Fare Policy and Concepts

Riders' Advisory Council October 6, 2021



Purpose

- Review updates to fare policy principles
- Consider potential fare concepts for further development



What drives ridership up and down?

Market Size

Total regional trip demand



Market Share

Metro's share of trips



Variability

Day-to-day drivers





Growth in people and jobs in the region

Visitors and tourists

The pandemic reduced commute market and transit share

Telework



Share of housing and jobs near transit

Frequency and Reliability

Stable fares



Ride-hailing

Declining bus speeds/ congestion



Major gatherings and events



Trackwork

Bad weather

Decreased non-work trips



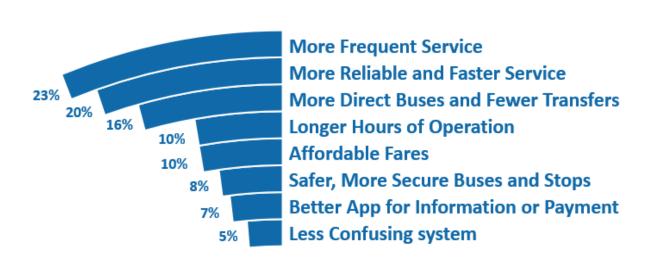
Increases awareness and affinity ● Changes perception ● Reduces anxiety



How customers weigh service and fare policy

Higher relative importance of service compared to fares is similar across customer surveys and observed behavior

Survey Example: Bus Customer Priorities



Source: Bus Transformation Project Customer Outreach

Ridership Analysis Example: Metrorail Elasticities



Source: "Origin-Destination Land Use Ridership Model for Fare Policy Analysis," National Center for Smart Growth Research and Education, University of Maryland, College Park

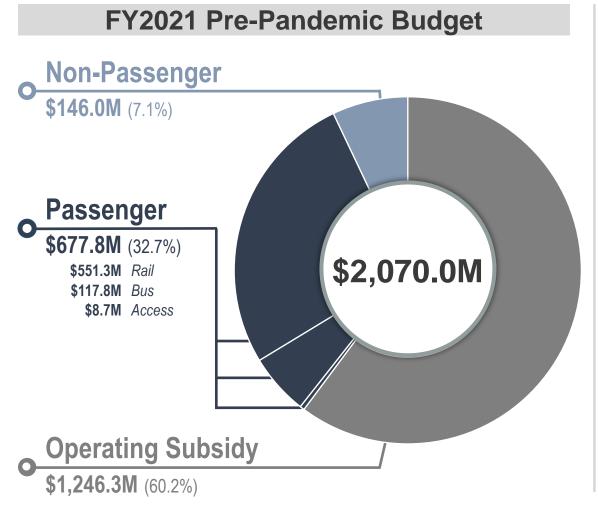


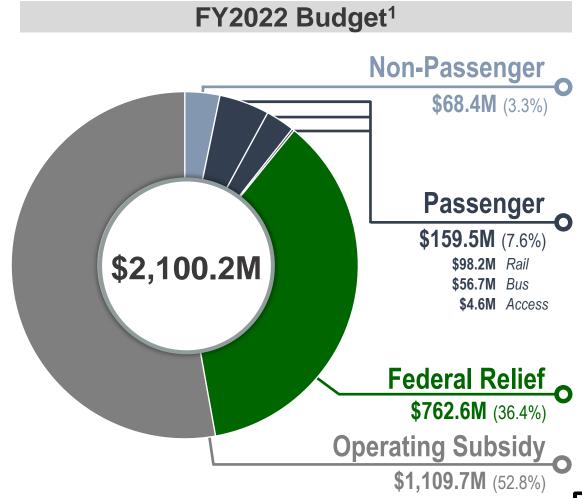
Recent Fare Actions

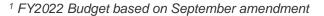
- No fare increases for four years (since June 2017)
- Added bus trips to short-term and monthly rail passes (2019)
- Reduced price of 1-day and 7-day combo rail/bus passes and launched 3-day combo pass (2019)
- Free rail-bus transfers up to \$2 transfer credit (2021)
- 7-day regional bus pass reduced to \$12 (2021)
- \$2 weekend one-way fares (2021)
- Fall pass sale (2021)
- Rail-bus combo passes including other local bus operators (in progress)



