TECHNICAL PANEL FINAL REPORT ON METRO

April 2017

Metropolitan Washington
Council of Governments

COG CHIEF ADMINISTRATIVE OFFICERS TECHNICAL PANEL FINAL REPORT ON METRO
Prepared by the COG Chief Administrative Officers Technical Panel on Metro, April 26, 2017

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The Metropolitan Washington Council of Governments (COG) is an independent, nonprofit association that brings area leaders together to address major regional issues in the District of Columbia, suburban Maryland, and Northern Virginia. COG's membership is comprised of 300 elected officials from 23 local governments, the Maryland and Virginia state legislatures, and U.S. Congress.

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TABLE OF CONTENTS

INTRODUCTION AND PURPOSE

In this Final Report, the Technical Panel presents further analysis on moving forward to provide the dedicated funding needed to support WMATA's continuing restoration and sustained system maintenance to assure it provides safe, reliable service to our region.

In October 2016, the COG (Council of Governments) Chief Administrative Officers (CAO) Technical Panel presented the Interim Report on Metro[1] (Washington Metropolitan Area Transit Authority - WMATA and its Metro system). The Interim Report presented a preliminary analysis of data to provide the technical foundation for pursuing a comprehensive-long-term approach to funding Metro. The Interim Report described the essential role Metro plays in the continued prosperity and livability of the region, and sought to define regional expectations on system performance focused on customer expectations. The Interim Report incorporated a robust financial forecasting model that enables projecting the long-term (10-year) financial needs of Metro.

The COG Board accepted the Interim Report on October 26, 2016. See Appendix A.

Focus of This Report

This Final Report is focused on the capital and maintenance needs of WMATA and how the region's localities can help meet those needs, to bring Metro to a State of Good Repair[2], to help it stay well-maintained and to advance projects required to address critical system needs.

This report is focused on finances. It does not include any discussion of WMATA governance, or other potential reforms. These are important issues, but are not part of the charge for the Technical Panel.

WMATA comprises Metrorail, Metrobus and MetroAccess. This report focuses on the capital and maintenance needs for WMATA, with primary focus on Metrorail.

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[1] Metropolitan Washington County of Governments, "COG Technical Panel Interim Report on Metro," October 2016.

[2] "State of Good Repair" (SGR) means the condition in which a capital asset is able to operate at a full level of performance, which is defined as: 1) the asset is able to perform its manufactured design function; 2) the use of the asset in its current condition does not pose a known unacceptable safety risk; and 3) the asset's life-cycle investment needs have been met or recovered, including all scheduled maintenance, rehabilitation and replacements. This is included in the Federal Transit Administration's (FTA) final rule on transit asset management (Federal Register, July 26, 2016, p. 48963, https://www.gpo.gov/fdsys/pkg/FR-2016-07-26/pdf/2016-16883.pdf) (accessed April 17, 2017).

THE BOTTOM LINE

WMATA/Metro are vital to our region's continued success and economic growth. Metro has suffered from decades of delayed maintenance and insufficient capital investment, and must be provided the resources it needs to build on recent progress -- to fully achieve a State of Good Repair and execute additional capital and maintenance projects essential for the long-term viability of the system. The COG CAO Metro Technical Panel worked together for the better part of a year to come forward with a regional solution for this regional asset.

The Technical Panel found that the predominant funding problem faced by WMATA is a **significant capital shortfall** that requires urgent attention. It concluded that a regional funding solution must be in place by no later than January, 2019 as local governments cannot afford the steep bill for Metro's needed capital and maintenance program while simultaneously financing their jurisdictional needs for schools and other critical infrastructure.

The Technical Panel concluded it is time to act for the good of the region, and establish **dedicated funding** to fill the major gap in funding needed for Metro's capital and maintenance -- to assure the long-range safety and reliability of the system. After examining many different options, the Panel concluded that a **dedicated sales tax** is the best, most equitable revenue option.

The Technical Panel found that a dedicated sales tax is the source of funding for most large transit systems in the nation, and for logical reasons. It is a reasonable solution that spreads the cost widely, over the entire region, including tens of millions of annual visitors. It provides a stable funding source, well understood by investors to debt-finance substantial capital infrastructure needs at low interest rates. It is easily understood.

It's important to remember that **everyone benefits from Metro**, whether you take it or not -- everyone benefits from congestion relief; from the need for fewer roads, bridges, etc.; and from the environmental benefits.

The Technical Panel's analysis demonstrates that doing nothing is not acceptable. A safe and reliable Metro system is fundamental to the long-term success of our region.

EXECUTIVE SUMMARY

In this Final Report, the Technical Panel presents further analysis on moving forward to provide the dedicated funding needed to support WMATA's continuing restoration and sustained system maintenance to assure it provides safe, reliable service to our region. The Technical Panel investigated, analyzed and discussed numerous options to support Metro's long-term capital and maintenance needs.

The Case for Metro Investment

It is clear that Metro is an essential asset to the region. The Interim Report described the strong case for investing further in Metro -- economic value, transportation benefits (congestion reduction, environmental benefits); and the downside of not investing. Metro's health is critical to the region's ability to continue to prosper and thrive. Above all, it is important to remember that Metro is a regional asset, a regional issue, and a regional priority.

The Panel believes that localities must move forward, together, to give Metro the resources it needs to build on its progress in the past year.

Failure to invest in Metro -- to restore it to a safe, reliable system in state of good repair -- could reduce regional tax revenues by $1 billion to $2 billion annually[3]. The lack of investment puts at risk $50 billion of investment, adjacent to Metro, that depends on a safe and reliable system. The success of the region's economy overall relies heavily on a world-class transit system.

Capital and Maintenance Funding Needed

The scope and scale of Metrorail's infrastructure, long-term capital and maintenance funding needs require billions of dollars of investment. These problems are insurmountable in the absence of significant new funding -- funding that faces competing priorities in the localities. Years of deferred maintenance, insufficient capital investment, and expanding service hours (reducing time available for track maintenance) have brought Metro to the current state. If the region desires for Metrorail to continue to support economic development and mobility, the region must find a financial solution to support Metro.

The Funding Gap

The capital funding required to achieve a State of Good Repair is $15.6 billion of investment over the next 10 years[4]. Analysis of anticipated revenues for capital investment indicates a funding shortfall (gap) for State of Good Repair of $6.1 billion or an annual average gap of $610 million per year (pay-as-you-go). The total estimated capital funding need is higher than the previous estimate in the Interim Report of 11.7 billion. **It is not possible to close this gap through farebox revenue and cost-**

[3] Jeffrey S. DeWitt, "WMATA's Funding Needs: The Magnitude and the Effect, Updated to Reflect WMATA's Proposed FY 2018 Budget," March 31, 2017 (Office of the Chief Financial Officer, District of Columbia).

[4] Ibid

saving measures alone. The vast majority of Metro's funding gap is due to insufficient capital funding, including significant capital needs beyond State of Good Repair.

The Technical Panel concluded that the best way to achieve long-term capital funding is through bonding, with dedicated funding paying the debt service. Bonds will distribute the cost of capital projects over the lifetime of the project -- the most feasible answer. The Technical Panel also concluded that the best way to fund the debt service on the bonds would be a dedicated funding source -- **a dedicated tax**.

In addition, WMATA faces a $1.3 billion funding gap for maintenance needs; this represents $130 million per year (pay-as-you-go) requirement, which could also be funded by a dedicated tax.

Today, federal funding (including PRIIA -- Passenger Rail Investment and Improvement Act of 2008) provides about 30% of WMATA's funding, which is assumed to continue in these projections. If federal funding drops, the funding gap will grow.

In order to contain WMATA's expense growth within a reasonable operating budget, the Panel suggests Metro limit its spending growth. For example, placing annual growth caps of 3% on capital and operating expenses and 2% for some non-personnel costs are assumptions built into the financial analysis in this report.

Regional Revenue Analysis

These are difficult times. Localities and states are struggling with capital budgets. As a region, localities must come together to find a solution.

The Technical Panel reviewed all potential options for raising revenue in the region. After much discussion and debate, the Panel concluded that a dedicated funding solution is required to support WMATA's essential capital and maintenance needs. To raise this funding, the Panel finds that the best revenue solution is an addition to the general sales tax in all localities in the WMATA Compact area in the National Capital Region. This funding would be designated for capital or maintenance needs only -- it would not be used for daily operating expenses.

Choosing to implement an addition to the general sales tax in the WMATA Compact region could provide enough funding to allow Metro to make continuous improvements to achieve safety and reliability, with the goal of reaching full State of Good Repair within 10 years.

The CAOs did not come to this recommendation lightly. After analyzing all the options, the Panel found this is the most equitable solution. Metro benefits the entire region -- regardless of whether a person takes Metro or not -- by boosting the regional economy, supporting employees, and relieving traffic congestion.

A uniform regional sales tax brings many benefits:

- Easily understood by the public.
- All residents in the Metro Compact area pay the same.
- For example, a 1% increase in the sales tax is generally equitable to taxpayers across the region, wherever a purchase is made.

- Provides stable funding source well understood by investors to debt-finance substantial capital infrastructure needs at low interest rates.
- Dedicated sales tax is source of funding for most large transit systems in the nation.
- It is a reasonable solution that spreads the cost widely, over the entire region, including tens of millions of annual visitors.

This finding is very similar to a 2005 COG report[5], which recommended "sales tax as the best means of generating dedicated revenue."

Regional Approach: Proposed Sales Tax

The sales tax revenue -- consistent across the region -- raises the necessary financing for Metro's capital and maintenance needs, but not in the exact proportions of the Compact formula. The Panel recognizes this difference, and believes this can be addressed in the implementation phase.

Performance Metrics

WMATA tracks hundreds of performance metrics every year. This information helps them identify priorities and where improvements need to be made. The Panel has identified these metrics as important measures of Metro's progress:

- Safety
- Reliability
- Customer experience
- Financial management

Over the last year, Metro has made excellent progress in its SafeTrack program. More maintenance work is necessary and will be a priority in coming years.

What Capital and Maintenance Buys

The Panel expects that a significant regional investment will yield tangible results, including:

- Ongoing rehabilitation and replacement of track -- to ensure reliable service and restore user confidence.
- Replace nearly 600 older railcars with 7000 series state-of-the-art railcars -- this alone will greatly help to improve service and reduce outages and service time.
- Replace or rehabilitate approximately 240 escalators -- to improve access and customer experience.
- Rehabilitate approximately 100 elevators -- to improve access to trains.
- Replace or refurnish fare gates and fare boxes -- to improve customer experience and provide greater accountability.
- Replace or rehabilitate approximately 185 buses per year -- to improve service and reliability.

[5] Metropolitan Washington Council of Governments, "Report of the Metro Funding Panel," January 6, 2005, page 35. Accessed April 7, 2017: http://www.mwcog.org/uploads/pub-documents/9VpeWw20051109142424.pdf

- Additional critical capital projects (not included in the $15.6 billion), such as Rosslyn connection, relining Red Line tunnels, power systems; these could be funded through available funds from the dedicated tax.

Challenges and Next Steps

The vision for Metro is achievable. Much can be accomplished in the next few years; capital investments can support a Metro system that works smoothly, dependably, with minimal delays and disruptions. A system that has sufficient dedicated funding can ensure regular maintenance and replacement of aging equipment. A safe and reliable system can continue to fuel economic development, continue to pull thousands of cars off the roads, and continue to support those who live, work, play, and visit in the National Capital Region.

This essential *regional asset* requires a *regional solution*.

THE CASE FOR METRO INVESTMENT

The Panel's Interim Report[6] came to the same fundamental conclusion that many have: **the Metrorail system is essential to the prosperity of the region**.

Panel members concurred with the December 2015 District of Columbia Office of the Chief Financial Officer's (DC CFO) report, which stated that Metro's overall health is "absolutely imperative to accommodate business and population growth" across the region[7]. In a recent article, The Washington Post's "Dr. Gridlock" underscored Metro's role in the region, writing, "Metro is too necessary to fail … The region's plans for commercial, office and housing development presume the existence of the subway system … The Downtown D.C. Business Improvement District sees fixing the Metrorail infrastructure as essential to the future of the region's hub."[8]

The Panel's Interim Report[9] provided an analysis of data on WMATA/Metro, summarizing a number of analyses and studies. The Interim Report focused on safety, reliability, customer experience and the system's benefits to the region -- to provide the technical foundation necessary to pursue a comprehensive, long-term approach to funding Metro and provide it with a solid financial foundation.

