Administration Committee

Action Item III-A

September 14, 2017

Approval of Title VI Program Update

Washington Metropolitan Area Transit Authority
Board Action/Information Summary

⊙ Action ○ Information	MEAD Number: 201901	Resolution: ⊙ Yes ○ No

TITLE:

2017 Title VI Program Update

PRESENTATION SUMMARY:

Metro's Title VI Program is being updated to meet the requirements of the Federal Transit Administration (FTA) Title VI Circular, FTA C 4702.1B.

PURPOSE:

To request Board approval of the 2017 Title VI Program, as required by the FTA Circular.

DESCRIPTION:

FTA requires Metro to prepare and submit a Title VI Program every three years to demonstrate Metro is complying with Title VI requirements. The Title VI Program must meet the requirements outlined in FTA Circular 4702.1B, effective October 1, 2012. The 2017 Title VI Program Update reports on Metro's activities from January 1, 2014 to December 31, 2016 and must be approved by Metro's Board of Directors prior to submission to FTA.

Key Highlights:

Metro's Board has already reviewed and approved several Title VI components, including the major service change, disparate impact, and disproportionate burden policies and service and fare equity analyses completed from 2014 to 2016.

These components have been incorporated into the Title VI Program.

- The 2017 update has no major programmatic changes, but includes updates to reflect new data, document progress during the reporting period, and describe new initiatives.

  - Staff has provided language assistance to limited English proficient (LEP) populations to ensure access to Metro's services and information.

  - Staff has completed several key work efforts, including monitoring and analyzing Metro's service delivery, which showed no discrimination against minority or low-income populations.

  - Notice has been provided to the public of its rights under Title VI of the Civil Rights Act (CRA).

Background and History:

Title VI of the CRA of 1964 seeks to ensure that no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

In the history of Metro, the FTA has never rejected or found substantial fault with our Title VI Program. Other transit agencies have contacted Metro to benchmark based on a suggestion from

FTA.

Under the requirements established in the Title VI Circular, agencies must submit as part of its program to the FTA:

- Title VI notice to the public
- Title VI complaint form and procedures
- List of Title VI investigations, complaints, and lawsuits
- Public Participation Plan and summary of public outreach
- Language Assistance Plan
- Racial composition of non-elected committees and councils
- Description of how the agency monitors its sub-recipients (not applicable to Metro)
- Title VI equity analysis for construction of new facilities
- Board approval of Title VI Program prior to submission to FTA

As a large fixed route transit provider, Metro must also submit:

- Demographic data, service profiles, and rider survey data

- Description of public engagement process to define major service change, disparate impact, and disproportionate burden policies, including Board approval of major service change, disparate impact, and disproportionate burden policies

- Title VI equity analysis of major service changes and fare changes, including Board approval of equity analysis results

- Title VI system-wide service standards and service policies for each fixed route mode
    - Service standards for vehicle load, vehicle headway, on time performance, and service availability
    - Service policies for transit amenities and vehicle assignment

- Results of monitoring transit service, including Board approval of monitoring results

A Title VI group, made up of staff and management from several departments, has been working to update the Title VI Program since 2016. The Title VI working group reviewed:

- Title VI system-wide service standards and policies – Updated the rail service standards to reflect Board-approved changes to vehicle headway and on-time performance

- Major service change, disparate impact, and disproportionate burden policies – No changes

- Results of monitoring transit service

Discussion:

Metro's 2017 Title VI Program Update addresses numerous requirements, as published in FTA C 4702.1B. Metro's work to comply with each requirement is described below. Many components in this Title VI Program Update were approved by the Board as part of the 2014 program, while others were updated in 2017.

Requirements with Prior Board Approval (Adoption of 2014 Title VI Program)

Set system-wide service standards and policies for each specific fixed route mode of service. The required service standards are vehicle load, vehicle headway, on-time performance, and service availability. The required service policies are distribution of amenities and vehicle assignment.

In 2013, Metro identified Title VI system-wide service standards and policies for its fixed route modes,

Metrorail and Metrobus, to ensure the distribution of service across the transit system affords users access to the system, and that service design and operations practices do not result in discrimination against minority and low-income riders. In September 2013, the Board was briefed on these standards and policies. These standards remained in place throughout the monitoring period (2014 to 2016) and were therefore used in the analysis for this submittal.

The Title VI working group reviewed the service standards and policies anew for 2017, and updated the rail service standards to reflect Board-approved changes to vehicle headway (from 6 to 8 minutes during peak periods) and on-time performance (from time-point-based to customer-based metric). The updated Title VI Service Standards and Policies are shown in Attachment A and will be used for Metro's next transit service monitoring period (2017 to 2019).

Develop policy definitions for major service change, disparate impact (minority populations), and disproportionate burden (low income populations) to use when conducting equity analyses of major service changes and any fare change. Engage the public in developing these policy definitions and obtain Board approval.

In 2013 Metro staff completed an intensive process to develop these policy definitions. The public was engaged during development of the definitions through meetings with CBOs and an online survey. In October 2013 staff presented the proposed policy definitions to the Board, which were approved. The Title VI working group reviewed the policy definitions in 2017 and determined that no changes were needed.