Operating Revenue Sources







Draft Fare Policy Principles for Consideration



Customer Focused

Adopt customer-focused fare policies and systems to position Metro as an attractive choice in a competitive travel market



Simple and Convenient

Make it simple, intuitive, and convenient for customers to purchase fares and take transit



Equitable

Maintain equitable fares and practices that promote broad access to regional destinations



Seamless

Create a seamless customer experience across modes and operators to promote regional mobility



Built to Drive Ridership

Maximize ridership while ensuring adequate revenue and cost efficiency to sustain service

Fare policy principles guide development and evaluation of potential fare policy changes

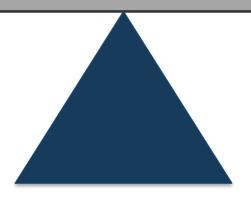


Balancing Considerations in Fare Policy

Simplicity

Complexity

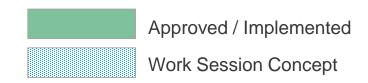
- Greater ease of use and understanding
- Minimized cost of fare collection



- Advance revenue and social/equity goals
- Fares vary by value delivered, cost to provide, or rider demographics



Potential Fare Concepts



Pricing

Targeted Discounts

Fare Structure

Passes

No Fare Increase

Low Income Discounts

Free Rail-Bus Transfers

Student Passes

Promotional Fares

MetroAccess Flat Fare

Rei Bei Beic

Cheaper Bus Pass

\$1 Bus Fare

Youth Discounts

Peak vs. Off-Peak

Passes with Local Bus

Cheaper Parking

Student Discounts

Mileage and Min/Max

Monthly Pass Updates

CPI Adjustment

Employer Subsidies

Zone-Based Fares

Trip-Based Passes

Free Fares

Available Capacity

Fare Capping

Non-Consecutive Pass



Concept: \$1 Bus Fare

- Cheaper fares for mode with higher share of price sensitive customers
- Considerations
 - Pros: Makes buses more affordable; more targeted to low-income riders than rail fare reductions
 - Cons: Loss of revenue to support service; price differential incentivizes using bus over equivalent rail trips



Concept: Charge \$1 bus fare

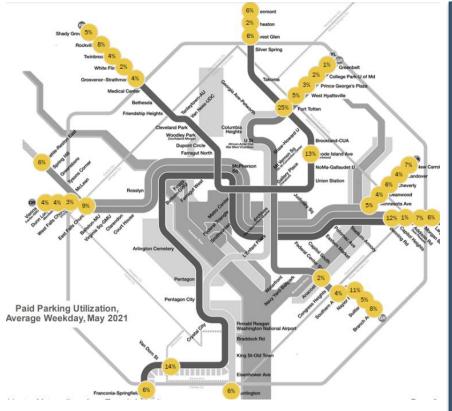
Replace the \$2 standard bus fare

Bus fares cheaper and equivalent to current Senior/Disabled bus fare.



Concept: Discount Parking

- Parking utilization is currently low and reduced rates could make use of available capacity and encourage more rail ridership
- Considerations
 - Pros: Encourages transit ridership by reducing cost of accessing transit and more fully utilizing parking facilities
 - utilizing parking facilities
 Cons: May reduce parking revenue; implementation could result in different parking rates across facilities and less predictability over time



Concept: Set parking rates to target high usage, maximizing rail ridership

Options include general daily price reductions or free/reduced evening rates

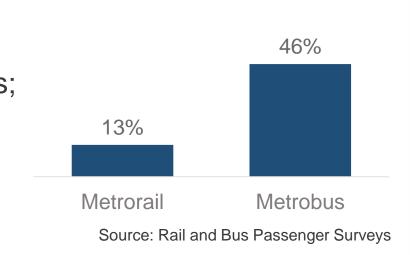


Concept: Low Income Discounts

 Low-income riders are more likely to avoid riding due to cost and less likely to receive tax or employer subsidies through SmartBenefits



- Considerations
 - Pros: Targets discounts to most price sensitive/cost burdened riders; likely positive implications for ridership, fare evasion, and longterm ability to raise general fares
 - Cons: Likely reduces near-term revenue