A look at the numbers. Without Metro, hundreds of thousands more vehicles would be on the roads:

- More than 1 million trips are made on an average weekday on Metro (bus and rail).
- Approximately 5% of rail trips are made by a person who lives elsewhere in the United States (visitors).
- Another 9% of rail trips are made by residents in the region but outside of the Compact area.

On an average weekend:

- Nearly half a million trips are made on an average weekend on Metro (bus and rail).
- Approximately 12% of rail trips were made by a person who lives elsewhere in the United States (visitors).
- Another 7% of rail trips were made by residents in the region but outside of the compact area.

It has been proven that **Metro fosters smart growth.** The 2011 WMATA technical report, "Making the Case for Transit,"[10] measured and assessed benefits such as avoidance of additional road capacity and parking costs; travel time savings; travel cost savings; accident reduction savings; emissions reduction savings; and land value premium impacts.

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[6] MWCOG, "Interim Report on Metro."

[7] Office of the Chief Financial Officer, District of Columbia, "Recommended Capital Planning Process for Remediation of Metrorail's Infrastructure Challenges," December 2015.

[8] Robert Thomson, "'Death spiral'? No. Metro is too necessary to fail," The Washington Post, March 22, 2017. Accessed March 29, 2017: https://www.washingtonpost.com/local/trafficandcommuting/death-spiral-no-metro-is-too-necessary-to-fail/2017/03/20/03d6fcea-0744-11e7-b77c-0047d15a24e0_story.html?utm_term=.14a98e7e2445

[9] MWCOG, "Interim Report on Metro."

[10] Washington Metropolitan Area Transit Authority, "Making the Case for Transit: WMATA Regional Benefits of Transit, Technical Report," November 2011. Accessed March 20, 2017: https://www.wmata.com/initiatives/case-for-transit/upload/WMATA-Making-the-Case-for-Transit-Final-Tech-Report.pdf

It is clear that **Metro brings economic value**. Several studies show that proximity to Metrorail brings higher real estate values; boosts economic development; brings more property tax revenues.[11] For example, Virginia's investment in the rail system was $941 million for 1978-2000, with a net return in tax revenue of $2.1 billion, for a net gain to the Commonwealth of $1.2 billion on a dollar-for-dollar basis.[12]

A poorly functioning Metro that is unsafe, unreliable, and lacks adequate capacity harms the region by causing delays that keep workers from getting to their jobs on time; increasing traffic congestion and disrupting the flow of people and commerce in the region; and harming Metro's ability to operate and improve as it loses riders and fare revenues. This will encourage more sprawl and a more car-dependent community.

The cost of not acting is high. It is essential that the region supports Metro to continue on its path toward a State of Good Repair. "With Metro, the region works. Without Metro, the region would be less wealthy, harder to get around, and have less economic activity," the 2011 WMATA report found[13]. Furthermore, the report found that properties near Metro stations had higher real estate values and produced more property tax revenues.

Metro is an investment-worthy asset; its infrastructure is valued at $40 billion. Currently, $50 billion of investments are active or planned near Metro stations.[14]

The DC CFO's report concludes that failure to invest in Metro, to restore it to a safe, reliable system in state of good repair, could reduce regional economic growth by ¼ to ½ percent or more, reducing regional tax revenues by $1 billion to $2 billion per year.[15]

There has also been significant impact of reduced reliability in the form of lost productivity for Metro system users, estimated at $51-61 million per year (2014-2015). And the cost of delay for 2015-2016 is preliminarily estimated at $153-253 million.[16] Without providing Metro the resources it needs, traffic congestion will worsen and economic growth in the region will slow.[17]

The entire region will suffer if the region does not invest in Metro. A preliminary analysis from the DC CFO shows that failure to implement dedicated funding will hurt all localities in the region. To bring Metro to State of Good Repair (capital and maintenance), localities would have to contribute significant sums; for example, over 10 years, Prince George's County would contribute $1.3 billion and Fairfax County, $1.1 billion.

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[11] MWCOG, "Interim Report on Metro."

[12] Ibid

[13] WMATA, "Making the Case."

[14] MWCOG, "Interim Report on Metro."

[15] How this is calculated: the 1/4% that equals $1.0 billion is the impact of reducing the total tax revenue growth derived from the COG demographic forecast that is estimated at 2.5% annually. In other words, the population, household and employment forecast translates into about 2.5% annual growth in the combined income, property, and sales taxes for the Metro Compact area. Keeping the math simple, that is about $40 billion a year as the total tax base today. If, over 10 years, that grows at 2.5% per year, ignoring compounding, that is $10 billion more in year 10 (25% X 40). If growth is reduced from 2.5% to 2.25%, or 0.25 percent, that is a 10% reduction in growth (0.25/2.5). Ten percent of $10 billion in growth is $1.0 billion. This is oversimplified, as the calculation would be a bit larger with compounding. (Source: Office of the Chief Financial Officer, District of Columbia.)

[16] Freudberg, "Technical Panel Status Update."

[17] Jeffrey S. DeWitt, "WMATA's Funding Needs."

Localities have major competing priorities for infrastructure investments within their jurisdictions; a new regional solution is needed for these long-term Metro priorities. The table[18] below shows the bill that jurisdictions would face without a regional solution.

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Total 10-Year Funding Gap Summary

($ Millions)

CIP Funding Gap	$ 6,157.05
Maintenance Budget Gap	$ 1,300.29
Total	$ 7,457.34
Annual Average (10 Years - FY 2017-FY 2026)	$ 745.73

(Dollars in Thousands)

		FY 2017		FY 2020	FY 2023	FY 2026	Total
Jurisdictional Share Gap Funding Needed	**%**	**Current Year**	**%**	**Add-on Needed for Gap - Above Current Year**			**Gap Need**
District of Columbia	***37.2%***	***$ 416,700***	***35.7%***	***$ 232,305***	***$ 108,099***	***$ 633,556***	***$ 2,671,543***
Montgomery County	17.1%	193,050	16.4%	106,652	49,630	290,872	1,226,604
Prince George's	17.7%	235,550	17.0%	110,394	51,371	301,078	1,269,643
Maryland Subtotal	***34.8%***	***$ 428,600***	***33.4%***	***$ 217,086***	***$ 101,021***	***$ 592,071***	***$ 2,496,786***
Alexandria	4.5%	33,000	4.3%	27,761	12,918	75,712	319,276
Arlington	8.2%	77,100	7.9%	51,143	23,799	139,483	588,196
City of Fairfax	0.3%	2,550	0.3%	1,871	871	5,103	21,519
Fairfax County	14.7%	155,450	14.1%	91,683	42,664	250,048	1,054,449
Falls Church	0.3%	3,150	0.3%	1,871	871	5,103	21,519
Loudoun County	0.0%	-	4.1%	26,600	12,378	72,546	283,520
Virginia Subtotal	***28.0%***	***$ 271,250***	***30.9%***	***$ 200,969***	***$ 93,521***	***$ 548,104***	***$ 2,289,007***
Unfunded	***100.0%***	***-***	***100.0%***	***$ 650,360***	***$ 302,641***	***$ 1,773,731***	***$ 7,457,336***

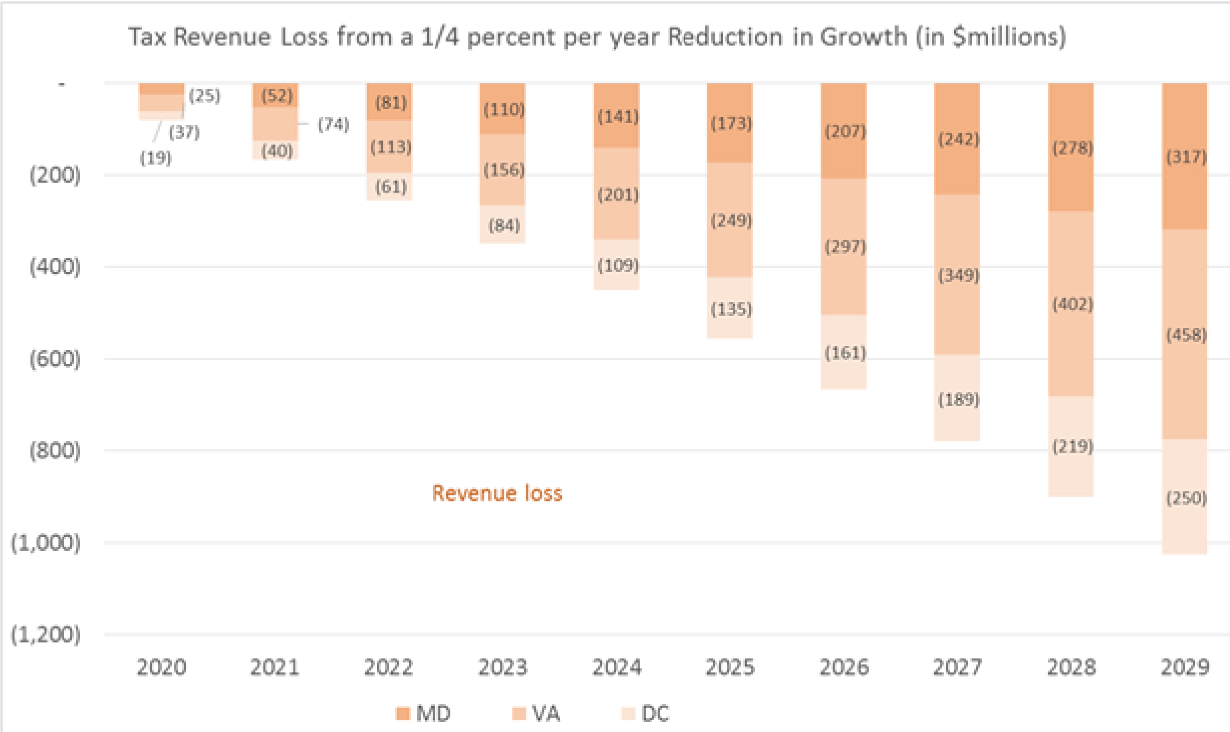
See the full Pro Forma for greater details

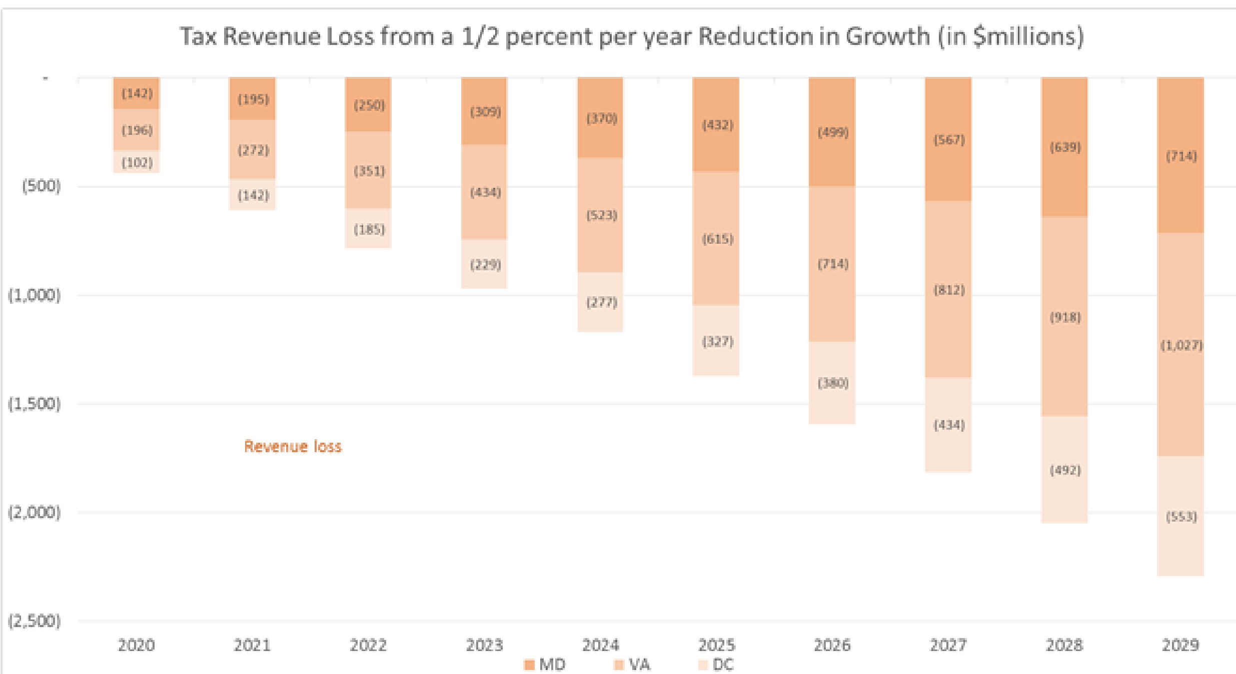
Failure to invest in Metro will slow economic growth in the region, resulting in annual losses to area income taxes, estimated from $1 to 2.3 billion in 10 years.[19]

Regional growth forecasts rely on a fully functioning Metro system. The worse Metro performs, the lower the region's ability to accommodate population and job growth will be. The reduction in growth will negatively impact local jurisdiction Sales, Property, Income, and Corporate taxes. Below are charts that show the loss in local tax revenue of a 0.25% and a 0.5% percentage point reduction in growth. These reductions are off of the baseline revenue growth rate of 3%. This was found from the 1% real growth in population/jobs coming from the COG regional forecasts and per capita income growth of 2% being conservatively assumed.