Develop procedures for investigating and tracking Title VI complaints filed against the agency, and make the procedures for filing a complaint, including the Title VI complaint form, available to members of the public upon request.

Metro has developed procedures for investigating and tracking Title VI complaints, and made the procedures and complaint form available on its website and via telephone requests. In addition, Metro's Title VI rights brochure provides a detailed description of the complaint process. The brochure has been disseminated to CBOs that serve minority, low-income, and LEP populations and is provided to patrons who lodge a complaint that may be related to Title VI. Additionally, "Take-One" notices on MetroAccess vehicles and in Metrorail stations and placards on Metrobuses provide contact information to obtain further information concerning complaint procedures.

Updates in 2017 Title VI Program

Collect, analyze, and report demographic data showing the extent to which members of minority groups are beneficiaries of programs receiving Federal financial assistance, preparing demographic and service profile maps and charts, and collecting data on customer demographics and travel patterns using passenger surveys that are conducted no less than every five years.

Metro has collected and analyzed socioeconomic data from the U.S. Census Bureau showing the extent to which members of minority groups and low-income persons are beneficiaries of its programs. Based on the 2011-2015 American Community Survey, the total population of the service area is 4.1 million people. Minorities represent 59 percent of the area population, and persons living below the poverty level represent nine percent.

Metro has also collected mode-specific data on customer demographics from the 2016 Metrorail Travel Trends Survey and the 2014 Metrobus Passenger Survey. The following table provides a system-wide demographic profile:

Mode	Annual Ridership (FY 16)	% Minority Ridership	% Low-Income Ridership	Annual Minority Trips	Annual Low-Income Trips

Rail	191,347,600	45%	13%	86,065,916	24,567,857
Bus	127,431,700	81%	52%	103,809,149	66,238,352
Total	318,779,300			189,875,065	90,806,209
System-wide Minority & Low-Income Ridership				60%	28%

Provide meaningful access to the benefits, services, information, and other important portions of Metro's programs and activities for LEP individuals by conducting a Four Factor Analysis to determine the specific language services that are appropriate to provide, and developing a Language Assistance Plan to address the identified needs of the LEP population.

Metro's updated Four Factor Analysis found that 31 percent of the region's population speaks a language other than English at home, 37 percent of which do not speak English "very well." All Metro jurisdictions have LEP populations exceeding five percent. Fairfax County, City of Fairfax, and Montgomery County have the highest LEP populations, around 15 percent. Of the languages other than English spoken in the region, the most prevalent are Spanish, Chinese, Korean, African languages, Vietnamese, French, Arabic, other Indic languages, Tagalog, and Farsi.
Per DOT guidance, the three-year Language Assistance Plan addresses five major steps: 1) identify LEP individuals in your service area, 2) identify ways to provide assistance, 3) train staff, 4) provide notice to LEP persons, and 5) continuously monitor and update the plan. Metro focused its language services to address the needs of the LEP population in the region, including the following examples:

- Identifying and translating vital documents into the top six LEP languages in the region

- Providing a language interpretation line that is available through the Metro Service Call Center and used by various departments that serve customers

- Training frontline staff about Metro's Title VI and language access policies and procedures, cultural sensitivity, assistance available to LEP persons, and Title VI complaint procedures

- Working with media reporting in other languages to provide Metro information to their readers, listeners, and viewers

- Targeting public outreach to areas where LEP populations reside and tend to travel

- Providing interpreters at Metro events such as public meetings and pop-up information centers

- Working with Community-Based Organizations (CBOs) that serve LEP, minority, and low-income populations to disseminate multilingual information and obtain feedback on language assistance needs and resources

- Providing translation of information on Metro's website into six languages

Provide a Public Participation Plan (PPP) that outlines strategies to engage minority and LEP populations and other constituencies that are traditionally underserved.

Based on recommendations from the 2014 PPP and stakeholder input, Metro has now adopted a standardized public participation planning process that includes collecting critical information such as project scope/timeline, demographic information of the impacted population, budget, and communication and input purpose. The Office of External Relations works with project managers to tailor a Project Communication & Outreach Plan that specifically considers impacts on Title VI communities and follows Language Access Plan requirements. Since implementation of the PPP in 2015, Metro now tracks public outreach activities through the Public Participation Management System, a web-based tracking system for PPP activities that facilitates monitoring and compliance reporting.

During the reporting period, more than 1,000 PPP activities, including pop-up events, CBO visits, surveys, open houses, and other engagement strategies, were completed. Metro established a

centralized Public Participation Office to manage public outreach, trained over 100 project managers on implementing the PPP, and created a CBO Outreach Committee to collaborate with local CBOs to ensure meaningful, broad based public participation. The 2017 PPP update outlines two new recommendations focused on exploring new technology and expanding strategies for reaching LEP communities.

Monitor its fixed route transit services to ensure that its service design and operational practices do not result in discrimination to minority and low-income populations. Complete this monitoring at least every three years.

The 2017 Metrorail and Metrobus monitoring focused on minority and low-income passenger trips experiencing service that does not meet Metro's established Title VI service standards or policies. The analysis applied the Board-approved disparate impact/disproportionate burden (DI/DB) test to evaluate impacted minority and low-income riders versus system-level ridership.

