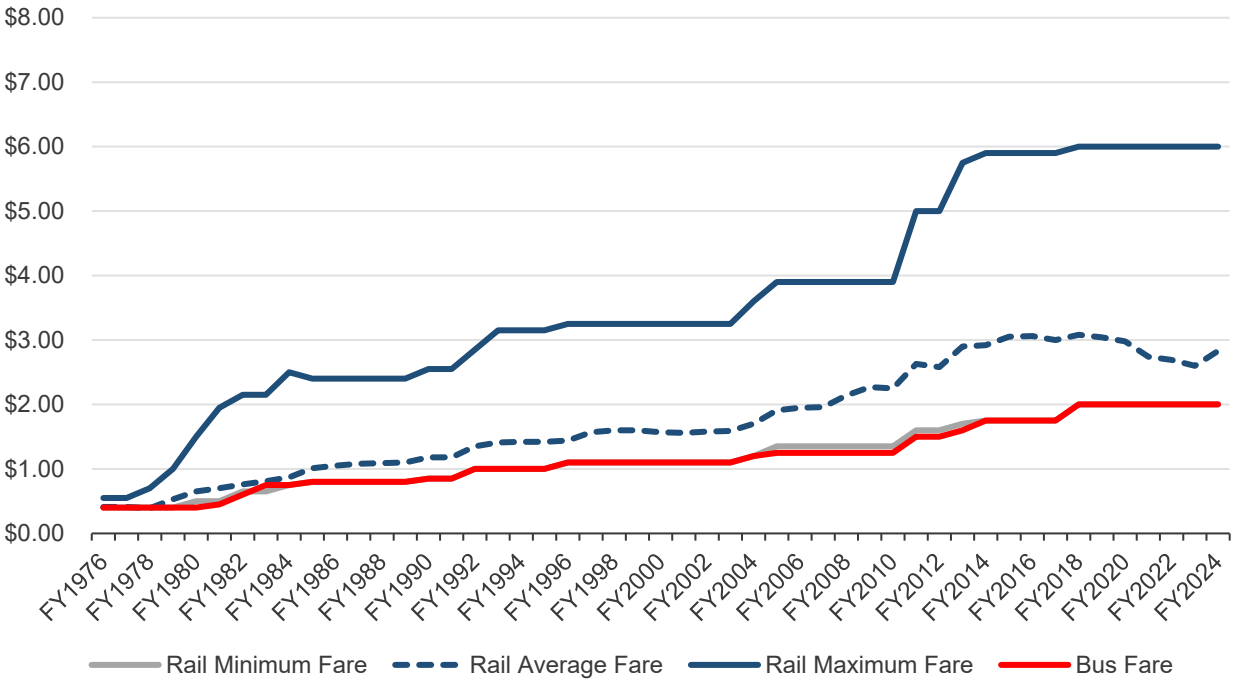
FY2023 average cost per trip of $87[4]

1. 70 percent of which are taken by customers who traveled outside the defined ADA service area and hours between July 1, 2009 and June 30, 2010 (Board Resolution 2010-31)
2. Within ¾ of a mile of fixed-route bus service and rail stations throughout the same hours as fixed route service
3. Federal regulations permit paratransit fares up to twice the fare for the comparable fixed-route trip
4. Includes Abilities-Ride trips and expenses

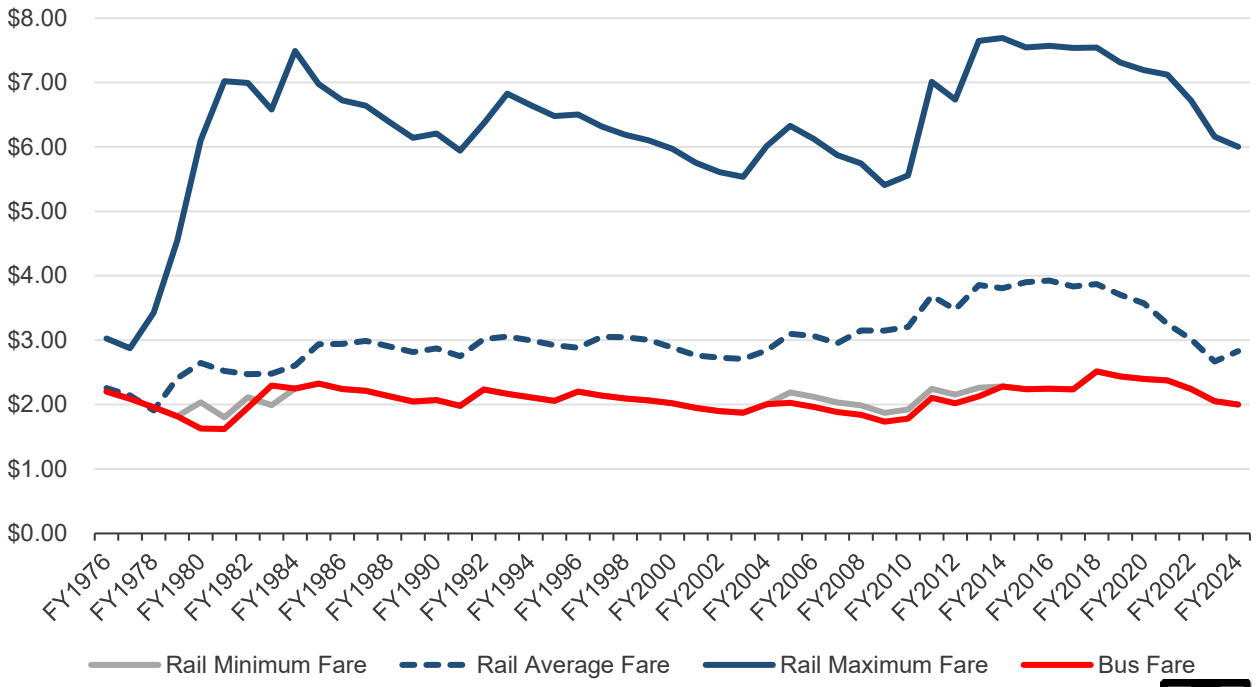
Metro Fares and Inflation

- Inflation adjusted, bus and rail minimum fares have historically remained around $2
- The nominal average rail fare increased slightly with max rail fare increases and decreased after $2 weekend fares and bus-rail transfers implemented