[18] Ibid

[19] Ibid


Tax Revenue Loss from a 1/4 percent per year Reduction in Growth (in $millions)
Revenue loss
MD
VA
DC


Tax Revenue Loss from a 1/2 percent per year Reduction in Growth (in $millions)
Revenue loss
MD
VA
DC

CAPITAL AND MAINTENANCE FUNDING NEEDED

As an essential asset to our region, Metro must continue on its path to State of Good Repair, so that the region can depend on reliable, safe service that is sustainable over the long-term. Years of deferred maintenance, insufficient financial investment, and expanding service hours (reducing time available for track maintenance) have brought us to the current state.

To bring Metro to a safe, reliable and stable State of Good Repair, WMATA must make a number of capital investments (totaling $15.6 billion) over the next 10 years[20]:

- Rail vehicles and vehicle parts: $3.3 billion
- Rail systems: $3.0 billion
- Track, structures, and systems: $2.1 billion
- Passenger facilities and stations: $2.6 billion
- Bus and paratransit investments: $2.6 billion
- Business support systems: $2.0 billion
- Repayment of short-term borrowing: $0.2 billion

In addition to this $15.6 billion for capital needs, an additional $1.3 billion over a 10-year period is needed for maintenance of the capital investment. Localities have major competing priorities for infrastructure investments within their jurisdictions; a new regional solution is needed to pay for these long-term Metro priorities.

Capital and Maintenance Needs Will Continue

In addition to these important safety and reliability projects, there are many known projects on Metro's list of needs. Here are additional critical capital projects (not part of the $15.6 billion) that are also important for safety and reliability. Their timing will vary and some are likely to stretch beyond the 10-year period for State of Good Repair. Other projects will come up and be added to the list over time. Estimated costs of other critical capital projects beyond the State of Good Repair are analyzed in the Capital Needs Inventory[21] as requiring as much as estimated $10 billion.

- New Rosslyn Connection
- Major Station Capacity Increases
- Heavy Overhaul Facility (Rail)
- Red Line Water Remediation
- Improved Tunnel Ventilation
- Bladensburg Bus Garage
- Metro Office Facilities

[20] Ibid

[21] Washington Metropolitan Area Transit Authority, "10-Year Capital Needs; Inventory and Prioritization, CY 2017-2026 Needs," November 2016, accessed April 19, 2017: https://www.wmata.com/initiatives/plans/upload/CNI-full-report-and-appendices.pdf

THE FUNDING GAP

Having agreed that Metro is an essential regional asset -- one that needs significant **capital and maintenance** investment -- the Technical Panel examined budgets and needs. After fully evaluating WMATA's long-term needs, the Panel determined that the fundamental problem is that WMATA's capital needs are vast, sustained long-term maintenance is essential, and insufficient funding is currently available.

The Panel spent the better part of year determining how best to fill the significant funding gap for capital and maintenance.

Capital Funding Gap

The capital funding required to achieve a State of Good Repair is $15.6 billion of investment over the next 10 years. Analysis of anticipated revenues for capital investment indicates a funding shortfall (gap) for State of Good Repair of $6.1 billion or an annual average gap of $610 million per year (pay-as-you-go). The total estimated capital funding need is higher than the previous estimate in the Interim Report of 12.6 billion. It is not possible to close this gap through farebox revenue and cost-saving measures alone. The vast majority of Metro's funding gap is due to insufficient capital funding, including significant capital needs beyond State of Good Repair.

Closing the Gap

The Panel concluded that the best way to provide long-term capital funding is through bonds, with dedicated funding going to pay the debt service. Bonds will distribute the cost of capital projects over the lifetime of the project, which benefits the region today, as well as future residents -- the most feasible answer. WMATA has little debt outstanding, and has the capacity to issue substantial new debt, but would need a new dedicated revenue source established to secure this new financing.

The Panel concluded that the best way to fund the debt service on the bonds would be a dedicated funding source -- a dedicated tax. The next section, "Regional Revenue Analysis," describes options on how to generate these revenues. The maintenance gap could be funded on a pay-as-you-go basis, using the same dedicated revenue source.

Assumptions

To develop estimates of long-term funding needs, the Technical Panel thoroughly vetted the District of Columbia's independent CFO's (Chief Financial Officer) financial model for calculating long-term Metro funding needs. Subsequent to detailed review by the Chief Administrative Officers and their senior financial management staffs, and acknowledgement by WMATA that the model represented a reasonable set of assumptions, the Technical Panel endorsed the DC CFO's Financial model.

In order to contain WMATA's expense growth within a reasonable operating budget, the Panel assumed WMATA will limit its spending growth. The analysis specifically incorporates annual growth caps of 3% on capital and operating expenses and 2% for some non-personnel costs. These assumptions are built into the financial analysis in this report. The primary cost and revenue assumptions in the model are:

Key Cost Assumptions Include:
● Base operating year FY 2018. ● Base capital plan year FY 2017. Using FY 2017 as the base because it was a more representative base year; the FY 2018 request was out of the ordinary. ● Analysis assumes WMATA personnel costs do not increase more than 3% per year (slower than current rate of growth). Assumes no funding increases for personnel in FY2018. ● Capital funding gap through FY 2026 estimated at ~$6.1 billion.[22] ● Operating funding gap through FY 2026 estimated at ~1.3 billion.[23] ● Operating and capital needs – updated based on FY 2018 WMATA budgets and Capital Needs Inventory (CNI). ● Analysis focused on achieving State of Good Repair, coupled with ongoing preventative maintenance. ● Use of bonding (6%, 30 year municipal type revenue bonds) to finance long-term public capital projects is good public policy, spreading costs over the lifecycle of the asset. ● Keeps fuel and utilities inflated at 2% annually.

Key Revenue Assumptions Include:
● Analysis assumes local and state operating subsidies continue at FY 2018 level, escalated 3% annually and that capital contributions continue at FY 2017 level, escalated at 3% annually. ● Analysis assumes Federal PRIIA ($150 million + $150 million DC-MD-VA match) and FTA funding continue at same level.[24] ● Assumes passenger revenue growth -- from ridership and/or fare increases -- of 3% starting in 2021.

Recent analyses bring overall conclusions:[25]

- Recent analyses indicate 10-year capital funding gap larger, operating funding gap smaller than October 2016 estimates.
- Similar to October 2016 conclusion, recent analyses suggest dedicated funding starting in FY 2019, coupled with debt financing, is required to fund State of Good Repair capital needs gap, plus maintenance cost gap, and additional critical capital project investments.

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[22] Freudberg, "Technical Panel Status Update."

[23] Ibid

[24] DeWitt, "WMATA's Funding Needs."

[25] Freudberg, "Technical Panel Status Update."

REGIONAL REVENUE ANALYSIS

Metro is a regional asset, a regional issue, and a regional priority. This regional priority needs a regional solution, as well as a regional viewpoint.

Bridging the Funding Gap

Metro faces a capital gap of $15.6 billion through FY 2026 and a maintenance gap estimated at ~$1.3 billion,[26] plus as documented in the Capital Needs Inventory[27], has at least several billion dollars of additional critical capital needs.

Revenue Options

The Panel considered a wide range of revenue options for the WMATA Compact region. They are described briefly here, and in more detail in Appendix B, "Revenue Options," and Appendix C, "Tax Options for Funding Metrorail's Capital Needs."[28]

Type of Tax	Tax Increase	Annual Tax Revenue Collected in WMATA Compact Region
Sales Tax	1.0%	$650 million
Property Tax (all property)	8 cents per $100	$650 million
Property Tax (½ mile from Metro)	43 cents per $100	$650 million
Gas Tax	16.3% increase	$650 million

- Sales Tax -- a 1% general sales tax in the region would generate the required amount, and would spread the cost widely, not only across the region, but also including tens of millions of visitors.
- Property Taxes -- To raise the needed amount, the property tax rate would have to be increased 8 to 43 cents, which is significant, especially for homeowners and businesses within a half-mile of Metro stations.
- Gas Tax -- reaching the required amount would require a 16.3% increase in gas tax across the region.

[26] Ibid

[27] WMATA Capital Needs Inventory

[28] Jeffrey S. DeWitt, "COG Technical Report -- Tax Options for Funding Metrorail's Capital Needs," April, 2017.

The table below provides the estimated revenue raised from each of these four options by jurisdiction:

Metropolitan Washington
Council of Governments

Distribution of Regional Uniform Taxes Collected by Jurisdiction

Jurisdicitons:	District of Columbia	Montgomery County	Prince George's County	Arlington County	City of Alexandria	Fairfax County	City of Falls Church	City of Fairfax	Loudon County	
Scenarios to raise $650 million per year:										
1) Sales Tax										TOTAL
Uniform tax rate to generate $650mm	**1.00%**	**1.00%**	**1.00%**	**1.00%**	**1.00%**	**1.00%**	**1.00%**	**1.00%**	**1.00%**	
Amount paid by jurisdiction w/uniform rate	$ 148	$ 91	$ 81	$ 39	$ 32	$ 179	$ 4	$ 10	$ 66	$ 650
Jurisdiction share of the total revenue	22.8%	14.0%	12.5%	6.0%	4.9%	27.6%	0.6%	1.5%	10.2%	100.0%
2) Property Tax										TOTAL
Uniform tax rate to generate $650mm ($/$100 of assessment)	**$ 0.080**	**$ 0.080**	**$ 0.080**	**$ 0.080**	**$ 0.080**	**$ 0.080**	**$ 0.080**	**$ 0.080**	**$ 0.080**	
Amount paid by jurisdiction w/uniform rate	$ 142	$ 124	$ 59	$ 55	$ 31	$ 176	$ 3	$ 5	$ 58	$ 652
Jurisdiction share of the total revenue	21.7%	19.0%	9.1%	8.5%	4.7%	27.0%	0.4%	0.7%	8.9%	100.0%
3) Property Tax near Metro										TOTAL
Uniform tax rate to generate $650mm ($/$100 of assessment)	**$ 0.428**	**$ 0.428**	**$ 0.428**	**$ 0.428**	**$ 0.428**	**$ 0.428**	**$ 0.428**	**$ 0.428**	**$ 0.428**	
Amount paid by jurisdiction w/uniform rate	$ 328	$ 67	$ 28	$ 108	$ 32	$ 80	$ 4	$ 4	$ -	$ 650
Jurisdiction share of the total revenue	50.5%	10.3%	4.3%	16.5%	4.9%	12.4%	0.6%	0.6%	0.0%	100.0%
4) Gas Tax										TOTAL
Uniform tax rate to generate $650mm	**16.3%**	**16.3%**	**16.3%**	**16.3%**	**16.3%**	**16.3%**	**16.3%**	**16.3%**	**16.3%**	
Amount paid by jurisdiction w/uniform rate	$ 41	$ 169	$ 148	$ 26	$ 19	$ 160	$ 8	$ 12	$ 67	$ 650
Jurisdiction share of the total revenue	6.3%	26.0%	22.8%	4.0%	3.0%	24.6%	1.2%	1.8%	10.4%	100.0%

The Panel also considered two other options:

- Value Added Tax (VAT) -- a tax on the value-added at each stage in production of goods and services. Exists nowhere in the United States; elsewhere, it is implemented as a national sales tax.
- Commuter Tax -- two states cannot tax the same earned income; also, Congress barred the District in 1973 from imposing a commuter tax.

A Shared Regional Economy

It's important to have this discussion in the context of the regional economy. People who live, work, visit and play in the region do so across the region, without regard to jurisdictional borders. People in DC buy their cars in Maryland or Virginia. People stay in an Arlington hotel and eat meals in DC. Virginia residents visit National Harbor for dinner and a show.