Concept: Low-income riders eligible for Senior/Disabled Fare equivalent

50% of peak fare weekdays and 50% off weekend fare

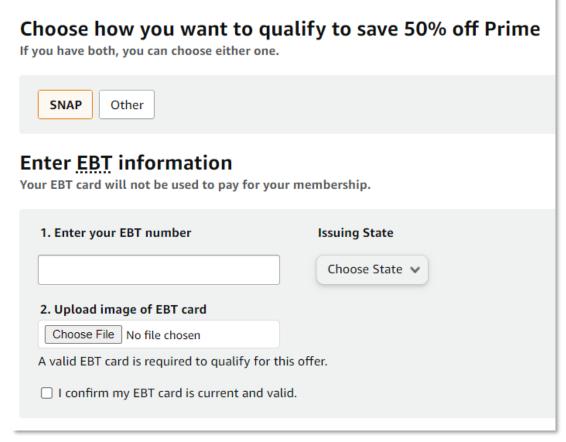
Qualify through enrollment in designated meanstested programs (e.g., Medicaid or SNAP/EBT)

Randomized controlled trial pilot in development with Lab@DC to begin in CY2022 – providing participants either discounted or free fare and comparing with control group



Concept: Low Income Discounts (Continued)

- Riders could qualify based on enrollment in designated meanstested programs (e.g., Medicaid or SNAP/EBT)
- Potential for integrated discount fare offering with eligibility for: (1) seniors, (2) disabled, (3) low income
- Funded through either jurisdictional reimbursement (e.g., student discount programs) or general subsidy (e.g., senior discount)



Example: Amazon offers discounted Prime memberships to customers participating in qualifying programs.



Concept: MetroAccess Flat Fare

- Lower and simpler flat fare for MetroAccess customers
- Considerations
 - Pros: Cheaper and simpler for customers; improved reservation process and fewer fare disputes
 - Cons: Operating cost impact expected to exceed revenue impact due to induced trips; lowers MetroAccess farebox recovery ratio; eliminates direct link between MetroAccess and fixedroute fares



\$4 MetroAccess weekend fare in effect for most trips due to \$2 rail weekend fares and free rail-bus transfers Concept: Charge a flat \$4 fare for MetroAccess trips

Replace the fare calculated as twice the fixed route equivalent fare, up to a maximum of \$6.50

All MetroAccess fares would be equal to twice the regular Metrobus fare



Concept: \$2 Late Night Rail Fares

- Lower fares to support latenight workers and late-night economy
- Considerations
 - Pros: Benefits late-night workers and encourages use of system during less busy hours; lower cost for reduced service levels
 - Cons: Some revenue reduction; adds additional fare period to weekdays



Concept: \$2 one-way late-night rail fares

One-way trips from 9:30 pm until close would cost \$2, 7 days a week

Late-night fares match weekend fares



Concept: Consolidate Peak and Off-Peak Fares

- Simplify rail fare structure weekdays by eliminating peak/off-peak differential
- Considerations
 - Pros: Simplifies fare structure; encourages more ridership
 - Cons: Significant revenue loss; fares less tailored to riders' higher willingness to pay during rush periods; may generate crowding

Rail Fares	Peak	Off-Peak
First 3 miles	\$2.25	\$2.00
Each additional mile (<=6 miles)	\$0.326	\$0.244
Each additional mile >6 miles	\$0.288	\$0.216
Max fare	\$6.00	\$3.85

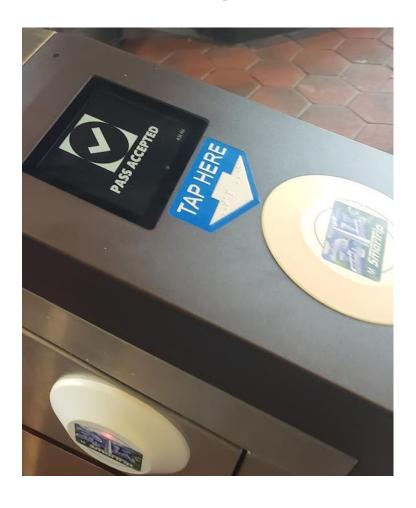
Concept: Eliminate rail peak and off-peak differential