Metro Fares (nominal dollars)



Metro Fares (shown in July 2023 dollar amounts)



Source: Bureau of Labor Statistics Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W)

Potential Fare Increase Scenarios

- Fare increases expected to result in a net revenue increase but reduce ridership
  - Diminishing revenue returns for fare increases as more customers get priced out of the system
  - Ridership impacts from fare changes build over time

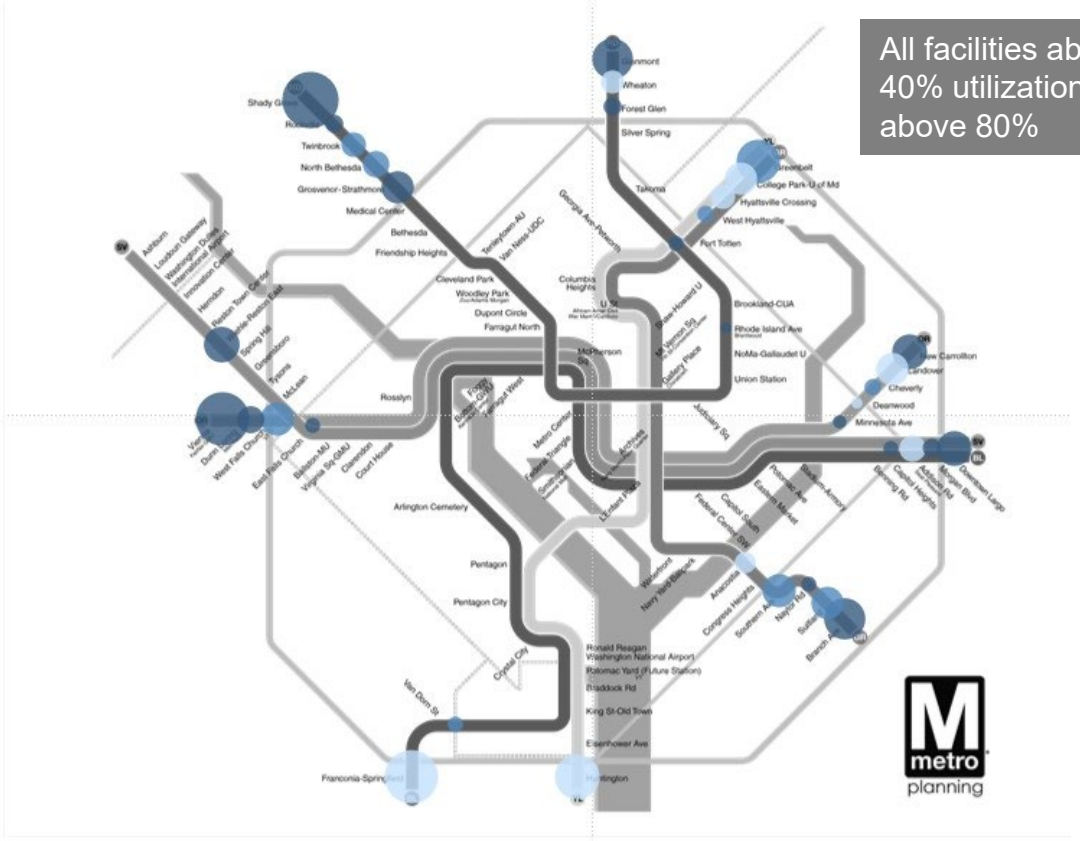
FY2025 Fare Increase Concept	Bus/Rail Base Fare (incl. night/weekend)	Rail Max Fare	Ridership Impact (Million)	Revenue Impact (Million)	Change from estimated FY2025 Ridership	Change from estimated FY2025 Fare Revenue
FY2024 Structure Change	**$2.00**	**$6.00**				
5% Increase	$2.10	$6.30	-4.7	$12.9	-2%	3%
10% Increase	$2.20	$6.60	-9.4	$24.3	-4%	6%
12.5% Increase	$2.25	$6.75	-11.6	$28.5	-5%	7%
25% Increase	$2.50	$7.50	-23.4	$54.1	-10%	13%
37.5% Increase	$2.75	$8.25	-35.0	$72.6	-16%	17%
50% Increase	$3.00	$9.00	-46.8	$86.9	-21%	20%

Notes: All concepts apply a proportional increase to all fares at all periods, including rail late night and weekend flat fare, through the base/max fares and the mileage charge. The monthly pass multiplier remains 32 and price of other passes scale by increase percentage. MetroAccess fares remain twice the equivalent fixed route fare and the current $4 fare cap would scale proportionally with any increase. Preliminary Title VI scans do not indicate a finding of potential disparate impact or disproportionate burden.

Parking Utilization

Average utilization down from 74% pre-pandemic to 22%, daily transactions down 60%