And the region includes the tens of millions of people who come here to visit -- for business, for vacation, to run a marathon, to visit our attractions, to witness history. They, too, use -- and can help pay for -- Metro.

Metro benefits everyone -- those who take Metro and those who do not. Metro removes vehicles from the roads, relieves congestion, lessens the need for additional roads, bridges, and parking, and brings environmental benefits, including fewer carbon emissions. Everyone has a stake in Metro and its success.

In order to support bond funding needed for Metro's critical capital and maintenance needs, it is necessary to find a method to generate the hundreds of millions of dollars per year, to pay the debt service and pay-go for maintenance.

This is **new money** -- money that is not collected today. This new money will come from the entire region … and will be dedicated to capital/maintenance needs for an essential regional entity.

This includes not only those who live in the NCR (National Capital Region), but also anyone who comes here for business, for vacation, for a visit, for entertainment. Government officials may think of jurisdictions as individual and separate, but people flow back and forth across boundary lines without giving it much thought.

An important part of running a major rail system is the needed ongoing maintenance and investment. Metrorail was originally conceived as a regional Compact, without dedicated funding. It is the only major big-city rail system in the U.S. (perhaps the world) without dedicated funding. This lack puts Metro -- known as "America's Subway" -- at risk, and keeps Metro from regaining world-class status. As Greater Greater Washington noted, "And while securing dedicated funding wouldn't fix all of Metro's woes, a more stable and reliable operating budget funding would bring Metro's budget in line with other systems and help provide a stronger platform for keeping the entire system in a state of good repair."[29]

REGIONAL APPROACH: PROPOSED SALES TAX

The Panel worked together to consider and analyze numerous options for dedicated regional funding. The Panel believes that Metro is so important to our region that the region must invest in its future. The Panel concludes that the sales tax best meets criteria for funding the capital and maintenance needs gap and additional critical capital projects.

The Panel recommends that the COG Board take a serious look at proposing that DC, Maryland and Virginia add to the general sales tax in all Metro Compact jurisdictions. It is not a perfect solution, but it comes closest to collecting revenue as if a regional taxing entity existed, and is an efficient and stable method to generate the revenue needed for Metro's critical capital needs.

A uniform regional sales tax brings many benefits:

- Easily understood by the public.
- All residents in the Metro Compact area pay the same
- For example, a 1% increase in the sales tax is equitable across the region, wherever a purchase is made.
- Provides stable funding source well understood by investors to debt-finance substantial capital infrastructure needs at low interest rates.
- Dedicated sales tax is source of funding for most large transit systems in the nation.
- It is a reasonable solution that spreads the cost widely, over the entire region, including tens of millions of visitors annually.
- Dedicated, stable funding allows for longer-term capital planning not currently included in the $15.6 billion needed for a State of Good Repair.

The Panel's conclusion regarding the sales tax option is the same as one made in 2005. A COG report then also concluded with its "preferred option" for a regional sales tax: "Based on revenue production and the rating criteria, the Panel finds that four revenue sources would be most appropriate for consideration by regional elected officials. Among these the preferred option would be a uniform regional sales tax … While there are issues as to the incidence of the tax and its

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[29] Matt Eldridge and Rayanne Hawkins, "How does Metro's funding compare to other cities' systems?", Greater Greater Washington, March 25, 2016; accessed April 7, 2017: https://ggwash.org/view/41125/how-does-metros-funding-compare-to-other-cities-systems

regressivity, at the levels contemplated these should not overcome its simplicity, its effectiveness in capturing visitor revenue, and its ability to grow with the regional economy."[30]

The Panel acknowledged there are differences between jurisdictional revenue generation from the sales tax and the WMATA funding formula. As these and other issues arise in the implementation phase, more discussion will be needed by policy officials to work out those details.

PERFORMANCE METRICS

WMATA tracks hundreds of performance metrics every year. This information helps them identify priorities and where improvements need to be made. The Panel has selected these metrics as important measures of Metro's progress: safety, reliability, customer experience, financial management. The metrics from 2016:[31]

> **Safety.** Safety is Metro's highest priority. For 2016, Metrorail's "major events" (collisions, derailments, etc.) will end up slightly lower than 2015. Major events overall -- including Metrobus and MetroAccess -- will end up slightly higher than 2015.
>
> While it's vital that the region helps Metro make needed capital/maintenance improvements, WMATA ranks third-lowest in the nation for fewest "major events" among major heavy rail systems, on a per-mile basis. (Miami-Dade Transit and San Francisco Bay Area Rapid Transit are lower.)[32]
>
> **Reliability.** Metrorail's on-time performance is at 70%, with 85% completing trips within 5 minutes of expected arrival time. New railcars and continued preventative maintenance are expanding reliability and making steady improvements. Customer surveys help measure rider satisfaction. WMATA has already accepted 316 of the 748 7000 Series railcars ordered.
>
> **Cost recovery.** Looking at the past four years, Metro's cost recovery ratio is currently at its lowest -- 47%, largely due to the impacts of SafeTrack and reduced service.
>
> **Financial.** WMATA ended FY 2016 on budget and completed its audit on time with no new findings. WMATA's federal ECHO privileges were restored for future grants; WMATA also recovered more than $1.3 billion in grant expenses. Over the last year, WMATA has improved its ability to invest capital funds to improve the system, reaching a historic high of $1 billion in capital investment.

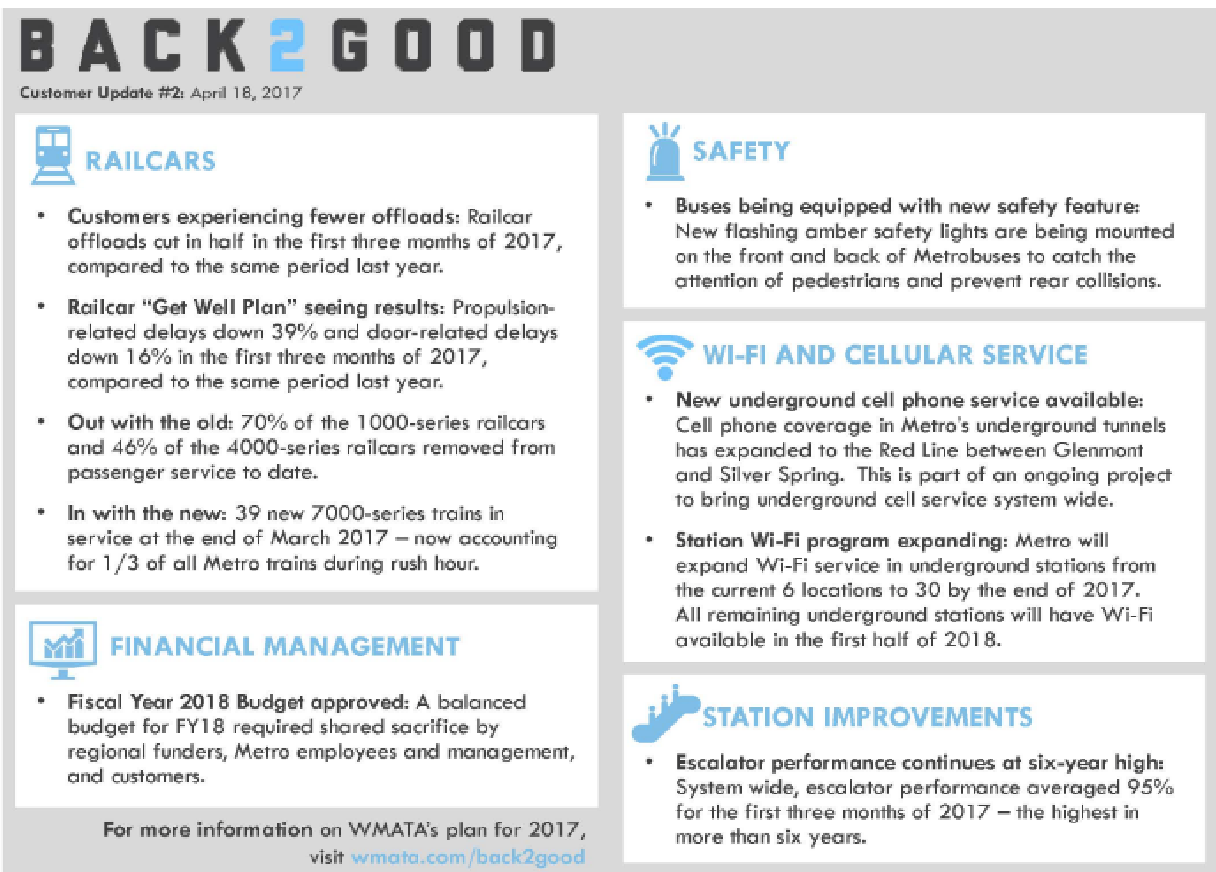
[30] MWCOG, "Report of Metro Funding Panel."

[31] Washington Metropolitan Area Transit Authority (WMATA), "Regional Measures," March 28, 2017 -- see Appendix D.

[32] Ibid

On April 18, 2017, WMATA released updated metrics for the first three months of 2017.[33] A few highlights:

- Half as many trains were offloaded in the first three months of 2017 as compared to the same period in 2016. The significant improvement in customer reliability was the result of the ongoing, accelerated retirement of all 1000- and 4000-series railcars, Metro's oldest and least reliable, respectively, combined with a "get well" maintenance program on the transit authority's other railcars to make them more reliable.
- In the first three months of the year, a total of 218 trains were offloaded (a rate of 2.4 offloads per day), as compared to 433 offloads during the same period in 2016.
- Metro's "mean distance between delays," a metric that tracks how far a railcar travels, on average, before encountering a problem that delays a train, improved nearly 70 percent - from 48,064 miles between delays in the first quarter of 2016 to 81,451 miles in the first quarter of 2017. Specifically, propulsion-related delays were down 39 percent and door problems were down 16 percent during the period.
- Metro has implemented an industry-first method of measuring on-time performance that is based on the actual customer experience, tracking travel times from the moment a customer taps into the system to the moment they tap out. So far this month, Metro customers have arrived within five minutes of their expected arrival time about 90 percent of the time, even with SafeTrack maintenance in effect.



[33] Washington Metropolitan Area Transit Authority (WMATA), "Back2Good Customer Update," April 18, 2017, accessed April 19, 2017: https://www.wmata.com/about/back2good/initiatives.cfm

Update: SafeTrack Metrics

As its SafeTrack program demonstrates, Metro is making a concerted effort to improve its safety and reliability within its existing tools and resources. The 12-month program is nearing completion; more work is necessary and will be a priority in coming years. Highlights of the work completed to date:[34]

> **Safety.** In 2016, track-related delays reduced by 7%, including delays caused by smoke, fire or arcing insulators (compared to previous year).
>
> To ensure all these programs are effective in meeting stated quality objectives, in October 2016, WMATA established an independent internal compliance department that reports directly to the General Manager, providing quality assurance and oversight. This internal compliance function, overall, is intended to promote compliance with internal policies and procedures, external laws, regulations and directives while adding greater accountability and transparency to Metro's compliance and internal control activities.
>
> **Reliability.** By the end of calendar year 2017, nearly 20 percent of all track in the Metrorail system will be refurbished, improving service reliability. This includes 50,000+ rail ties, reducing the number of defective ties to less than 5,000. More than 25,000+ track fasteners have already been replaced. More than 20,000 linear feet of grout pad have been replaced, which would have taken 2-½ years to accomplish under previous maintenance access.
>
> **Financial.** As of now, 12 of 16 SafeTrack surges are complete. To achieve this, WMATA is spending at a higher rate than in the past -- a good indicator that WMATA will be able to accelerate its infrastructure projects.

WHAT CAPITAL AND MAINTENANCE INCLUDES

In proposing this funding plan, localities have a number of expectations. The Panel expects that a significant regional investment will yield tangible results, including:

- Metro will be an organization worthy of the region's continued support and expanded investment.
- WMATA will be good stewards of our investment.
- Metro will manage an expanded budget that will help to rebuild trust with the region.
- Metrorail will be in State of Good Repair.
- Metro will continue to enable economic growth in the region.

[34] Paul J. Wiedefeld, WMATA, "Tesimony of Paul J. Wiedefeld, General Manager and Chief Executive Officer of the Washington Metropolitan Area Transit Authority; Before a hearing of the Subcommittee on Government Operations under the Committee on Oversight and Government Reform, March 29, 2017: https://oversight.house.gov/wp-content/uploads/2017/03/17-3-29-Testimony-of-Paul-Wiedefeld.pdf, accessed April 11, 2017.