Consolidates to single fare period on weekdays



Concept: Updated Pass Offerings

- Adapt to new ridership patterns to encourage more pass sales; passes encourage more ridership by committing customers to transit and reducing the marginal cost of each trip to zero
- Considerations
 - Pros: Better aligns monthly pass offering with evolving ridership patterns and potential to increase revenue by encouraging more customers to commit to transit and ride more
 - Cons: Reduction in revenue from existing pass users



Concept: Update trip multiples on monthly pass to reflect market changes/telework

Reduction from 36 trip multiple to 32 trips – approximate 4-day workweek equivalent

Example: \$2 fare level monthly pass reduced from \$72 to \$64 (11% cheaper)



Fare System Modernization Capital Investments

Restoring State-of-Good-Repair and Improving Customer Experience

- Mobile payment launched during FY2021 Apple and Google
- Metrorail faregate replacement underway
- Metrobus farebox replacement design underway
 implementation begins in CY2022
- Pilot test of Metrobus rear-door payment targets also planned to begin CY2022
- Initiated market research on back-office systems modernization; will improve flexibility to support future fare policy





Back-office fare system upgrades could enable new capabilities

- Real-time Communications Cellular/fiber connections between fare readers and back office enables faster card updates [currently 1+ day on bus, hours on rail, immediate on mobile]
- Meets customer expectation of real-time availability of added funds or passes

- Account-based System Value or pass information is stored in agency back-office of fare payment system rather than on card/fare media
- Integrates customer funds across multiple media (cards/mobile)

 Open Payments – Payment taken directly from customer's debit/credit card (physical or mobile) after tapping at card reader

Reduces effort needed for fare payment, especially for infrequent riders

■ Fare Capping — Allows riders to "pay-as-you-go" for pass-like products by limiting amount charged over a period (e.g., day, week, month) to a defined cap

Improves simplicity and equity and encourages loyalty / additional trips



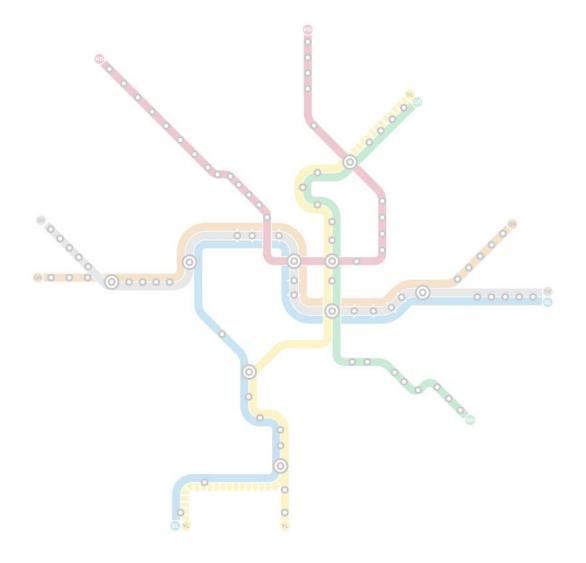
Next Steps

- Request Board action on updated fare policy principles
- Further development and evaluation of potential fare concepts
- Present GM/CEO's FY2023 Budget Recommendation to Finance and Capital Committee in November 2021





Appendix





Ongoing Service and Fare Initiatives

Summer 2021

Labor Day 2021

2022

Approved: Service improvements

Metrobus service

- 2 am service on 34 lines, 7 days
- Peak, full day, and weekend service restorations

Metrorail service

Rail open until midnight,
7 days starting July 2021

Approved: Service and fare improvements

Metrobus service

- 20 lines with 12 minutes or better service, 7 am to 9
 pm, 7 days a week; 16 lines at 20 minutes or better
- 46 additional routes with service restored or improved

Metrorail service*

- Improved frequencies:
 - 10 minutes or better peak
 - 12 minutes or better all day
 - 15 minutes or better late night
- Rail open until 1 am Friday and Saturday

Fares

Free rail-bus transfers, \$12 weekly bus pass;
 passes with local bus, \$2 weekend flat fares;

Planned: 7 new rail stations open

- Reston Town Center
- Herndon
- Innovation Center
- Dulles Airport
- Loudoun Gateway
- Ashburn
- Potomac Yard