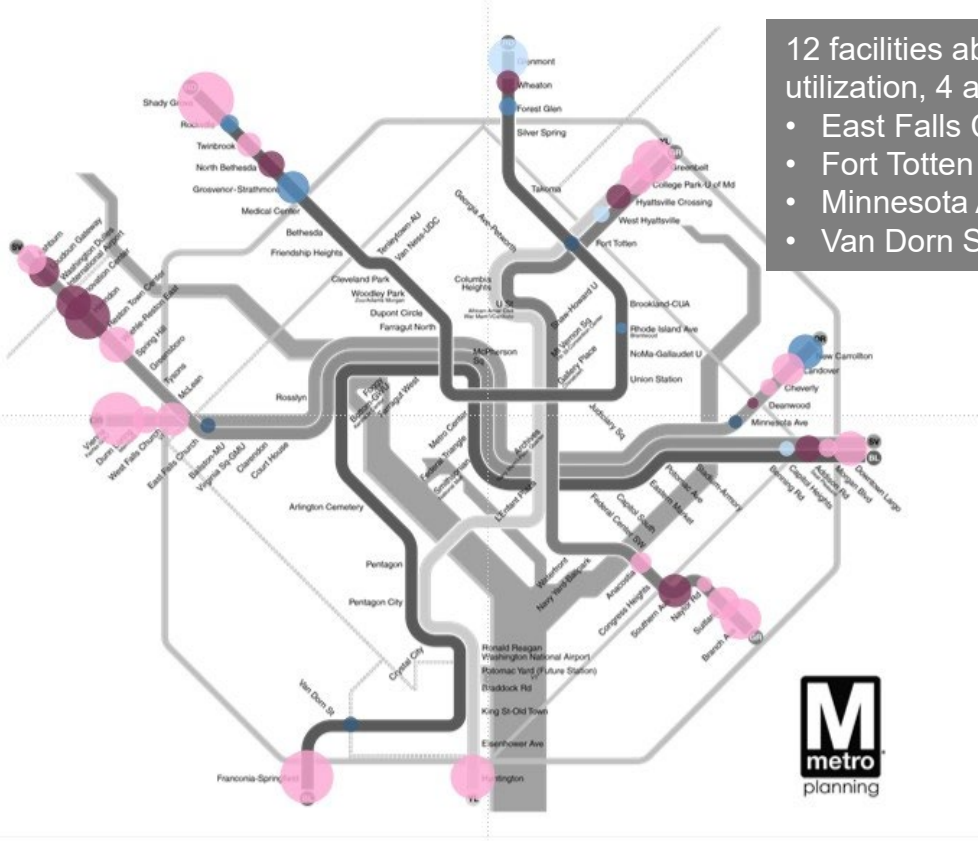
Average Wednesday, September 2019



All facilities above 40% utilization, 17 above 80%

Summary	Total Transactions	Avg Daily Transactions	Showing Data Through: 9/25/2019
	193,020	48,255	

Average Wednesday, September 2023



12 facilities above 40% utilization, 4 above 80%:

- East Falls Church
- Fort Totten
- Minnesota Ave
- Van Dorn St

Summary	Total Transactions	Avg Daily Transactions	Showing Data Through: 9/27/2023
	87,748	21,937	

Avg Capacity Utilization

- Less than 20%
- 20% to 40%
- 40% to 60%
- 60% to 80%
- Greater than 80%

Note: The size of the circles represent the maximum parking capacity of the lots at each station.

Parking Concepts

P1 Increase rates in lockstep with fares

- Applies fare increase percentage to parking rates resulting in equitable impact on all customers
- Could further deter park-and-ride customers from using Metro

FY2025 Parking Rate Adjustment	Rail Ridership Impact (Million)	Rail+Park Revenue Impact (Million)	Change from estimated FY2025 Ridership	Change from estimated FY2025 Revenue
5% Increase	-0.0	$0.7	-0.0%	0.3%
10% Increase	-0.1	$1.2	-0.1%	0.5%
12.5% Increase	-0.1	$1.5	-0.1%	0.7%
25% Increase	-0.1	$3.1	-0.1%	1.3%
37.5% Increase	-0.2	$4.5	-0.2%	2.0%
50% Increase	-0.3	$5.9	-0.2%	2.6%

P2 Adjust rates based on current utilization

- Increase rates at highly utilized stations (over 80%), maintain rates at medium utilized stations (40 to 80%), and decrease rates at low utilized stations (under 40%)
- Targeted approach to increase access to transit while disincentivizing crowding at facilities

Note: Rider rates are comprised of Board-approved base fares and jurisdictional surcharges and range from $0 to $5.20. Non-rider rates range from $0 to $15, to be standardized at $10 in FY2025.

FY2025 Potential Scenarios

$ in Millions	Operating Budget: Illustrative Concepts				
	Scenario 1 Standard PM No service cuts Most add'l Subsidy	**Scenario 2** Max PM No service cuts Some add'l Subsidy	**Scenario 3** Max PM Targeted service cuts Least add'l Subsidy	**Scenario 4** Max PM[C] Major (~33%) svc. cuts No add'l subsidy	**Scenario 5** Standard PM Severe (~60%) svc. cuts No add'l subsidy
FY2025 Deficit	**$750**	**$750**	**$750**	**$750**	**$750**
One-Time Savings + Cost Efficiencies	- $145	- $145	- $145	- $145	- $145
FY24 Revenue Adjustment[A]	+ $45	+ $45	+ $45	+ $45	+ $45
Preventive Maintenance Transfer Options[B]	- $0	- $285	- $285	- $220	- $0
Fare Increase[D]	- $0	- $0	- $25	- $25	- $25
Service Cuts[D]	- $0	- $0	- $25	- $405	- $625
Additional Subsidy to Balance Budget[E]	**$650**	**$365**	**$315**	**$0**	**$0**
Potential Inflation Reduction	- $23	- $23	- $23	- $23	- $23
Potential Federal SmartBenefits Replacement	- $50	- $50	- $50	- $50	- $50
	$577	$292	$242	Service cut relief	
FTE Impact[D]	-	-	-175	-2,900	-4,700

A. $45M Revenue Forecast Adjustment - includes $65M average fare and trip adjustment (rev. decrease) offset by $20M fare evasion recovery (rev. increase)
B. Additional PM transfer above $60M annual base amount
C. Maximum PM transfer reduced due to cuts to eligible maintenance activity
D. 10 to 12.5% increase; does not include parking.
E. Amount above annual 3 percent growth cap from FY2024-2025

Note: Totals may not sum due to independent rounding

Customer Impacts of FY2025 Scenarios

Operational Reduction: Illustrative Service Concepts

	Scenario 1 Standard PM No service cuts Most add'l Subsidy	Scenario 2 Max PM No service cuts Some add'l Subsidy	Scenario 3 Max PM Targeted service cuts Least add'l Subsidy	Scenario 4 Max PM[C] Major (~33%) service cuts No add'l subsidy	Scenario 5 Standard PM Severe (~60%) service cuts No add'l subsidy
Metrorail	**124 trains** **5** to **12** minutes **Midnight** or **1 am closing**	**124 trains** **5** to **12** minutes **Midnight** or **1 am closing**	**112 to 120 trains** Targeted service cuts Shorter peak periods Turnbacks Six-car trains	**75 to 90 trains** **10-15 min peak** **20-30 min off-peak** **Early closing** **~33% cut**	**50 to 60 trains** **20-30** mins all day **9:30 PM closing** **~60% cut**
Metrobus	134 bus lines 21 lines: **12** min or better all day Systemwide: **varies**	134 bus lines 21 lines: **12** min or better all day Systemwide: **varies**	**Cut 10 bus lines**	**Cut 50 bus lines** Cut frequency on busy lines **~33% cut**	**Cut 80 to 95 bus lines** **20 to 30** minutes **9:30 PM closing** **~60% cut**
MetroAccess	Full service	Full service	Full service	No service beyond regulatory requirements	No service beyond regulatory requirements
Fares	No fare increase	No fare increase	**Higher fares**	**Higher fares**	**Higher fares**