The Panel expects that significant regional investment -- $15.6 billion for capital and $1.3 billion for maintenance -- will yield tangible results, including:

- Ongoing rehabilitation and replacement of track -- to ensure reliable service and restore user confidence.
- Replace nearly 600 older railcars -- this alone will greatly help to improve service and reduce outages and service time.
- Replace or rehabilitate approximately 240 escalators -- to improve access and customer experience.
- Rehabilitate approximately 100 elevators -- to improve access to trains.
- Replace or refurnish fare gates and fare boxes -- to improve customer experience and provide greater accountability.
- Replace or rehabilitate approximately 185 buses per year -- to improve service and reliability.

Additional critical capital projects (not included in the $15.6 billion), such as Rosslyn connection, relining Red Line, power systems; these may be able to be funded through available funds from the dedicated tax.

CHALLENGES FACING STATE PARTNERS

Today, state partners contribute significant funding to support WMATA and its localities.

For example, in Maryland, the state funds 100% of Maryland jurisdictions' required funding for WMATA operations and capital. For FY 2018, Maryland will provide $223.7 million in capital funding for WMATA.

The picture in Virginia tells a different story.

In FY 2018, Virginia will provide $195.6 million in funding for WMATA capital expenses, which includes $102.9 million from local member jurisdictions and $92.7 million in state funding. Officials at the Virginia Dept. of Rail and Public Transportation (DRPT) tell us that these state funds are not guaranteed going forward because the state will be losing about $110M/year in statewide transit funding with the loss of Capital Project Revenue Bonds in 2019. As of this time the state has not identified a replacement source of revenues to cover this gap, and any new funds will require action by the General Assembly. (See Appendix E for more details.)

While the localities fully support the effort to fund Metro's capital needs, the Panel is aware that state funds are not assured and must compete with other transportation priorities in the states.

The Panel consulted with and thanks representatives from the District and the states:

- Chris Conklin, Deputy Director, Transportation Policy, Montgomery County
- Todd Horsley, Director of Northern Virginia Transit Programs, Virginia Dept. of Rail and Public Transportation (DRPT)
- Jennifer Mitchell, Director, Virginia Dept. of Rail and Public Transportation (DRPT)
- K. Jane Williams, Director, Maryland Department of Transportation (MDOT) Washington Area Transit Office

CHALLENGES AND NEXT STEPS

The Panel members worked together to develop a long-term regional solution for Metro. In working toward its recommendation, all Panel members are all in full agreement that the localities must find the right solution for the region. Working together was very rewarding for Panel members, as everyone values the benefit Metro brings to our two states, District, and all our localities.

The Panel identified needs and next steps:

- COG Board accepts report from the Technical Panel and asks the Metro Strategy Group to develop recommendations for consideration at the June COG Board meeting.
- COG coordinates with the business community, with the initiative led by former Secretary LaHood in Virginia, with Maryland and D.C., with the WMATA General Manager and Board of Directors, and with others, to receive inputs.
- Legislative proposals are developed to implement the funding plan with a goal of consideration in the 2018 legislative sessions.
- The critical importance of federal funding support -- PRIIA and FTA grants -- must remain a very high priority to help contribute to Metro's long-term success.

As the old saw goes, "Sometimes the hardest thing and the right thing are the same." Metro must be preserved -- and improved -- for the good of the region.

APPENDIX A: COG BOARD RESOLUTION ACCEPTING THE CAO TECHNICAL PANEL INTERIM REPORT

Resolution R63-2016
October 26, 2016

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
777 North Capitol Street, N.E.
Washington, D.C. 20002

RESOLUTION ACCEPTING THE CHIEF ADMINISTRATIVE OFFICERS TECHNICAL PANEL ON METRO INTERIM REPORT

WHEREAS, the Metrorail system is the most significant regional transportation system and plays a critical role in meeting the National Capital Region's socio-economic and mobility needs and has served this need for the past 40 years; and

WHEREAS, the region's leaders are unified in their desire to help the Washington Metropolitan Area Transit Authority (WMATA) address the safety and service reliability issues faced by its Metrorail system that are partly due to funding constraints; and

WHEREAS, the current state of safety and service concerns associated with Metrorail and the resultant disruptions to mobility and commerce in the region reaffirms the need to thoroughly explore and address to the best of the region's ability the funding and revenue needs of the Metrorail system; and

WHEREAS, on June 8, 2016 the board adopted Resolution R39-2016 authorizing the Executive Director to convene a Technical Panel of Chief Administrative Officers and Chief Financial Officers to partner with WMATA to develop safety and reliability performance metrics for Metro, analyze operating and capital funding needs, and assess revenue options to meet operating and capital funding needs; and

WHEREAS, the panel also analyzed the economic value of Metro and its importance to the region.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS THAT:

1. The board accepts the Technical Panel's Interim Report and expresses its gratitude to its members for their support to date, and for continuing its work on this critical priority for the region.

2. The board directs the Executive Director and the Technical Panel to coordinate with the WMATA General Manager to complete its technical foundation work and provide a final report to the COG

Board of Directors by the end of the first quarter of 2017, consistent with the focus areas in R39-2016, plus the addition of analysis of the economic value of Metro.

I HEREBY CERTIFY THAT the foregoing resolution was adopted by the COG Board of Directors on October 26, 2016.

Laura Ambrosio
COG Communications Specialist

APPENDIX B: REVENUE OPTIONS

The committee considered the following revenue options, described briefly in the table below and in more detail in Appendix C.

Funding Source	Pro	Con
Sales Tax	Simple to implement/raise awareness of 1% increase	Potential legal constraints re: state approval for local add-on
	Applies equally to all Compact area jurisdictions	Not proportional to current share of jurisdictions' Metro funding
	Consistent with other large transit agencies' source of funds	Not all subject to tax utilize the service
VAT	Easier to collect than a sales tax	Administrative and political difficulty replacing a sales tax
	Self-enforcing to a large degree	Educating the public about distributional implications of a VAT
	Likely generates more revenue than a sales tax does	Is typically implemented at the National level, not State
	Affects individuals/businesses equally	--
Motor Vehicle Fuel Tax	Complements Metrorail's purpose of reducing road congestion and environmental damage by discouraging driving	Relatively low level of revenue generated; would require a very large increase in the tax rate
	--	Gasoline taxes set at state level
Commuter Tax	Tax pays for the benefits commuters receive in the jurisdiction they work	Congress barred DC from imposing a Commuter Tax on non-residents in 1973
	--	2 states cannot tax the same income, so commuter tax results in a credit for taxes paid in other jurisdictions
	--	Administrative and political difficulty in implementing

APPENDIX C: TAX OPTIONS FOR FUNDING METRORAIL'S CAPITAL NEED

Source: Office of the Chief Financial Officer, District of Columbia

One method to cover the costs of necessary maintenance and capital expenditures needed to restore the Metrorail system is to implement a new dedicated funding source. As part of the COG Metro Technical Panel, several dedicated funding options for Metrorail have been discussed. These options would generate revenue in the jurisdictions served by Metrorail (DC, Montgomery County, Prince George's County, Arlington County, City of Alexandria, Fairfax County, City of Falls Church, City of Fairfax, Loudoun County) and the revenue raised would be dedicated to funding Metrorail's maintenance and improvements. The four specific revenue options that this committee shortlisted include: Sales Tax, Value-Added Tax (VAT), Motor Vehicle Fuel Tax, and a Commuter Tax. The subsequent sections of this report discuss these options in more detail and provide the high level benefits and drawbacks of each option.

Sales Tax

In order to generate the estimated cost of necessary repairs and capital expenditures, the region could institute a 1% general sales tax. In D.C., for example, this would raise the general sales tax rate from 5.75% to 6.75%. If each jurisdiction in the region added 1% to their respective Sales and Use Taxes, the increased revenues would be sufficient to fund Metrorail's needed improvements.

There are several benefits to this proposal. First, it is simple to raise awareness of a 1% increase in tax (i.e. 1 cent on the dollar). Second, since this add-on to the sales tax would apply across all the Compact area jurisdictions, it would not change the current relative sales tax burdens across the participating jurisdictions. As such, it would not change the incentive for consumers to shop in one jurisdiction over another. Additionally, a dedicated sales tax is what most major jurisdictions around the country use to fund their transit systems, so it would be consistent with what other large transit agencies in other cities do.

Drawbacks of this proposal include legal constraints some jurisdictions may have in imposing a local add-on to the sales tax; Virginia and Maryland jurisdictions require state legislative body approval to levy a local add-on to the sales tax. Another downside of a broad-based add-on sales tax is that some of those paying pay the tax would not be Metrorail riders and might consider it unfair that they are paying for a service they do not use (although there are indirect benefits in the form of less road congestion and better air quality). Finally, the 1% regional tax is not entirely proportional to the current share of each jurisdiction's funding levels for Metro. This will need to be addressed going forward.

Value Added Tax

A value-added tax (or VAT), is used in many parts of the industrialized world but nowhere in the United States (although Puerto Rico came very close to implementing a VAT tax in 2016). Similar to the state and local sales and use tax, in many countries the VAT is implemented as a national sales tax. It is a tax on the value-added at each stage in the chain of production of both goods and services and, ultimately, consumers end up paying the entire cost of the VAT (see diagram below). One implementation of the VAT (the credit-invoice) requires that firms offset the tax they have paid on their purchase of goods and services against the tax they charge on the sales of their goods and services.

How a Value-Added Tax Works

In a country with a value-added tax, businesses collect the tax on their sales and pay it on their purchases from other businesses. Here's how a 10% VAT would apply to the production and sale of a shirt.

	STEP 1 Farmer grows cotton and sells to textile maker for **$1.00**	**STEP 2** Textile maker makes fabric and sells to clothes maker for **$5.00**	**STEP 3** Clothes maker sews shirt and sells to retailer for **$12.00**	**STEP 4** Clothing retailer sells shirt to consumer for **$20.00**
Sale price with VAT	**$1.10**	**$5.50**	**$13.20**	**$22.00**
VAT collected by seller	$0.10	$0.50	$1.20	$2.00
Credit for VAT paid in previous stage	N.A.	–$0.10	–$0.50	–$1.20
Net VAT collected	$0.10	+ $0.40	+ $0.70	+ $0.80
Total VAT collected				**$2.00**

Source: Heritage Foundation

THE WALL STREET JOURNAL.

In the illustration above, the final customer paid $22 for the shirt, of which $2 (or 10%) was the VAT embedded in the price. Effectively, the customer paid the full cost of the 10% VAT even though it was collected in increments along the production process because the intermediate stages of production can pass on the net tax paid to the following stage.

Although the VAT seems more complicated than a retail sales and use tax, proponents say a VAT is easier to collect (and harder to evade) than a sales tax. The VAT is self-enforcing to a large degree because an intermediate producer must file a tax return for taxes paid on good and services purchased; thus, tax authorities can glean information on taxes collected by an intermediate producer because businesses in the next stage in the production chain would report having paid a VAT to the prior producer. The VAT, in theory, could generate increased tax revenues, and would, like a 1% regional sales tax, not target specific individuals or businesses. However, some of the major drawbacks would include the administrative and political difficulty in replacing a sales tax with a value-added tax and educating the public about the distributional implications of the VAT. Furthermore, almost all of the existing VAT systems apply at the national level, doing so at the state or region level would be novel. The COG Metro Technical Panel did not estimate any revenues that would be generated by switching to a VAT.

Gas Tax

Every state in the U.S. implements some form of tax on motor vehicle gasoline. The state taxes are on top of the federal gasoline tax which is 18.4 cents per gallon. Some states assess a per-gallon tax rate that is collected at the pump. Other states charge wholesalers a tax on the wholesale price of a gallon, and some states assess a sales tax on the purchase of gasoline[1]. According to the American Petroleum Institute[2], the national average of both state and federal taxes for gasoline is 49.44 cents per gallon. Maryland, Virginia, and the District, comparatively, have rates of 51.90, 41.73, and 41.90 respectively.

Increasing the gasoline tax was a proposal the COG Metro Technical Panel considered in addition to the two aforementioned proposals. In the District, all revenue generated by the Motor Vehicle Fuel Tax is dedicated to the Highway Trust Fund. Each fiscal year, the District generates roughly $20 million from this tax. To raise enough revenue to bridge the capital funding gap, all the jurisdictions would have to significantly increase their gasoline tax rates. This was quickly seen as unfeasible. Another difficulty with this idea is that gasoline taxes are currently set at the state level for Maryland and Virginia and some legislative changes at the state level to increase the tax rates in the Metrorail jurisdictions.