Analysis showed that for each service standard and policy, Metro provides an equitable level of service to all its customers during peak and off-peak service periods. A memorandum describing the monitoring procedures and results is included in Attachment B. The results of the monitoring are a specific component of the Title VI Program that must be approved by the Board.

Record and report transit-related Title VI investigations, complaints, and lawsuits.

Metro maintains a list of all complaints where race, color, or national origin was mentioned as the basis for the complaint. Complainants are apprised of their Title VI rights including the ability to take further action by filing a formal Title VI complaint. During the reporting period (2014-2016), Metro reviewed 283 complaints and contacted the complainants to provide notice of their Title VI rights.

Four formal Title VI complaints were filed and investigated. During the investigations for two formal complaints, the complainants chose not to continue the investigations. One investigation resulted in a "no probable cause" finding. The fourth investigation concluded that the Metro employee was at fault, and the employee was disciplined.

During the reporting period, Metro had no Title VI lawsuits or investigations conducted by oversight agencies.

The list of complaints will be submitted as part of the Title VI Program Update, including the status of the complaint, Metro's actions to investigate, and the findings of the investigation. Metro uses the information gathered from complaints to examine policies and practices of the organization and implement operational changes as appropriate; to detect misconduct in its earliest stages; to improve the customer service skills of frontline employees; and identify areas that should be emphasized in future training.

Other Requirements

Provide notice to the public regarding the agency's Title VI obligations and apprise members of the public of the protections against discrimination afforded to them by Title VI.

The Title VI notice to the public is provided through several formats and venues, including posting and distributing notice of Title VI rights brochures on its website; disseminating notice of Title VI rights brochures to community based organizations (CBOs) that serve low-income, minority, and LEP populations and at public meetings sponsored by Metro; distributing Take-One notices on MetroAccess vehicles and in Metrorail Stations; and notice of Title VI rights displayed as placards inside Metrobuses and available in the headquarters building lobby. Title VI notice brochures and Take-One notices are translated into the top six languages spoken by LEP individuals in the service area: Spanish, Chinese, Korean, Amharic, Vietnamese, and French.

Evaluate service and fare changes to determine whether those changes will have a discriminatory impact on minority and low-income persons.

Metro conducted nine equity analyses between 2014 and 2016 using policies and procedures consistent with FTA C 4702.1B. Service equity analyses were completed for each of Metro's annual state of good operations Metrobus service changes, Silver Line Phase 1 (2014), and rail span of service changes (2016). Fare equity analyses were completed for Metro's annual budgets including proposed fare changes, paper farecards elimination (2015), sales office closures (2016), and the new Select Pass (2016). For each service and fare proposal, staff developed the equity analysis and presented the findings to the Metro Board. The Board approved all the equity analyses conducted during the reporting period. Provide minority representation on non-elected committees and councils.

The Riders' Advisory Council (RAC) is an all-volunteer group that obtains input from a broad range of riders and advises Metro's Board of Directors on ways to improve the system. The demographics of the current 18 members (three vacancies) on the RAC include Male-61%, Female-39%, Caucasian-56%, African-American-28%, Hispanic-11%, and Asian-6%. Overall, minority representation on the RAC is 44%.

The Accessibility Advisory Committee (AAC) is consists of 20 volunteers committed to helping Metro enhance the travel experience of people with disabilities and senior citizens. The AAC membership is diverse to reflect geographical areas, various types of disabilities, race, color, and national origin. The current AAC members include Male-65%, Female-35%, Caucasian-55%, African-American-25%, Hispanic-10%, and Asian-10%. Overall, minority representation on the AAC is 45%.

Complete a Title VI equity analysis when determining the site or location of facilities.

Facilities included, but not limited to, are storage facilities, maintenance facilities, operations centers, etc. During the reporting period (2014-2016), Metro did not plan or construct any new facility projects and therefore, did not conduct any Title VI equity analyses with regard to where a project is sited or located.

Provide annual Title VI certifications and assurances to FTA.

Metro's Federal Fiscal Year 2017 Certifications and Assurances dated March 2, 2017 are submitted through the FTA web based Transit Award Management (TrAMS) grants management system. The General Manager and Chief Executive Officer, Paul Wiedefeld, acted as the Official Certifying Officer.

Provide Title VI assistance to sub-recipients of Federal financial assistance.

Metro does not pass through FTA funds to any sub-recipients, and is therefore not subject to these requirements.

FUNDING IMPACT:

Metro does not pass through FTA funds to any sub-recipients, and is therefore not subject to requirements regarding sub-recipient compliance with Title VI regulations.	
Project Manager:	James T. Wynne, Jr.
Project Department/Office:	GM/Office of Equal Employment Opportunity

TIMELINE:

	09/2013 – Board presentation Title VI Required Service Standards, Policies, and Definitions
	10/2013 – Board approval of Title VI Required Major Service Change, Disparate Impact, and Disproportionate Burden Policy Definitions; **Resolution 2013-27**