Current Metro Fare Policy Principles

Adopted by Metro Board of Directors, November 2010

Metro Fare Policy Principles

Ensure and enhance customer satisfaction

Establish a mechanism to allow customers to determine their fares easily

Optimize the use of existing capacity

Establish equitable fares and ensure compliance with federal regulations

Facilitate movement between modes and operators throughout the region

Encourage the use of cost-effective media

Generate adequate revenue while maximizing ridership



Rail and Bus Fare Structures

Rail fare structure

- Distanced-based fares
 - First 3 miles at flat rate
 - Per-mile fee after first 3 miles
 - Max peak fare of \$6.00
 - \$2 weekend flat fare approved
- Rates higher during peak periods

Bus fare structure

- Metrobus fares flat throughout the system, \$2 per trip
- Higher prices charged for express bus routes, airport lines

	Peak	Off-Peak
First 3 miles	\$2.25	\$2.00
Each additional mile (<=6 miles)	\$0.326	\$0.244
Each additional mile >6 miles	\$0.288	\$0.216
Max peak fare	\$6,00	\$3.85

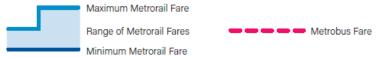
Note: Senior and Disabled Fares are 50% of the Peak Fare Charged

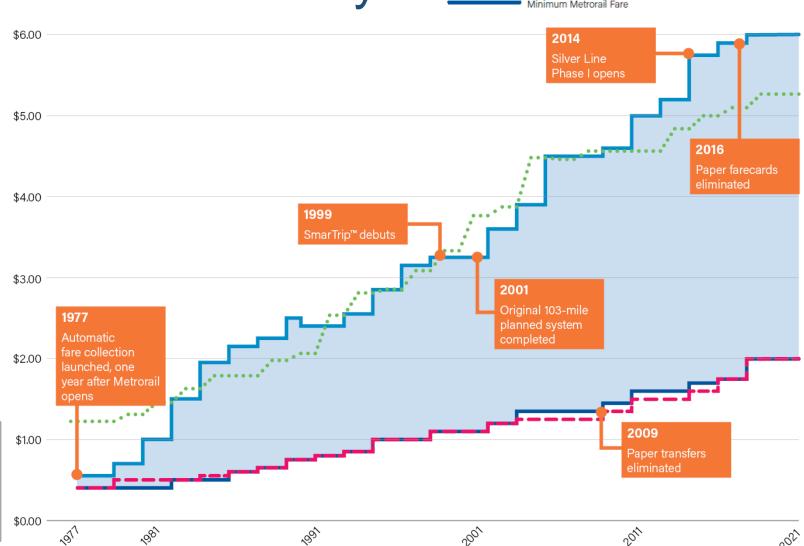
Regular Metrobus, MetroExtra, Metroway, REX	\$2.00
Airport routes (B30, 5A)	\$7.50



Rail and Bus Fare History

Metrorail/Metrobus Fare





1976 Fares:

- Metrorail (peak): \$0.55
- Metrorail (offpeak): \$0.40
- Metrobus: \$0.40

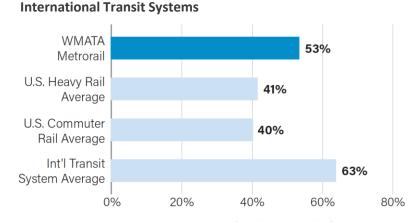


********* CPI

Year

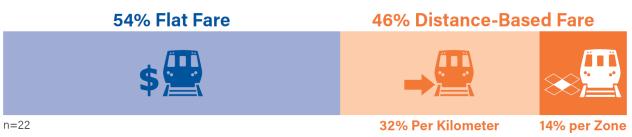
Comparison to Other Transit Agencies

- Metrorail distance-based fare structure aligns with about half of international systems
- Metro has higher rail cost recovery and lower bus cost recovery than many domestic agencies



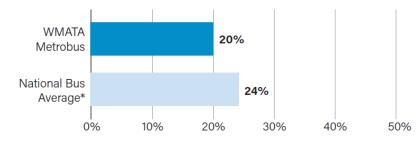
Average Farebox Recovery Ratio n=15 U.S. Heavy Rail Systems, 25 U.S. Commuter Rail Systems, 45 International Transit Systems

Comparison of Fare Structures of International Metros in Community of Metros (CoMET)