Commuter Tax

A commuter tax is a tax charged to persons who work, but do not live, in a certain locality. In the metropolitan D.C. area, for example, the idea would be that the District would levy a tax on the roughly 300,000 Maryland and Virginia residents who work in the District, while Maryland and Virginia jurisdictions in the Compact Area would tax District residents working in their jurisdictions. The underlying argument for this is that this tax would pay for the public services that benefit commuters (including the direct and indirect benefits of Metrorail) in the jurisdiction they work. Since two states cannot tax the same earned income, a commuter tax would require that residents filing taxes in their home jurisdiction receive a credit for taxes paid to other jurisdictions – an obvious point of contention to those states.

The idea of a commuter tax in the DC area has been long discussed. In fact, as part of the Home Rule Act of 1973, Congress barred the District from imposing a commuter tax on non-residents. The controversial point here was that more than 40 communities across the country, however, do levy commuter taxes -- none subject to congressional approval.[3]

The COG Metro Technical Panel did not evaluate potential tax rates or revenues generated by a commuter tax as it is, in terms of feasibility, quite difficult to implement.

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[1] https://taxfoundation.org/state-gasoline-tax-rates-2016
[2] http://www.api.org/oil-and-natural-gas/consumer-information/motor-fuel-taxes/gasoline-tax
[3] http://www.washingtonpost.com/wp-dyn/content/article/2005/11/04/AR2005110401052.html

APPENDIX D: WMATA REGIONAL MEASURES

Source: WMATA, March 28, 2017

Regional Measures
Washington Metropolitan Area Transit Authority

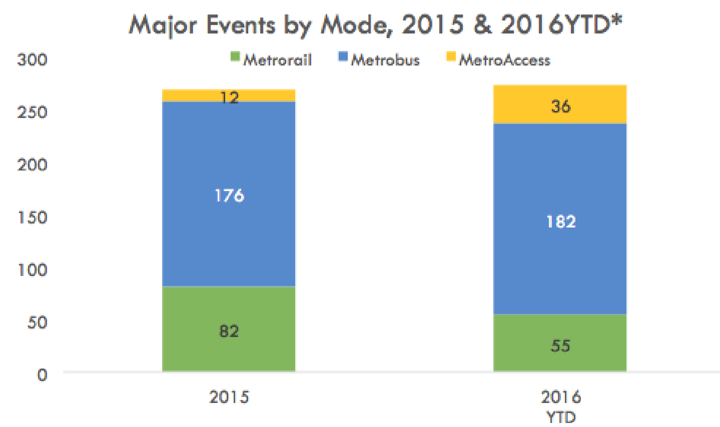
Metropolitan Washington
Council of Governments

Priorities | **CY2016 Results**

Safety - How Metro is making safety its first priority and ensuring it will continue to significantly improve in a way that restores the trust of the public and regulators

As measured by

- National Transit Database (NTD)-reported Major Events, including collisions, derailments, fires, security incidents, and all other reportable events

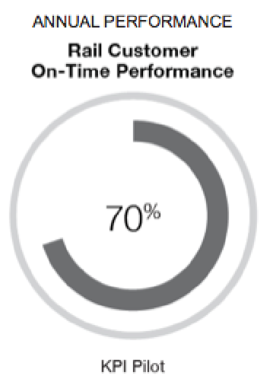


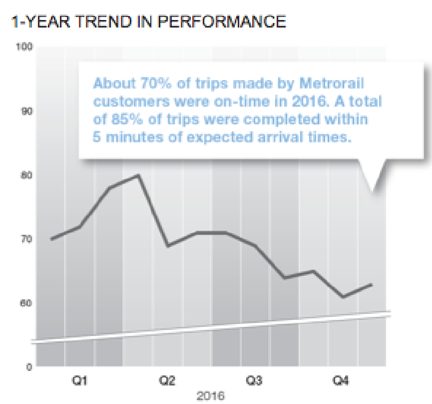
*2015 includes full-year data; 2016 includes YTD through November

Reliability - How Metro is ensuring riders will get to destinations on time and delivering quality customer service

As measured by

- Rail customers on time (MyTripTime)
- Customer experience ratings, based on a quarterly survey of nearly 800 customers.





Customer Experience
70% Overall experience

Experience Factors from Q3 of Calendar Year 2016
60% Service Reliability
79% Personal Safety/Security
70% Customer Service

Regional Measures
Washington Metropolitan Area Transit Authority

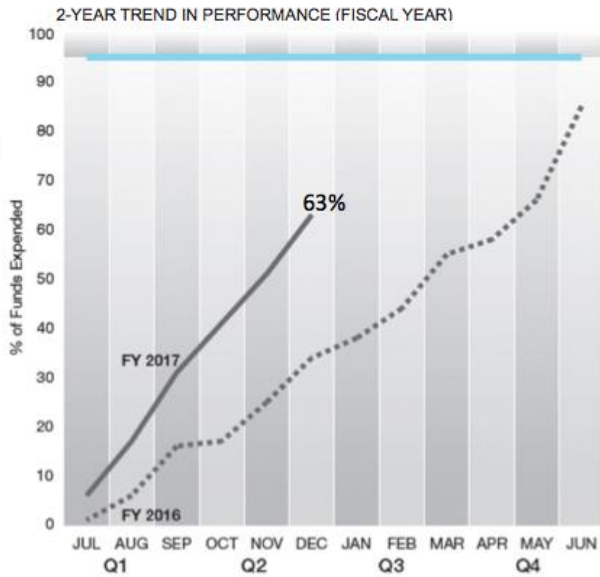
Metropolitan Washington
Council of Governments

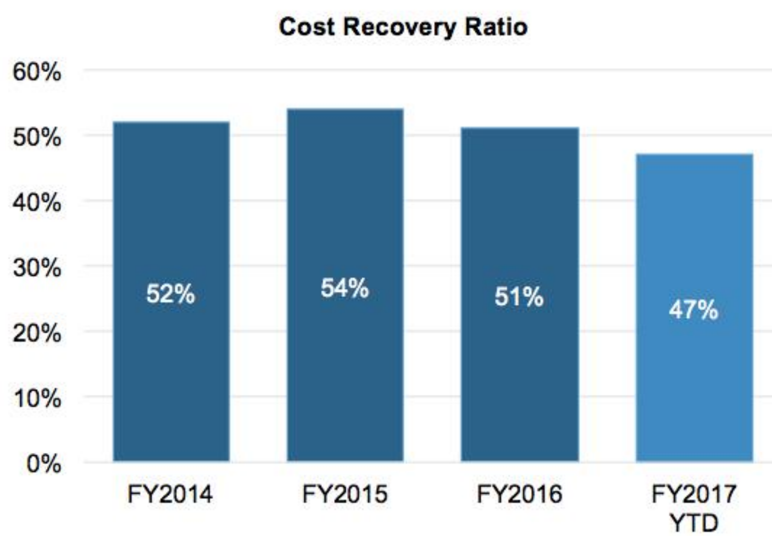
Priorities	FY2017/Q1 & Q2 Results

Financial - How Metro is managing capital funds to make smart investments and restore the system and operating efficiently to limit the need for growth in jurisdictional subsidies

As measured by

- Capital Funds Invested
- Cost Recovery Ratio

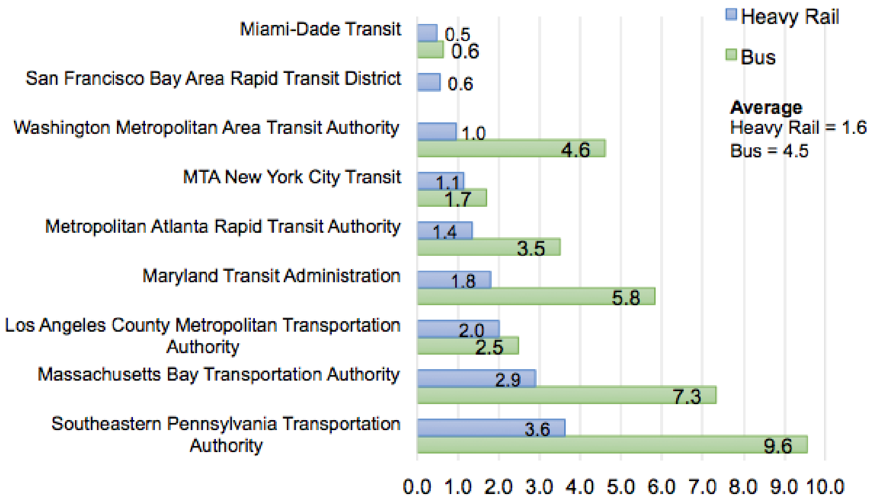




Definitions and Context

Major Events. National Transit Database-reported Major Events include the following Safety & Security event data reported via NTD form S&S-40 in five categories: (1) Collisions (includes all collision types reported to NTD, excludes suicides), (2) Derailments (includes all derailments reported to NTD), (3) Fires (includes all fires reported to NTD), (4) Security (includes all security events reported to the NTD), and (5) NOC ("Not Otherwise Classified" includes all other reportable events). The following chart compares WMATA to peer transit agencies.

Safety: Major Events divided by Millions of Vehicle & Passenger Car Revenue Miles, 2015



Source: National Transit Database, 2015 data (most recent full-year available)

Rail customers on time (MyTripTime): Percentage of customer journeys completed on time using customer Smartrip data. Number of journeys completed on time ÷ Total number of journeys

Factors incorporated in this measure include: railcar availability, fare gate availability, elevator and escalator availability, infrastructure conditions, speed restrictions, single-tracking around scheduled track work, railcar delays (e.g., doors), or passenger-caused delays.

Customer experience: Based on a quarterly customer satisfaction survey of nearly 800 customers. Measure derived from aggregation of experiential factor ratings.

Capital Funds Invested. Percentage of capital budget spent. Cumulative monthly capital expenditures ÷ fiscal year capital budget, including actual rollover from previous fiscal year

Cost Recovery Ratio. Total share of operating expenses recovered through non-subsidy revenue generation, including passenger fares, parking, advertising, and real estate.

APPENDIX E: VIRGINIA STATE FUNDING

Source: Virginia Department of Rail and Public Transportation (DRPT)

In Virginia, state funding for mass transit capital projects is currently provided from three primary sources. In FY 2018 state funding is estimated to be approximately $249 million from the following:

- Approximately $98 million annually from the state Transportation Trust Fund (TTF)
- Approximately $41 million from federal grant funds
- $110 million annually from Transportation Capital Project Revenue (CPR) bonds
    - The CPR bonds have a 10-year term that will expire in 2018 and cannot be renewed or extended
    - CPR bonds provide $60 million annually for statewide transit capital needs
    - CPR bonds also provide $50 million annually for state match to federal PRIIA funding for state of good repair needs at the Washington Metropolitan Area Transit Authority (WMATA)

In FY 2018, Virginia will provide $195.6 million in funding for WMATA capital expenses, which includes $102.9 million from local member jurisdictions and $92.7 million in state funding. Officials at the Virginia Dept. of Rail and Public Transportation (DRPT) tell us that these state funds are not guaranteed going forward because the state will be losing about $110M/year in statewide transit funding with the loss of Capital Project Revenue Bonds in 2019. As of this time the state has not identified a replacement source of revenues to cover this gap, and any new funds will require action by the General Assembly.

CPR bond revenues currently comprise approximately 44% of revenues used for state funding for mass transit capital projects. Expiration of these bonds in 2018 will leave transit systems in the Commonwealth, including WMATA, without necessary funds for capital improvement, at a time when transit demand and needs continue to grow across Virginia.

Today DRPT is able to provide state funding for 68% of the cost of rolling stock purchases and 34% of costs for most transit facility and systems projects. Assuming no additional revenues are generated, by 2021 DRPT will be unable to provide funding for any transit expansion projects and state funding for state of good repair projects would likely be capped at 36%. This reduced state transit capital funding will require local jurisdictions to significantly increase the amount of funding they will be required to contribute to transit capital projects at their own local transit systems as well as to WMATA. In FY 18, local jurisdictions in Virginia who are members of the WMATA Compact are budgeted to provide $208.7 million in local funding for WMATA capital expenses.