Capital Outlook

FY2023 Accomplishments – Major Projects

Potomac Yard Station

Silver Line Expansion

Station Platform Rehabilitation

Two Bus Garage Groundbreakings

Bladensburg and Northern Bus Garages

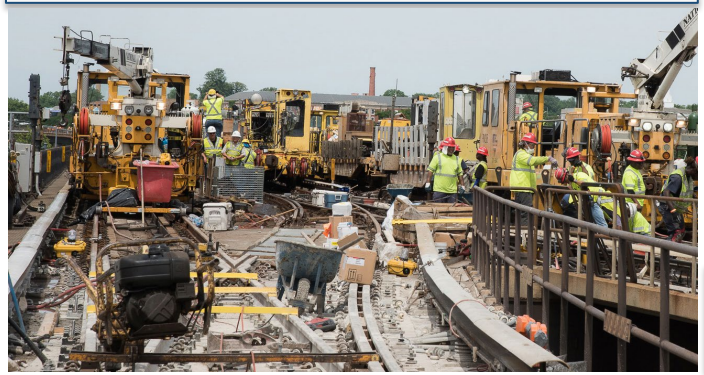
FY2023 Accomplishments – State of Good Repair

Signaling Switch Machine Replacement

Yellow Line Tunnel Rehabilitation

Rail Replacement – Orange Line

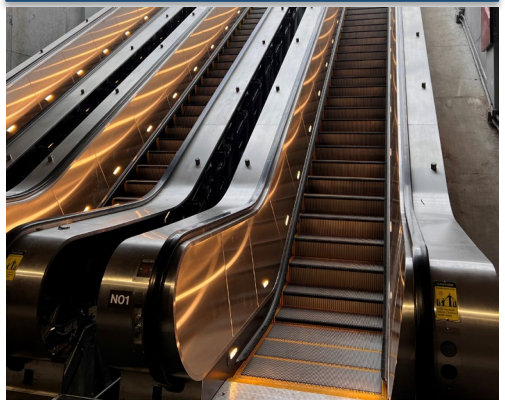
Track Rehabilitation



Traction Power Substation Replacement

Tunnel Grouting

Escalator Replacement
Replaced 33 units in FY23



Bus Rehabilitation

FY2024 Ongoing Capital Initiatives

Advancing Underway Projects and Programs

State of Good Repair Investments

- Track Rehabilitation
- Railcar Replacement, Maintenance & Rehabilitation
- Bus Vehicle Replacement, Maintenance & Rehabilitation
- Northern Bus Garage
- Bladensburg Bus Garage
- Radio Replacement
- Fare Systems
- Power Infrastructure Upgrades
- Signaling System Replacement

Other Major Projects

- Zero Emission Bus
- Upgrade Remote Power Control Capabilities
- New Customer Digital Signage and Infrastructure