Previous Actions	06/2014 – Board Approval of Metro's 2014 Title VI Program Update excluding the Public Participation Plan; **Resolution 2014-30**
	09/2014 – Board Approval of Title VI Required Public Participation Plan; **Resolution 2014-47**
	Title VI Fare Equity Analysis – FY2015 Budget; **Resolution 2014-15**
	Title VI Service Equity Analysis – Silver Line Phase I (2014); **Resolution 2014-31**
	Title VI Service Equity Analysis – Fall 2014 Metrobus State of Good Operations; **Resolution 2015-06**
	Title VI Fare Equity Analysis – FY2016 Budget, Change in Daily Parking Fee at Minnesota Avenue Station; **Resolution 2015-29**
	Title VI Fare Equity Analysis – Elimination of Metrorail Paper Farecards (2015); **Resolution 2015-36**
	Title VI Service and Fare Equity Analysis – Fall 2015 Metrobus State of Good Operations and Tariff Change; **Resolution 2015-54**
	Title VI Fare Equity Analysis – Close Metro Sales Offices (2016); **Resolution 2016-50**
	Service Equity Analysis – Rail Span of Service Changes; **Resolution 2016-52**
	Title VI Fare Equity Analysis – Metro Select Pass; **Resolution 2016-53**
Anticipated actions after presentation	09/2017 – Board Approval of Metro's 2017 Title VI Program and results of 2017 service monitoring of the system-wide service standards and policies
	10/2017 – 2017 Title VI Program Submittal to FTA

RECOMMENDATION:

Administration committee concurrence and subsequent Board approval of the 2017 Title VI Program and the results of the monitoring.

Washington Metropolitan Area Transit Authority

2017 Title VI Program

Administration Committee

September 14, 2017

Purpose

Seek Board approval for the 2017 Title VI Program and updates

Title VI of the Civil Rights Act of 1964

"No person in the United States shall, on the ground of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

--42 U.S.C. Section 2000d

Metro's Commitment to Title VI

- Demonstrates equal access

- Rail & bus system-wide service standards & policies

- Policy definitions for equity analysis

  – Major service change, disparate impact (minorities) & disproportionate burden (low-income persons)

- Complaint procedures

- Public Participation Plan (2014)

Changes in 2017 Program

- No major programmatic changes since 2014

- Updates:
  - Demographic and survey data
  - Language Assistance Plan
  - Public Participation Plan
  - Monitoring of service standards
  - Title VI complaints

Customer Demographics

FY 2016

	Annual Ridership (FY 16)	% Minority Ridership	% Low-Income Ridership
Metrorail	191,348,000	45%	13%
Metrobus	127,432,000	81%	52%
System-wide Minority & Low-Income Ridership		**60%**	**28%**

FY 2013

	Annual Ridership (FY 13)	% Minority Ridership	% Low-Income Ridership
Metrorail	208,969,000	43%	11%
Metrobus	132,065,000	76%	43%
System-wide Minority & Low-Income Ridership		**56%**	**24%**

Language Proficiency

	District of Columbia	Maryland (Compact areas)	Virginia (Compact areas)
High Limited English Proficiency (LEP) Areas	• Parts of northwest quadrant	• Silver Spring • Wheaton-Glenmont • Rockville • Gaithersburg • Takoma Park • Langley Park • Hyattsville	• South Arlington • City of Alexandria, west end • Central Fairfax County • Hybla Valley • Annandale • Vienna • Reston • Herndon

Limited English Proficiency (LEP) Language Assistance Plan

Languages Spoken in Service Area

- Speaks other language - LEP 12%
- Speaks other language - non-LEP 19%
- Speaks English only 69%
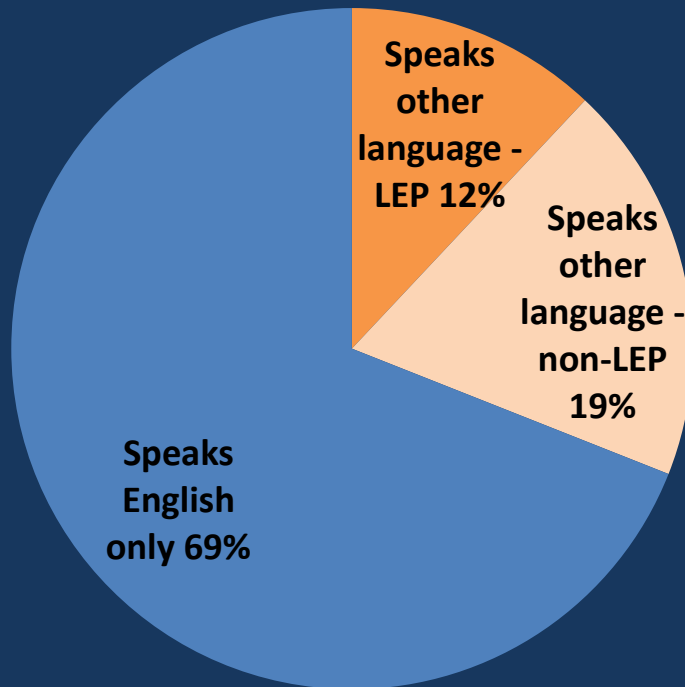
Top LEP Languages	% Regional LEP Pop.
Spanish	50%
Chinese	8%
Korean	7%
African languages	6%
Vietnamese	5%
French	3%
Arabic	2%
Other Indic lang.	2%
Tagalog	2%
Persian	2%
Other Asian lang.	2%
Urdu	2%
Other languages	9%