In 2016, the Virginia General Assembly enacted HB 1359, creating the Transit Capital Revenue Advisory Board (RAB) to examine the impacts of the forthcoming revenue reduction created by the expiration of the CPR bonds in 2018. Additionally, the RAB is tasked with identifying possible sources of replacement revenue, and to develop methodologies for prioritization of transit capital funds similar to the successful HB2 (SMART SCALE) program enacted in 2015.

Thus far, the RAB has focused on validating the transit capital needs and developing a transit capital prioritization process. The transit capital needs work was summarized in three ten year (FY 18 – FY 27) funding scenarios with the conservative base case projecting a funding gap of $178M in FY 27.

Furthermore, analysis indicates that existing state transit capital funds are insufficient to cover just those needs associated with maintaining a state of good repair for existing transit assets. Consequently, existing state transit capital grant match rates cannot be maintained without additional revenue. Reduced state capital grant contributions will likely result in a reduction in transit capital investments by Virginia transit agencies, or will require additional funding from local, regional, or federal funding sources to make up the gap created by reductions in state funding.

For the purpose of prioritization, it is proposed that projects will be divided into two major groups that will follow separate prioritization processes: State-of-Good Repair (SGR) and Major Expansion projects. In this proposed approach, minor capital expansion projects will be evaluated and prioritized using the same criteria as the SGR projects. Both prioritization processes will use a different set of criteria and scoring process, and will ultimately lead to two separate lists of prioritized projects. Project scores would be compared against other transit projects and ranked relative to cost (i.e. cost-effectiveness) within the two categories.

APPENDIX F: WMATA'S FUNDING NEEDS PRESENTATION TO THE COG BOARD

Presentation made by Jeffrey DeWitt, District of Columbia CFO to the COG Board of Directors on April 26, 2017.

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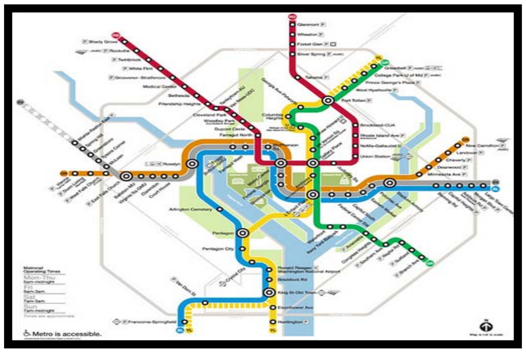

WMATA’s Funding Needs

The Magnitude and the Effect

Updated to Reflect WMATA’s Proposed FY 2018 Budget

Presentation to the COG Board

April 26, 2017

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Overview

- Development of a reasonable basis to estimate the total WMATA funding gap
  - ✓ *Realistic State of Good Repairs (SGR) capital needs*
  - ✓ *Operating and maintenance gap*

- The models initially developed for this analysis have been updated based on WMATA's Proposed FY 2018 operating and capital budgets

- Potential impact of the Capital Needs Inventory (CNI) versus the CIP

- Need for additional contributions to fill the gap, and the impact on jurisdictions

- Determine the needed level of a dedicated funding source

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Assumptions to Address the Funding Gap

Data

- Created "out-year" funding based on WMATA's FY 2018 proposed budget for expenses.
- Used WMATA's 6-year CIP (FY 2018-FY 2023) as basis for capital needs analysis.
- Developed key forecasting assumptions (inflation, growth, etc.).
- Included Loudoun County and Metropolitan Washington Airports Authority (MWAA) impacts (beginning in FY 2020).

Funding Assumptions

- Federal PRIIA contributions will continue at present levels through FY 2026
- Jurisdictional contribution changes:
  - ✓ *Operating and Maintenance - 3% annual increases using FY 2018 as the base*
  - ✓ *Capital – Assumes we will meet the FY 2018 WMATA need, and then beginning in FY 2019 applied a 3% annual increase - using FY 2017 as the base year*
- Assumes dedicated funding source (beginning in January of 2019), escalated at 3% per year

Analysis

- Determine operating and maintenance gap
- Determine capital gap
- Determine impact of a dedicated regional tax to fund shortfall

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Key Assumptions – Operating and Maintenance

Operating and Maintenance Budget

- Required State of Good Repair maintenance (Safe-Track) is built into the WMATA proposed budgets.
- Assumed WMATA's FY 2018-2020 operating budget, then escalated after that at 3% annually.
- Passenger revenues track WMATA estimates through FY 2020, and then are escalated at 3% annually to reflect either ridership and/or fee increases, beginning in FY 2021.
- Assumes Jurisdictions will contribute to meet the FY 2018 need.
- Assumes State and local operating subsidies grow at a 3% annually compounded rate (FY 2018 as the base year). Personnel, services, materials and supplies are inflated at a 3% compounded annual rate.
- Fuel, propulsion power and utilities are inflated at a 2% annual compounded rate.
- Reflects additional operating expenses of Silver Line coming online in FY 2020.
- OPEB contributions are increased per the FY 2017 assessment recommendation – starting in FY 2019.
- Funding gap does not reflect any potential impacts of a new collective bargaining agreement.

(Dollars in Thousands)

	10 Year Total
Revenues:	
Passenger	$ 7,710,909
Other Passenger	$ 209,154
Parking	$ 468,667
Advertising	$ 263,456
Joint Development	$ 86,027
Fiber Optics	$ 162,023
Other	$ 118,967
Jurisdictional Reimbursements	$ 320,584
Total Direct Revenues	**$ 9,339,788**
State & Local Subsidy Request	10,757,967
Total Revenues	**$ 20,097,755**
Expenses:	
Personnel	$ 14,986,925
Services	$ 3,320,006
Materials and Supplies	$ 1,386,991
Utilities - Fuel	$ 368,075
Fuel and Propulsion Power	$ 943,349
Casualty and Liability	$ 330,620
Leases and Rentals	$ 95,090
Miscellaneous	$ 60,364
Capital Allocation	$ (472,609)
OPEB - Additional Need based on FY 2017 Assessment	$ 180,000
Total Expenses	**$ 21,198,810**
Operating and Maint Gap (Expense minus Revenue)	***$ (1,101,056)***
State and Local Debt Service (Metro Matters)	$ (199,232)
Total Funding Gap	**$ (1,300,288)**

See the full Pro Forma for greater details

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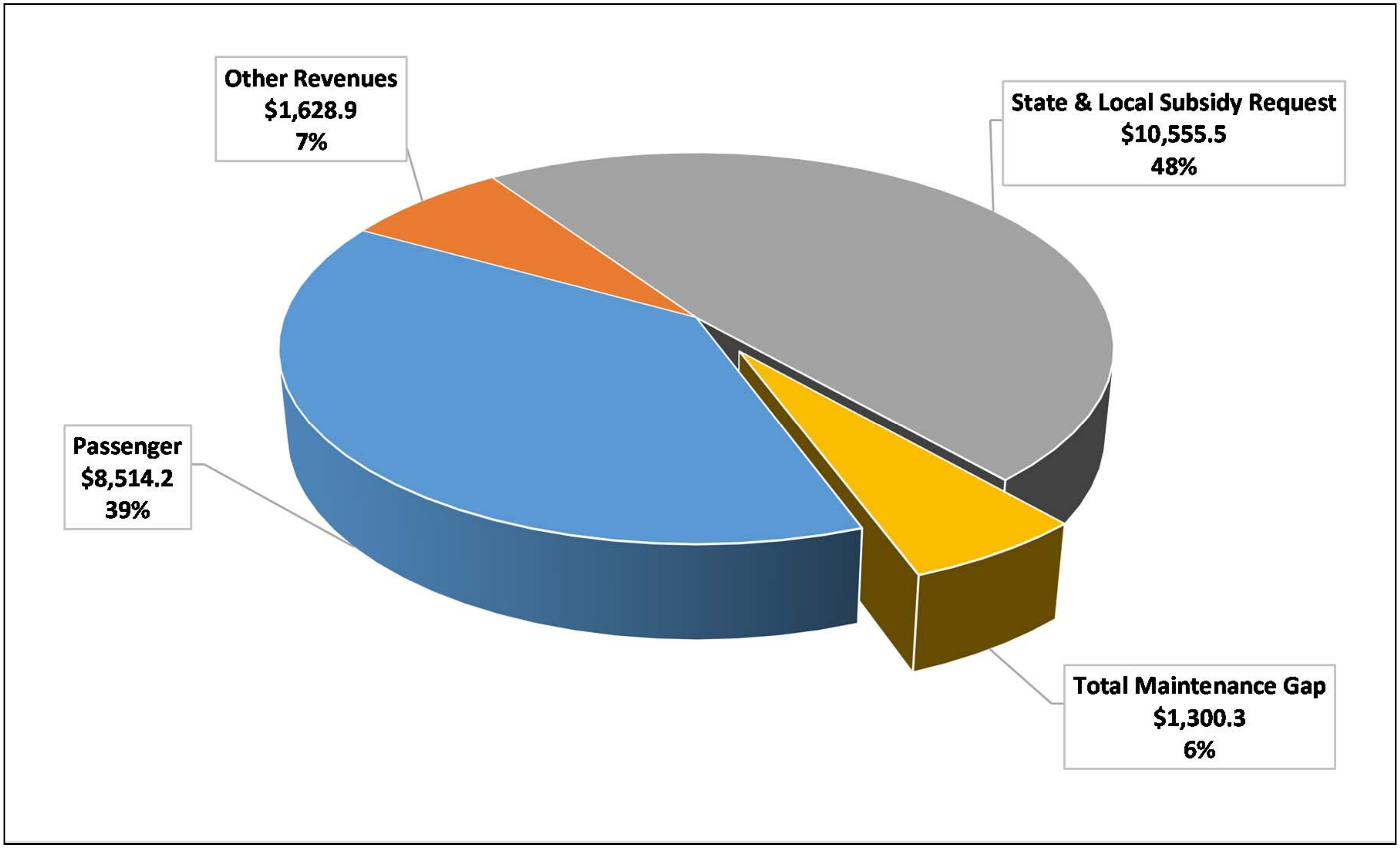
Operating Revenue & Maintenance Funding Gap
(in $millions)



Total is approx. $21 Billion

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Key Assumptions - CIP

Capital Improvements Program

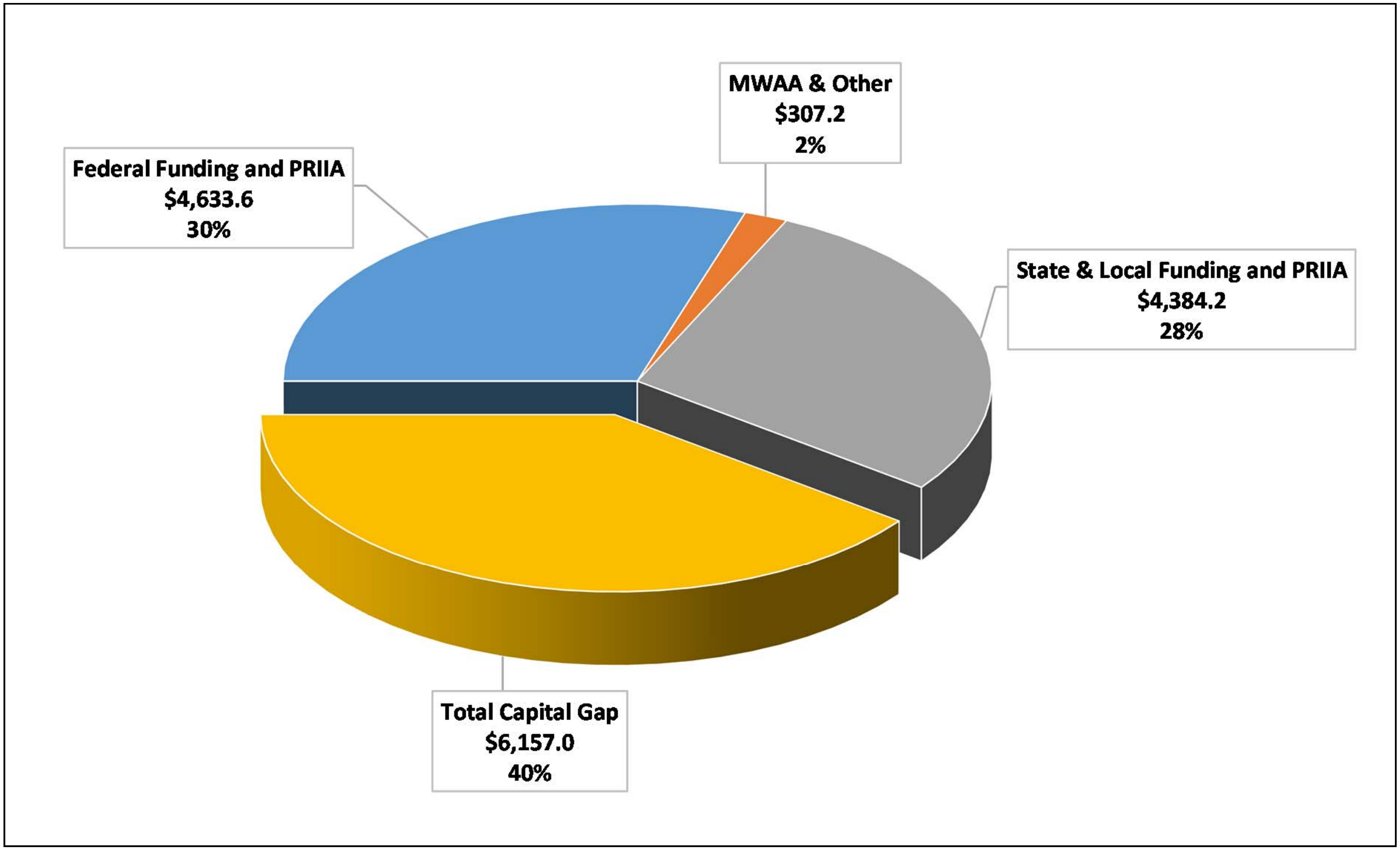
- Assumes PRIIA funding is continued at current levels beyond FY 2019, and assumes Federal Formula Grants remain flat.
- The 6-year CIP is from WMATA's "FY 2018 Proposed Budget – December 1, 2016".
- Assumes the jurisdictions meet the WMATA requested budget for FY 2018.
- Assumes 3% annual escalation on jurisdictional contributions for the remainder of the 10 year period (above FY 2017 base).
- Used the WMATA proposed 6-year CIP of $7.2B – the additional $8.4B was assumed to occur beyond the CIP planning period, and within the 10 year plan, for a total of $15.6B total CIP.
- Based on CNI SGR adjusted to reflect safety and reliability totaling approx. $15.6 billion.