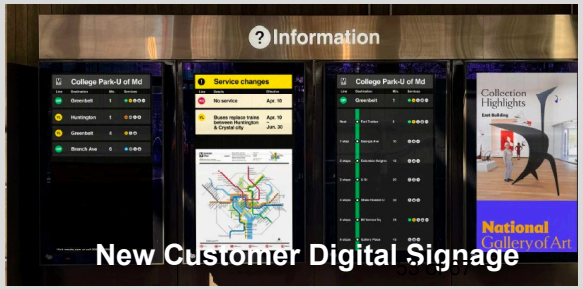

Zero Emission Bus


8000 Series Rendering


Northern Bus Garage Rendering


Fare Systems


Below Ground Radio Infrastructure

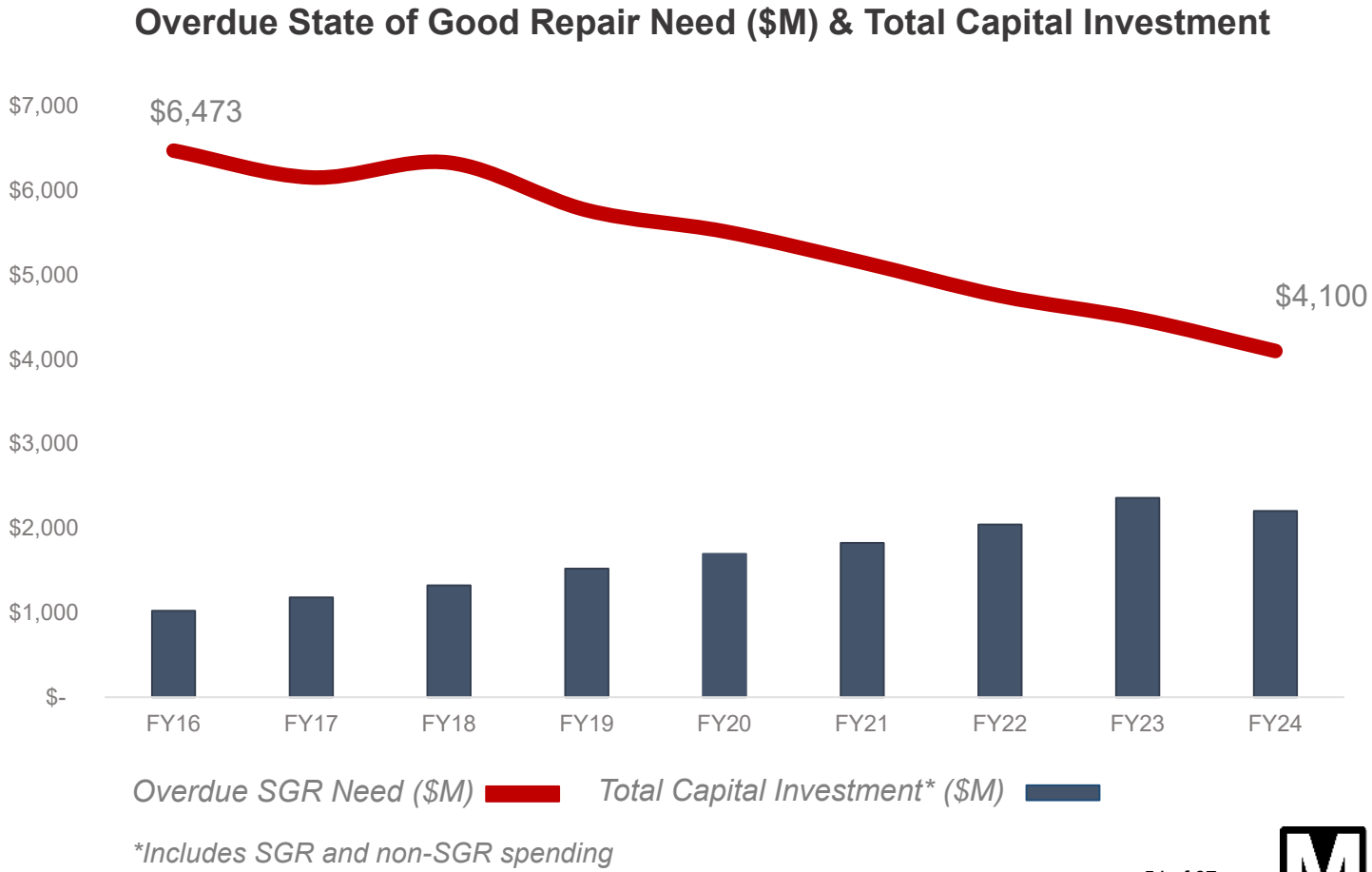


New Customer Digital Signage

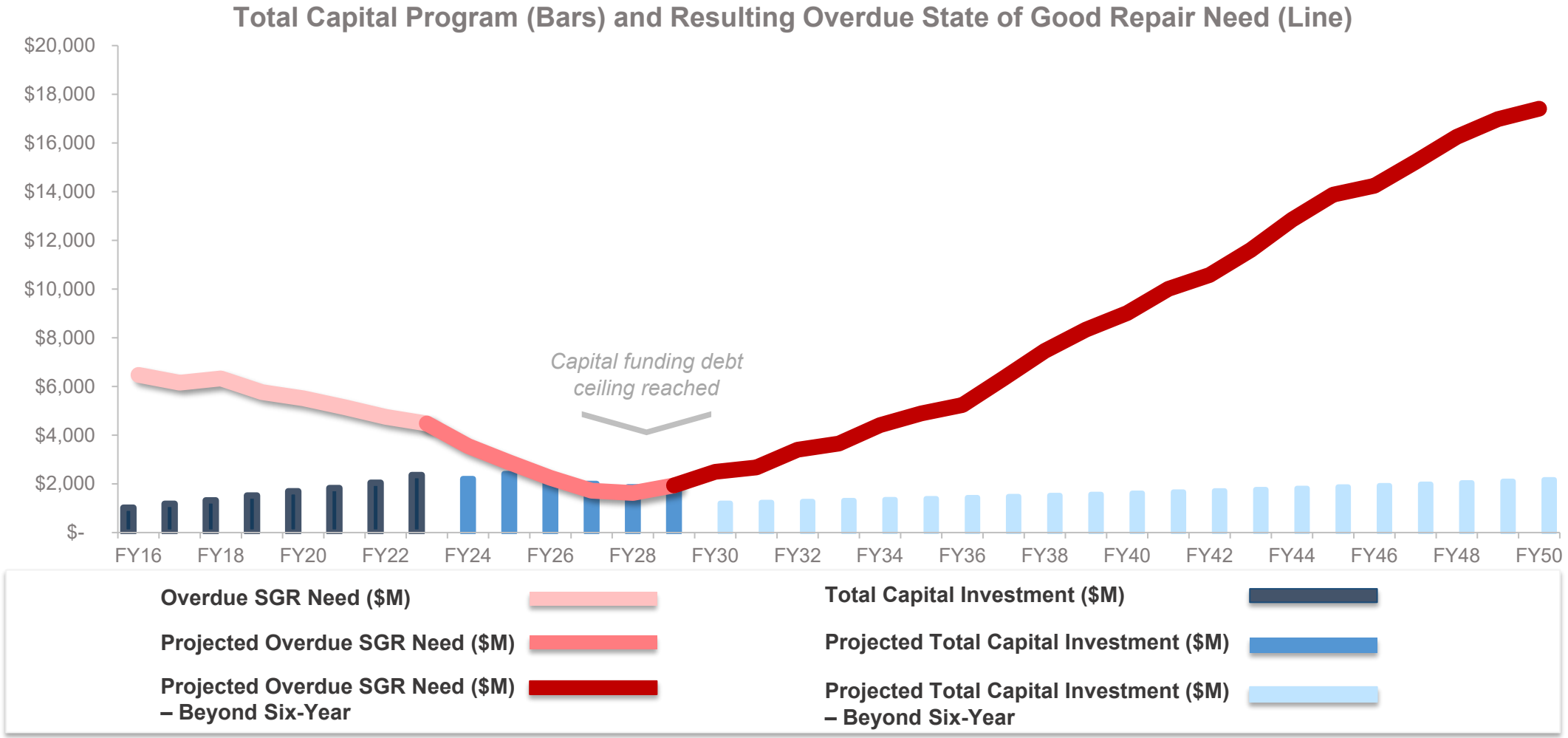
Regional and Federal Investment in Metro is Restoring System to State of Good Repair

- Dedicated funding received in 2018 for State of Good Repair and important modernization projects

- Since then, Metro has made progress to reduce the backlog, seen through improved performance, reliability, and safety
  - Vehicles – 7000-series railcars, modern bus fleet
  - Key station components through Platform Rehabilitation projects
  - Track and structural components essential for safe and reliable operations