Inclusive Public Outreach/ Public Participation Plan (PPP)

- Completed over 1,000 public outreach activities from 2014-2016

- Centralized a Public Participation Office & created a web-based tracking system

- New recommendations: explore new technology & expand strategies to reach LEP communities
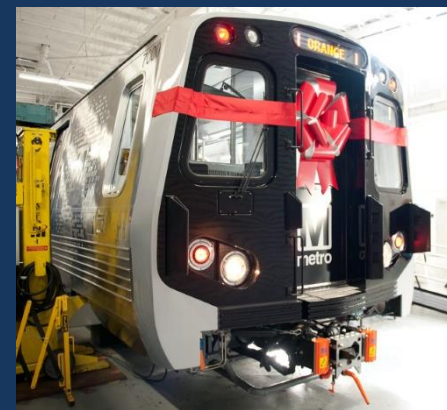
Monitoring – No Disparate Impacts or Disproportionate Burdens

Service Standards	Rail	Bus
Load	✓	✓
Headways	✓	✓
On-time Performance	✓	✓
Service Availability	✓	✓

| Service Policies	Rail	Bus
Transit Amenities	✓	✓
Vehicle Assignment	✓	✓

Rail Car Age – As of FTA Monitoring Period (Spring 2016)

- ROCS train movement data from April 2016 used as a base

- Matched-up with average age of car series

- Calculate average age of cars serving a given line on an average weekday

	Average Car Age
Red	25.0
Blue	23.0
Silver	23.9
Yellow	24.4
Orange	24.0
Green	17.7

Title VI Complaints
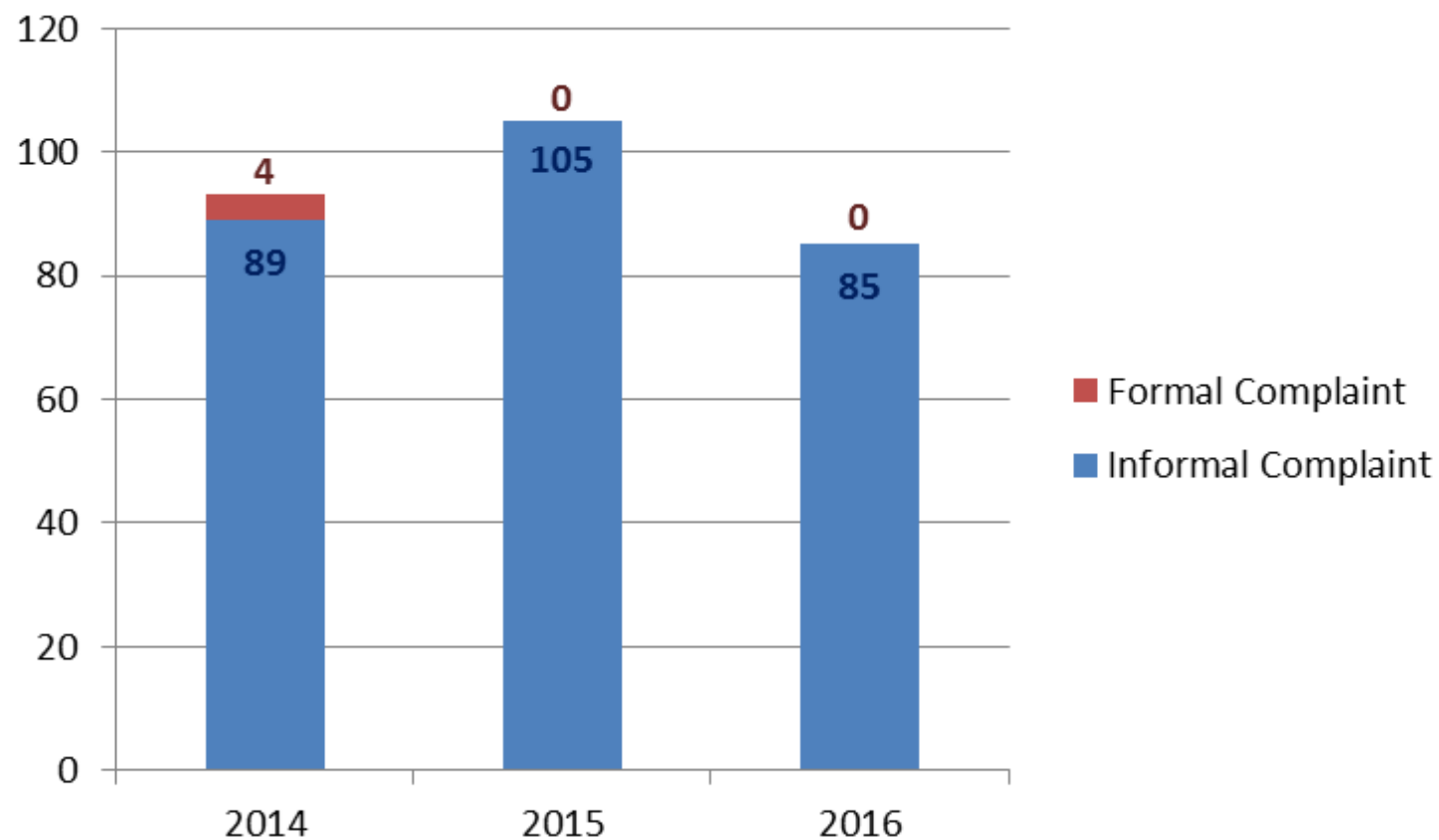
Other Requirements

- Title VI notice to public

- Racial composition of non-elected committees

- Service & fare equity analyses (2014-2016)