(Dollars in Thousands)

	10 Year Total
Sources:	
Federal Formula Grants	3,053,350
Other Federal Grants	58,200
Federal PRIIA	1,522,000
Federal Subtotal	***4,633,550***
MWAA	292,000
Other	15,200
State and Local PRIIA Match	1,522,000
Local Match to Federal Formula	764,650
System Performance - Local ('Regular' CIP)	1,885,452
State and Local Subtotal (per WMATA proposed budget through FY2023)	**4,172,102**
Other State and Local	62,100
Additional Short-Term Borrowing Required for Capital	150,000
Total Sources	**$ 9,474,952**
Uses:	
Rail Vehicles/Vehicle Parts	3,301,000
Rail Systems	3,036,000
Track, Structures, and Systems	2,050,000
Passenger Facilities and Stations	2,559,000
Bus and Paratransit Investments	2,572,000
Business Support	1,964,000
Repayment of Short-Term Borrowing	150,000
Total Uses	**$ 15,632,000**
Capital Funding Gap	**$ (6,157,048)**

See the full Pro Forma for greater details

Capital Budget Revenue & Funding Gap
(in $millions)



Total is approx. $15.6 Billion

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Total 10-Year Funding Gap Summary

($ Millions)

CIP Funding Gap	$	6,157.05
Maintenance Budget Gap	$	1,300.29
Total	$	7,457.34
Annual Average (10 Years - FY 2017-FY 2026)	$	745.73

(Dollars in Thousands)

		FY 2017		FY 2020	FY 2023	FY 2026	Total
Jurisdictional Share Gap Funding Needed	**%**	**Current Year**	**%**	**Add-on Needed for Gap - Above Current Year**			**Gap Need**
District of Columbia	***37.2%***	***$ 416,700***	***35.7%***	***$ 232,305***	***$ 108,099***	***$ 633,556***	***$ 2,671,543***
Montgomery County	17.1%	193,050	16.4%	106,652	49,630	290,872	1,226,604
Prince George's	17.7%	235,550	17.0%	110,394	51,371	301,078	1,269,643
Maryland Subtotal	***34.8%***	***$ 428,600***	***33.4%***	***$ 217,086***	***$ 101,021***	***$ 592,071***	***$ 2,496,786***
Alexandria	4.5%	33,000	4.3%	27,761	12,918	75,712	319,276
Arlington	8.2%	77,100	7.9%	51,143	23,799	139,483	588,196
City of Fairfax	0.3%	2,550	0.3%	1,871	871	5,103	21,519
Fairfax County	14.7%	155,450	14.1%	91,683	42,664	250,048	1,054,449
Falls Church	0.3%	3,150	0.3%	1,871	871	5,103	21,519
Loudoun County	0.0%	-	4.1%	26,600	12,378	72,546	283,520
Virginia Subtotal	***28.0%***	***$ 271,250***	***30.9%***	***$ 200,969***	***$ 93,521***	***$ 548,104***	***$ 2,289,007***
Unfunded	***100.0%***	***-***	***100.0%***	***$ 650,360***	***$ 302,641***	***$ 1,773,731***	***$ 7,457,336***

See the full Pro Forma for greater details

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Recommendations to Fund Gap

- Recommend that annual capital funding gaps be debt financed *(requires a stable, predictable and truly dedicated regional funding source)*
- This would allow for a lower annual impact on jurisdictions through debt service versus pay-as-you-go capital
- Dedicated tax revenues are estimated to comfortably cover debt service payments
- There should also be sufficient remaining dedicated tax revenues to fund the gap related to maintenance funding in the budget
- There is also estimated to be revenues remaining after funding the maintenance gap for additional critical capital projects beyond the SGR, such as expansion

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Criteria for a Dedicated Funding Source

- Ease of Implementation (Can it be done through existing systems and what are administrative costs?)
- Predictable and Sustainable (Does the source of funding allow it to be pledged for debt financing?)
- Revenue Yield (Will the source provide enough revenue to meet funding gaps without excess increases above current levels?)
- Fair and Equitable (Does the tax or fee paid reflect the commensurate benefits from the transit system funded?)

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Dedicated Funding Source Options

Type of Tax	Tax Increase	Dollars Collected
Sales Tax	1% on taxable sales	$650 Million
Property Tax (All Property)	8 cents per $100	$650 Million
Property Tax (1/2 mi. from Metro)	43 cents per $100	$650 Million
Gas Tax	16.3% Increase	$650 Million

Other options considered include Value Added Tax (VAT), Commuter Tax and Income Tax

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Benefits of a Uniform Regional Sales Tax

- Easily understood by the public and easy to administer
- All residents in the Metro compact area pay the same
- Maintains the relative competitiveness of jurisdictions within the compact
- Provides a stable funding source well understood by investors to debt finance substantial capital infrastructure needs at low interest rates
- Grows as the economy grows to fund future needs
- Captures revenues of tourists, visitors and commuters from outside of the compact area
- A dedicated sales tax is a source of funding for most of the large transit systems in the nation, including: New York (MTA), Chicago (CTA), Massachusetts (MBTA), San Francisco (BART), Los Angeles County (LACMTA), and numerous others.

Note: In 2016 sales tax referendums for transit funding passed in San Francisco, Los Angeles and Atlanta.

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Dedicated Tax to Fund Capital Gap

- ✓ For example, a 1% dedicated regional sales tax can fund all of Metro's revised SGR capital needs in a 10-year period
- ✓ Remaining tax revenues can be used to fund additional critical capital needs beyond SGR (capacity expansion or other improvements)

Fiscal Year	Capital Funding Gap[1]	Est. Debt Service to Cover Capital Gap[2]	Dedicated Tax Revenues[3]	Remaining Tax Revenues prior to Funding Maintenance Gap	Annual Maintenance Funding Gap[4]	Funds Available for other Critical Capital Projects Beyond SGR
2017	-	-	-	-	-	-
2018	-	-	-	-	(21,360)	-
2019	433,857	(31,519)	***325,000***	293,481	(70,089)	223,391
2020	494,263	(67,427)	***669,500***	602,073	(156,097)	445,976
2021	402,249	(96,650)	***689,585***	592,935	(164,952)	427,984
2022	149,911	(107,541)	***710,273***	602,732	(174,003)	428,729
2023	119,496	(116,222)	***731,581***	615,358	(183,144)	432,214
2024	1,450,608	(221,608)	***753,528***	531,920	(168,279)	363,641
2025	1,518,413	(331,918)	***776,134***	444,216	(176,884)	267,332
2026	1,588,251	(447,303)	***799,418***	352,115	(185,480)	166,636
Total	**$6,157,048**	**($1,420,188)**	**$5,455,018**	**$4,034,831**	**($1,300,288)**	**$2,755,903**

Notes:
1. Estimate. Represents the annual capital funding gap for $15.4 billion revised SGR CIP as identified by WMATA.
2. Assumes debt funding of all annual capital gap amounts; 30-year amortization and 6% cost of borrowing.
3. Conservative estimate of revenues from a 1% regional sales tax on all jurisdictions in the compact area escalated at 3% annually for growth. First year estimated to collect only 50% of revenues due to timing of implementation.
4. Estimate. FY 2018 shortfall represents Metro Matters debt service.

Est. Costs of Other Critical Capital Projects Beyond SGR (from Metro's published CNI):
1. New Rosslyn Connection – $2 billion or more
2. Major station capacity increases - $260M
3. Heavy overhaul facility (Rail) - $375M
4. Relining of Red Line tunnels – *cost TBD*

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Summary of Issues

- Allows WMATA to reach a State of Good Repair in 10 years
  - ✓ *SGR total capital needs are estimated by WMATA at $15.6 Billion*
- Effort will require metro to execute approx. $1.5B CIP annually over 10 years
- Represents a maintenance gap of $1.3 billion and a capital gap of $6.2 Billion (total 10-year combined gap of $7.5B)
  - ✓ *Far exceeds reasonable capacity of the compact jurisdictions*
- A dedicated regional funding source is essential to achieve a State of Good Repair
  - ✓ A dedicated funding source collecting approx. $650M annually, beginning in January 2019, can cover both the maintenance and capital funding gaps, as well as additional critical capital needs
- ***Without a dedicated funding source in place by January 2019, jurisdictions <u>will not</u> be able to fund WMATA's capital needs***

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Key Take-Aways

- ***At this funding level the following are required:***
  - ✓ Federal funding beyond 2019 must be continued at $150M per year with continued matching from the jurisdictions (PRIIA)
  - ✓ Local jurisdictions must meet the FY 2018 operating need, and increase operating contributions by 3% annually (over FY 2018 base year) to cover cost inflation
  - ✓ Local jurisdictions must meet the FY 2018 capital need, and increase capital contributions by 3% annually (over FY 2017 base year) to cover cost inflation
  - ✓ WMATA's non-utility costs limited to 3% annual growth
  - ✓ A regional dedicated funding source (i.e. regional sales tax) must be created to allow for sufficient debt funding of the capital gap

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Impacts of No Additional Funding

- ❑ Safe Track type delays will continue indefinitely
  - ✓Estimated cost of rush hour (only) trip delays are estimated at between $153M and $235M annually
- ❑ Passenger safety risks will continue to increase
- ❑ Traffic congestion will continue and worsen
- ❑ Approx. $25 billion of development has occurred near metro stations over the past 8 years
- ❑ Economic growth in the region will likely slow
- ❑ MWCOG economic forecast implies regional state and local government tax revenue growth from 2.5% to 4% annually, depending on per capita income growth

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Estimate of Tax Losses in Metro Compact Area
(Income, Property, Sales & Use)

- Reducing the economic forecast by 0.25% to 0.50% results in annual losses to compact area taxes, collectively, ranging from $1 billion to $2.3 billion, respectively, after ten years.

- Areas with expected growth or redevelopment near Metro stations, or where traffic congestion can impede planned growth, can be expected to be impacted particularly hard.

- Reasonable estimates of losses for a poorly functioning transportation system will easily exceed the required new taxes collected to achieve a state of good repair.

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Other Issues

- Financial oversight of WMATA for use of dedicated funding source
- Increased monitoring to ensure control of WMATA costs escalation
- Regional efforts to continue, and increase, federal financial support
- Address any potential jurisdictional issues with a uniform regional sales tax
- Coordination of regional process for adoption of dedicated regional sales tax

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Questions ?

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