State of Good Repair Progress at Risk Without Increased Investment

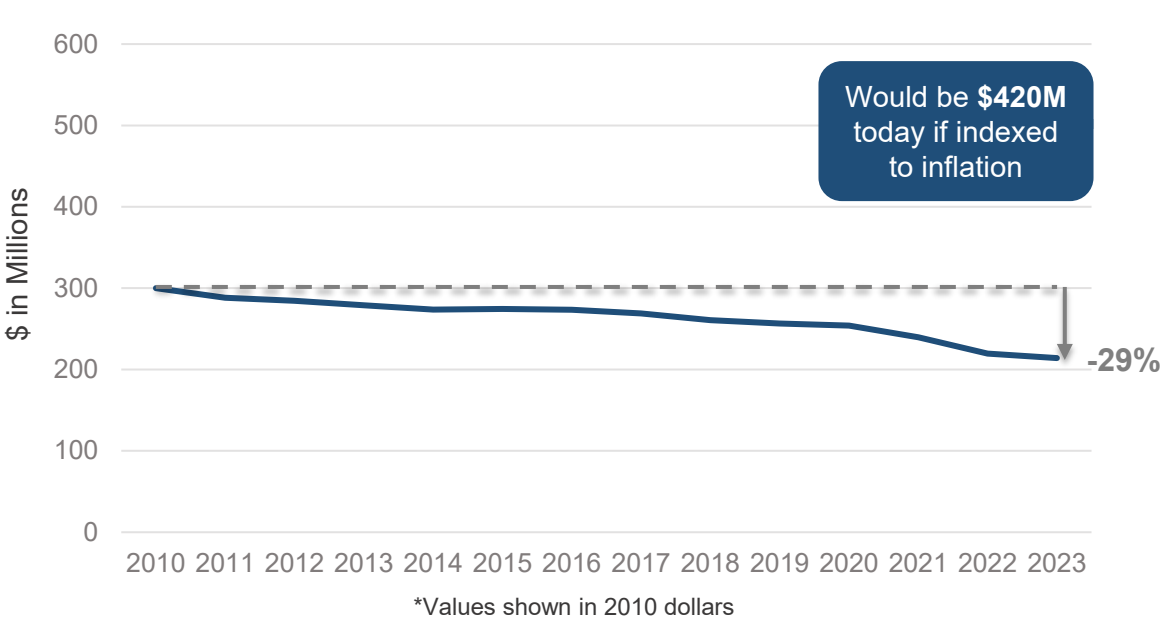


1. Data reflective of Proposed FY2024-FY2029 Capital Program
2. Assumes approx. $1B SOGR investment from FY30 onwards, escalated at 3%
3. Estimate before additional PM transfers

Value of Capital Funding Has Eroded Over Time

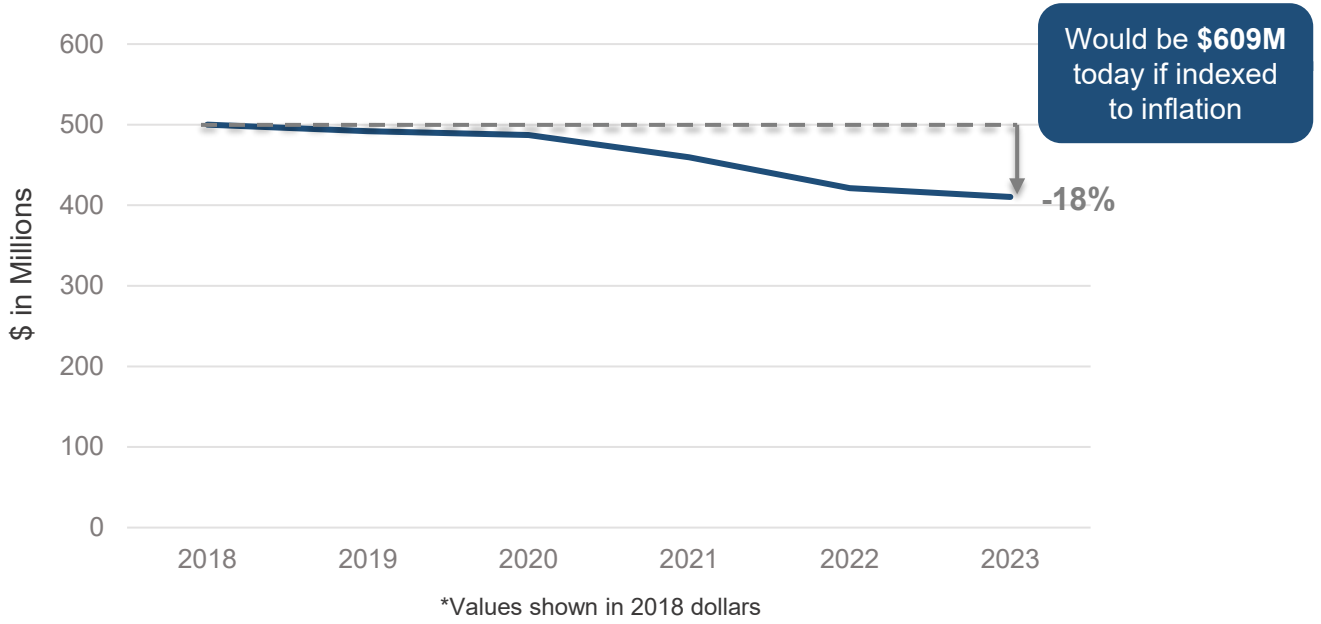
- PRIIA approved in 2010, Dedicated Funding agreements signed in April 2018
- Purchasing power of original PRIIA and Dedicated Funding levels has decreased by 29% and 18% respectively