- Annual Title VI certifications & assurances

Riders' Advisory Council: 44% Minority

- Asian 1
- Hispanic/ Latino 2
- African American/ Black 5
- Caucasian/ White 10
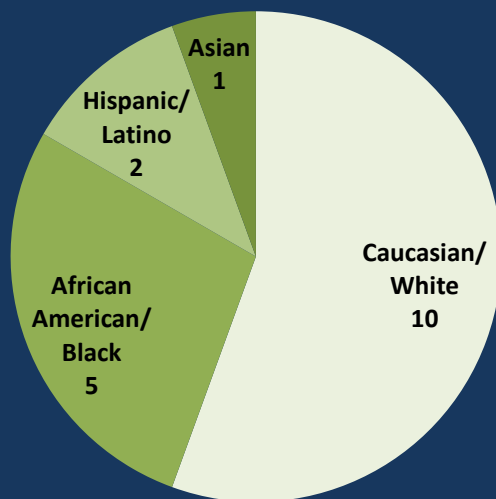
Accessibility Advisory Committee: 45% Minority

- Asian 2
- Hispanic/ Latino 2
- African American/ Black 5
- Caucasian/ White 11
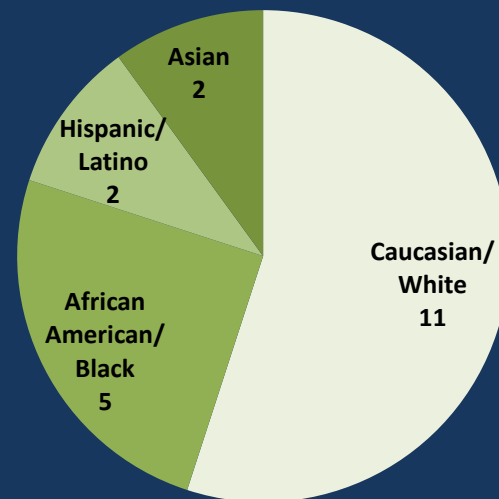
Next Steps

- Board approval of 2017 Title VI Program

- Submission to FTA by October 1, 2017

SUBJECT: APPROVAL OF 2017 TITLE VI PROGRAM

RESOLUTION
OF THE
BOARD OF DIRECTORS
OF THE
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

WHEREAS, The Federal Transit Administration (FTA) requires that the Board of Directors reviews and approves updates to the Title VI Program; and

WHEREAS, FTA requires that grant recipients, such as the Washington Metropolitan Area Transit Authority (WMATA), submit a Title VI Program every three years documenting compliance with Title VI; and

WHEREAS, The 2017 Title VI Program has no major programmatic changes, but includes updates to several program components, including demographics of the Transit Zone and customers; the Language Assistance Plan; the Public Participation Plan; monitoring of service standards; and Title VI complaints received and investigated; and

WHEREAS, WMATA is committed to ensuring that its policies and programs are designed to ensure meaningful participation in and equal access to transit services for minority, low-income, and limited English-proficient populations; now, therefore be it

RESOLVED, That the Board of Directors approves the 2017 Title VI Program, including the service monitoring results in Attachment A; and be it finally

RESOLVED, That to comply with the FTA submission deadline, this Resolution shall be effective immediately.

Reviewed as to form and legal sufficiency,

_____
Patricia Y. Lee
General Counsel

WMATA File Structure No.:
18.2.1 Federal Government Relations

M E M O R A N D U M

M metro

SUBJECT: Title VI Transit Service Monitoring

DATE: September 8, 2017

FROM: OEEO – James T. Wynne, Jr

THRU: FAIR – Franklin Jones

TO: GM/CEO – Paul J. Wiedefeld

This memorandum serves as the Metrorail and Metrobus service monitoring results, which were compiled in accordance with the Federal Transit Administration (FTA) Circular, 4702.1B, "Title VI Requirements and Guidelines for Federal Transit Administration Recipients" (Title VI Circular).

I. Conclusion

Staff analysis shows that no significant difference exists between the service provided to Metro's minority and low-income passengers and the service provided to Metro's non-minority and non-low-income passengers.

II. Background

The Title VI Circular requires that transit providers ensure that service design and operational practices do not discriminate on the basis of race, color, or national origin. To ensure that such service is non-discriminatory, transit agencies are required to monitor fixed-route service at least every three years using Board-approved service standards and policies. Although the Title VI Circular only requires that transit agencies compare levels of service between minority and non-minority riders, Metro also evaluates its service for low-income passengers.

Washington Metropolitan Area Transit Authority

Transit agencies must establish four service standards: on-time performance (OTP), vehicle headways, vehicle load, and service availability; and two service policies: distribution of transit amenities and vehicle assignment for each specific fixed route mode of service they provide. The Title VI Circular requires that the monitoring results be reported to the Board for its "consideration, awareness and approval." Appendix A describes each of the standards and policies used in the monitoring analysis.