Average Farebox Recovery Ratio - US Bus Systems

Average Farebox Recovery Ratio - Heavy Rail and



Average Farebox Recovery Ratio

n=50 Local Bus Systems

Pre-Pandemic: 2017 FTA National Transit Database



Existing Pass Products

	Bus/Rail Combo	Rail	Bus
1-Day Unlimited	√		
3-Day Unlimited	\checkmark		
7-Day Unlimited	\checkmark		\checkmark
7-Day Short Trip	\checkmark		
Monthly Unlimited	\checkmark		



Typical impacts of fare changes on ridership

- Fare changes affect revenue more than ridership: Lower fares typically increase ridership but decrease revenue; higher fares typically decrease ridership but increase revenue
- Ridership impacts from fare or service changes build over time only about half of impact occurs within the first year
- Bus riders are typically more price sensitive than rail riders
- Rail riders are more price sensitive for shorter, off-peak trips; less price sensitive for longer, peak period trips



Riders benefit from subsidized fares

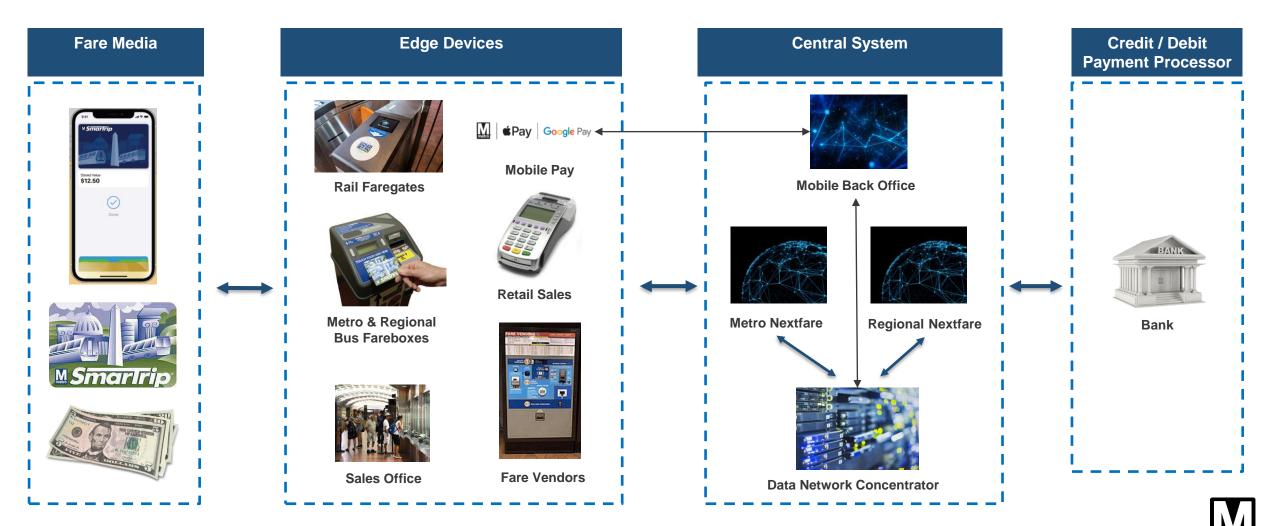
Discounts offered based on age, disability, or participation in school or employer-based programs

Approximate Share of Riders with Subsidized Fares by Age Group





Regional Fare Collection Ecosystem



Transit operates in a competitive environment

- Customers have multiple travel options; time and cost of trips influence customers' decision-making
- Transit is often cost competitive and usually a less expensive option, especially for individual trips
- Transit is most time-competitive for long rail trips and less competitive for trips that require transfers with long wait times



Service | Long Term Options

- Continue to monitor ridership and regional trends and consider additional service changes
- With additional resources, Metro could:
 - - —Expand high frequency bus segments to the branch line level \(\subseteq \)
 - For one-third of lines included, the highest frequency applies only to the trunk segments
 - —Add additional lines to the all-day high frequency network <a>
 - —Offer high frequency for more hours of the day e.g., starting earlier at 6 am or extending later until 10 pm ♣ ♣
 - -Increase the frequency standard e.g., 10 minutes 🕮 🚍
 - Restore more pre-pandemic service 🕮 🚍