$300 million of original PRIIA worth $214 million today



*Values shown in 2010 dollars

$500 million of original Dedicated Funding worth $410 million today

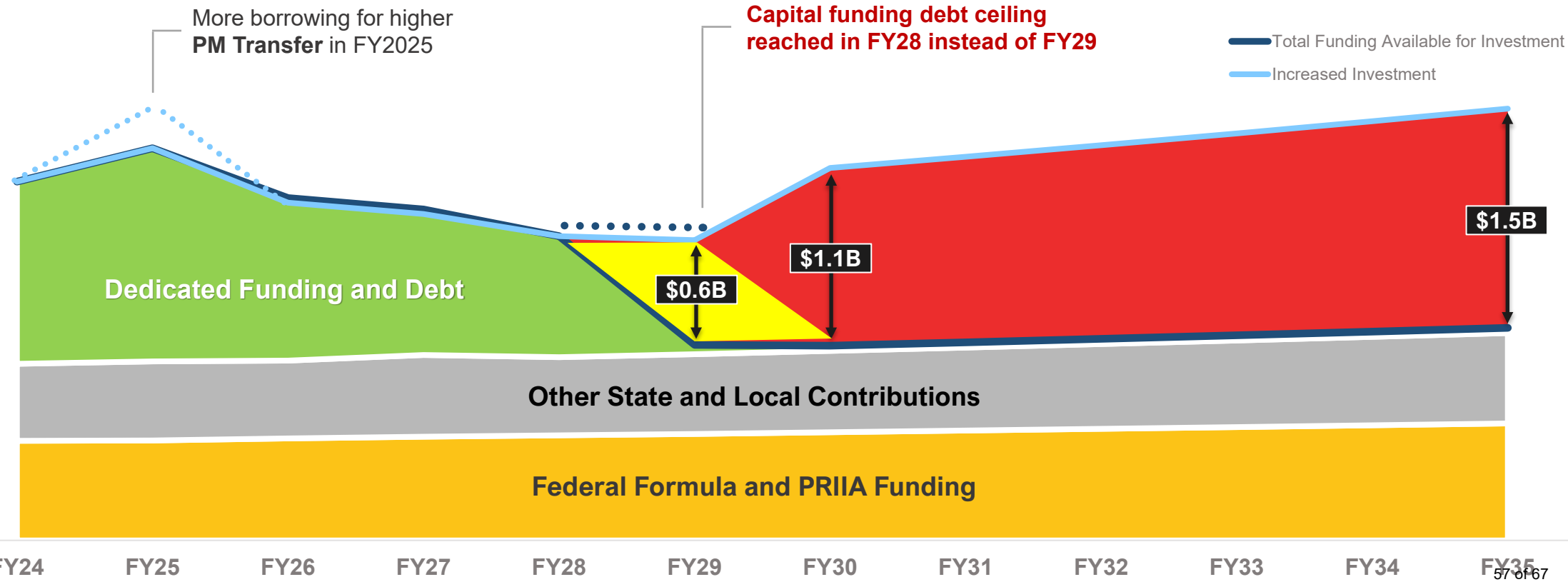


*Values shown in 2018 dollars

Together, PRIIA and Dedicated Funding would be worth an additional **$229M** today if indexed to inflation

PRIIA: Passenger Rail Investment and Improvement Act funding provides federal grants for WMATA's CIP, matched by regional funding
Source: U.S. Bureau of Labor Statistics, Consumer Price Index for Urban Wage Workers and Clerical Workers (CPI-W)

Increasing PM transfer will exhaust funding faster and decrease state of good repair investments



FY2025 Capital Program Preview

FY2025 - FY2030 Total Capital Program Need $17B

Financially unconstrained investment in state of good repair, modernization, and development of future investments to align with Your Metro Strategic Transformation Plan

Investments include:

- Zero-emission facilities and fleet
- Accelerate Metro railyard, signaling, and power modernization/expansion initiatives
- Increase 8000-Series railcar fleet
- Station infrastructure, including platform screen doors and digital modernization

FY2025 – FY2030 Draft Capital Program Capacity $11B

Financial capacity defers some state of good repair and modernization investments, delaying needed investment work (power & signaling systems, bridges, structures and tunnels).

Investments include:

- Continue currently funded investments and contract commitments
- Planning for Next-Generation Train Control and Blue/Orange/Silver Capacity improvements
- Acquire 8000-series railcars (replace 2000 and 3000 series fleets)

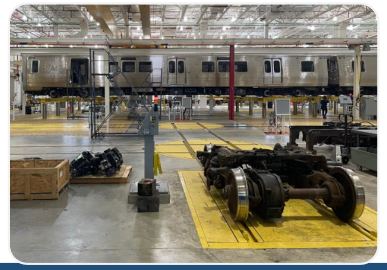
Pressure on Capital Program

- Additional preventive maintenance transfers could further reduce capital program capacity (by up to $709M total)
  - FY2024: increased $139M
  - FY2025: up to $285M
  - FY2026: up to $285M
- Projects further at-risk:
  - Heavy Rail and Overhaul Facility
  - 8000-series railcar purchase options and potentially reduce size of railcar fleet
  - Zero emission bus purchases and defer additional facility upgrades
  - Development of Next Generation Signals Upgrade (CBTC)
  - Development of Blue/Orange/Silver study improvements

Implications of Capital Funding Deficit

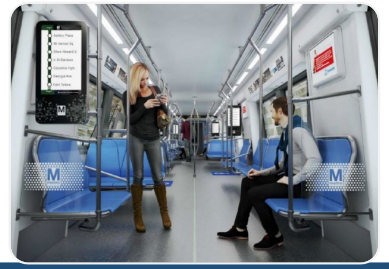
- Increased state of good repair backlog
- Declining reliability, worsening customer experience and increased safety risk
- Limited modernization and enhancements and no expansion

Impact of Deferring Major Capital Investments:



Heavy Repair & Overhaul Facility

- Fleet performance and reliability reduced
- Inefficiency increases ongoing operating budget costs
- Deferral adds complexity for operations and maintenance; continuing a decentralized approach in outdated, constrained facilities



8000-Series Fleet of the Future

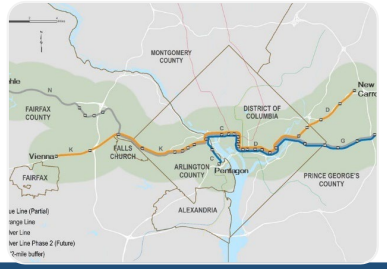
- If legacy fleets remain in service longer, reduces reliability and efficiency
- Delaying purchase option could be aligned with decrease in fleet size, limiting flexibility to increase rail service and reduces capacity

Zero-Emission Buses & Facilities

- If legacy buses remain in service longer, reduced reliability & environmental impacts
- Adds complexity to facility transition; limits flexibility
- Extends goal to achieve zero-emission bus fleet by 2042
- Potential smaller bus fleet and less peak service