Because Metro's fixed-route service (bus and rail) ridership is 60% minority, including 81% minority on Metrobus, Metro analyzed how the implementation of its service standards and policies for minority riders compares to the overall service provided to non-minority riders, instead of classifying routes as minority or non-minority. Metro believes that this monitoring approach is the most comprehensive way to accurately assess whether Metro provides equitable bus

and rail service.

To evaluate whether service is equitably delivered across each mode, Metro staff applied its Board-approved[1] disparate impact/disproportionate burden (DI/DB) test for those riders that experienced service that failed to meet its Board-established standards or policies. As shown in Table 1, the DI/DB thresholds vary based on the number of average daily riders impacted.

Table 1: WMATA DI/DB Thresholds

Total Daily Riders Impacted	Threshold for Significant Disparity
Up to 10,000	8%
10,001 to 20,000	7%
20,001 to 40,000	6%
Over 40,000	5%

The DI/DB service test provides the threshold for determining when adverse effects of Metrorail and Metrobus services are borne disproportionately by minority or low-income populations.

If, for example, more than 4,000 off-peak riders experience a load factor that does not meet Metro's service standards, the DI/DB threshold would be 8 percent, because less than 10,000 riders are impacted. If the variance from the Metrorail system averages for minority and low-income riders was greater than 8 percent, Metro would consider the load standard to have a DI and DB.

III.   **Analysis**

The monitoring analysis focuses on minority and low-income passenger trips experiencing service that <u>does not</u> meet WMATA's established standards or policies, comparing the demographic make-up of those customers to that of the total ridership during the same time period.

Metro's monitoring period corresponds to that of the FTA Triennial period, 2014 to 2016. Therefore, staff used the service standards and policies that were in place from October of 2013 to December 2016. Because Safetrack had a significant impact on travel behavior (and would therefore skew the results of the analysis), staff chose the period immediately before it, April and May of 2016, as the baseline period for ridership and operations data.

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1 Adopted October 24, 2013, Res. 2013-27

Please note that Metro recently made two changes to its rail service standards. First, as of June 25, 2017, scheduled rail headways changed from 6 to 8 minutes during peak periods. Second, as of the first quarter of 2017, Metro officially transitioned from the time-point-based to the customer-based on-time performance metric. These changes to the rail performance standards are detailed in Chapter XI of the Title VI program.

Staff used the 2016 Metrorail Travel Trends Survey and the 2014 Metrobus Passenger Survey as its primary sources of demographic data. In order to conduct a robust monitoring analysis, staff had to understand ridership demographics by line. To that end, operating data was integrated with demographic data to assess the performance data for minority and-low income riders. To evaluate the service availability standard, staff used the American Communities Survey (2011-2015) data.

Service Standards - Load, Headways and OTP
Analysis of the first three service standards—load, headways, and OTP—is based on April/May 2016 performance data. Each service standard was evaluated for both Metrorail and Metrobus using the DI/DB threshold applicable to the number of impacted riders (i.e., those experiencing service not meeting the Board-approved standard).

Table 2 summarizes these three standards and how they are measured. The paragraphs that follow briefly describe the staff analysis for each standard by mode.

Table 2: Service Standards and Measures from October 2013 to December 2016

Standard		Measure	
Vehicle Load	Rail	80 to 120 passengers per car (PPC)	
	Bus	1.0 to 1.2 x Seated Load	
Vehicle Headways	Rail	3 or 6 Min.	Peak
		6 or 12 Min.	Off-Peak
	Bus	15 or 30 Min.	Peak
		30 or 60 Min.	Off-Peak
OTP	Rail	Headway + 2 min	
	Bus	Window: 2 minutes early or 7 minutes late	

Metrorail:
Vehicle Load: Vehicle load is measured at 'maximum load' points on each line. Using passenger survey data, staff determined the demographic composition of riders on each line to determine whether minority and low-income riders are

significantly more likely to experience crowding. This information is then compared to data on vehicle load provided by WMATA's Office of Performance.[2]

Vehicle Headways: The analysis focuses on whether minority and low-income riders are significantly more likely to experience scheduled headways that do not meet established standards. To conduct the analysis, staff reviewed the number of trains scheduled per hour to see if the corresponding standard was met.

On-Time Performance: By combining OTP data and rail survey data, staff estimated "average" on-time performance for minority and low-income trips by time period and compared this with an average OTP for the system. Minority and low-income trips not meeting the OTP standard were then evaluated using the DI/DB test.

Metrobus:
Vehicle Load: Each Metrobus line has its own maximum load point by time of day. Staff evaluated rider demographics by line to determine whether minority and low-income riders are significantly more likely to experience crowding.

Vehicle Headways: The analysis focuses on whether minority and low-income riders are significantly more likely to experience scheduled headways that do not meet established standards. As with rail headways, staff reviewed the number of buses scheduled per hour to see if the headway standard that corresponded to that time period was met. However, staff also took into account the type of line (urban/ suburban), as the standards vary by line category (see Attachment A).