Signaling Improvements

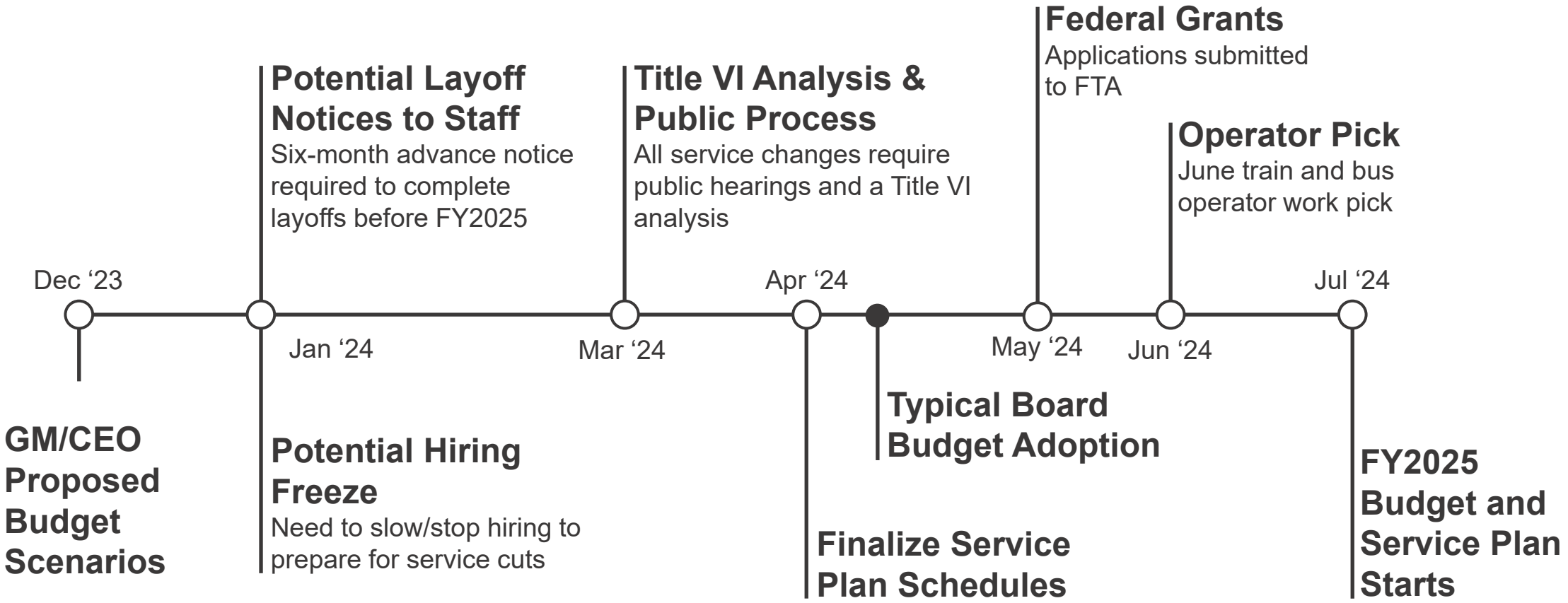
- Deferring Next-Gen Automation and Signaling forces use of older assets with parts that are no longer available



B/O/S Corridor Improvements

- Limits Metro's ability to increase capacity on busy sections of the system, run more frequent service, and support regional growth

FY2025 Budget Timeline



Appendix

FY2024 Budget Implementation Status

	Rail	Bus	Fares
Complete	✓ GR/YL service pattern ✓ 6 min GR/YL peak headways ✓ 8 min GR/YL all day service ✓ 10 min OR all day service Operating 89% of budgeted weekday service	✓ Restored Service: 11Y ✓ Increased Frequency: B2 ✓ Restructured Routes: 16M, L12	✓ Simplified Metrorail Fare Structure ✓ Metro Lift Income Qualified Fare Program ✓ MetroAccess $4 Fare Cap
In Progress	❑ 6 min GR/YL all day service weekday all day 6 min starts in December ❑ 7.5 min OR peak service ❑ Full peak periods ❑ All 8-car trains	❑ 24-hour bus network in DC expected December 2023	❑ Senior SmarTrip Card Fee Waiver expected December 2023

Preliminary FY2025 Ridership and Revenue Scenario

	Forecast as of Oct. 2023	FY2023 Actual	FY2024 Budget	FY2025 75% Scenario
Trips (in M)	**Rail**	88.8	116.5	123.5
	Bus	102.5	105.6	112.3
	Access	1.4	1.5	1.5
	Total	**192.7**	**223.7**	**237.3**
Passenger Revenue ($ in M)	**Rail**	$231.5	$330.8	$355.0
	Bus	$55.9	$67.9	$72.1
	Access	$4.6	$4.9	$5.4
	Total	**$292.0**	**$403.5**	**$432.5**
Average Fare	**Rail**	$2.61	$2.84	$2.87
	Bus	$0.55	$0.64	$0.64
	Access	$3.27	$3.17	$3.51

FY2025 Scenario assumes a total ridership recovers to approximately 75 percent of pre-pandemic levels and represents a 6 percent increase above FY2024 budgeted levels.

Ridership and revenue forecast adjustments anticipated during the budget development process.

Estimated $11 billion Capital Funding Projected for FY2025-2030

Declining capacity for capital projects, state of good repair programs, and preventive maintenance transfers

$ in millions	FY2025	Six-Year Total
Federal Grants	$621	$3,967
Jurisdiction Contributions	$451	$2,791
Reimbursable and Other	$31	$96
Dedicated Funding Pay-Go*	$244	$765
Dedicated Funding Debt	$1,188	$ 3,446
Total	**$2,535**	**$11,065**

*$500 million annual Dedicated Funding less debt service costs

Notes:
- Assumes current IIJA funding increases 2% annually
- PRIIA continues through FY2030
- Jurisdictional Contributions (inflated 3% annually includes match for Federal Grants) and PRIIA match
- Dedicated Funding Debt Capacity Exhausted in FY28
  - Total Debt Capacity influenced by cost of borrowing, debt coverage ratios, and maintaining a consistent credit rating
  - Pay-Go funding of approximately $85M annually after FY28