On-Time Performance: Metrobus OTP data is collected for six daily time periods and aggregated into peak and off-peak samples. By combining the OTP data, ridership data, and bus survey data, staff estimated an "average" OTP for minority and low-income trips by time period and compared this with an average OTP for the system.

Service Standards – Service Availability
To assess how accessible Metro's service is for minority and low-income residents, Metro staff used American Community Survey (2011-2015) residency data. Using GIS tools, staff calculated a buffer of a ½ mile around Metrorail stations and a ¼ mile around Metrobus stops. Using the GIS and ACS data, staff calculated the percentage of minority and low-income persons within walking distance of Metro services compared to the non minority and non-low income population in Metro's service area.

Service Policies – Passenger Amenities, Vehicle Assignment

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2 April 2016 Vital Signs passengers per car (PPC) data

Metro has set standards for the distribution of passenger amenities through the rail transit network in its station design and planning standards. A list of the amenities evaluated for this analysis is shown in Appendix B. Metro does not own or operate bus stops except for those located on Metrorail station property. Consistent with the Title VI Circular, Metro therefore only assessed distribution for those bus stops on Metrorail station property.

Metro's vehicle assignment policies focus on fleet age, and whether minority and low-income riders disproportionately ride on buses or railcars that are significantly older than the system average. The following paragraphs describe the staff analysis for each policy by mode.

Metrorail:
Passenger Amenities: Staff conducted a field survey to determine if the amenities specified in the design and planning standards were present at each station. Staff determined that all stations met these requirements. If the amenities were not present, staff would have calculated the demographic make-up of passengers using these stations to determine whether minority and low-income customers were significantly more likely to use stations where amenities were missing.

Vehicle Assignment: By applying operations data detailing train composition by car series on an average weekday[3], staff calculated an average vehicle age by line. Fleet age by line was then compared with the system-wide fleet age to determine whether minority or low-income riders were significantly more likely to encounter older vehicles.

Metrobus:
Passenger Amenities: Metro does not own or manage bus stops beyond its rail stations. Metro has, however, set standards for bus bays at rail stations. Bus bays were included in the Metrorail station field survey and evaluated with the Metrorail station amenities.

Vehicle Assignment: By applying the average age of the Metrobus fleet by garage to the ridership of the lines served by each garage, staff calculated the average vehicle age per passenger trip. Fleet age by line was then compared with the system-wide fleet age to determine whether minority or low-income riders were significantly more likely to encounter older vehicles.

IV. **Results**

Staff analysis shows that for each service standard and policy, Metro provides an

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3 ROCS SPOT data, April 2016

equitable level of service to all its customers on Metrobus and Metrorail during peak and off-peak service periods.

Service Standards - Load, Headways and OTP
As shown in Tables 3 and 4, Metrorail and Metrobus service standards do not result in a DI or DB for minority or low-income passengers. In all cases, the percentage of minority and low-income trips not meeting a certain standard did not exceed the DI/DB threshold. In Tables 3 and 4, a negative number in the difference column indicates that minority or low-income passengers experience better service than the system average.

Metrorail:
Three rail service standards—peak vehicle load and peak and off-peak vehicle headway—meet the corresponding service standard criteria. For example, staff reviewed scheduling of trains and determined that Metro adheres to its headway policy. As a result, Metro's headways do not result in a DI or DB.

With respect to OTP, minority and low-income customers experience about the same level of OTP during peak periods and a slightly better level of OTP during off-peak periods.

Finally, off-peak vehicle load data is not available, as this data is not currently collected by operations staff.

Table 3: Metrorail Results – Load, Headways and OTP

Service Standard	DI/ DB Threshold	Difference Minority	Difference Low Income	Pass DI/DB Test
Vehicle Load				
Peak	All service meets standard			Yes
Off-Peak			Data not available	N/A
Vehicle Headway				
Peak	All service meets standard			Yes
Off-Peak	All service meets standard			Yes
On-Time Performance				
Peak	5.0%	0.7%	0.0%	Yes
Off-Peak	7.0%	-2.6%	-1.5%	Yes

Metrobus:

Staff analyzed the bus service that does not meet Metro's Board-approved standards to determine whether a DI or DB exists. Table 4 summarizes the underperforming bus service provided to minority and low-income riders compared to the underperforming service provided to non-minority and non-low-income riders.

As shown in Table 4, minority and low-income riders make up a slightly higher proportion of riders on bus routes that exceed the vehicle load criteria. However, these results do not exceed the DI/DB threshold.

Minority and low-income riders, however, experience better headways and about the same OTP as the system average.

Table 4: Metrobus Results – Load, Headways and OTP

Service Standard	DI/ DB Threshold	Difference Minority	Difference Low Income	Pass DI/DB Test
Vehicle Load				
Peak	8.00%	1.0%	4.5%	Yes
Off-Peak	8.00%	3.4%	3.5%	Yes
Vehicle Headway				
Peak	5.00%	-1.7%	-7.0%	Yes
Off-Peak	7.00%	-2.1%	-7.8%	Yes
On-Time Performance				
Peak	5.00%	0.0%	0.7%	Yes
Off-Peak	5.00%	-0.1%	0.7%	Yes

Service Standards – Service Availability
Overall service coverage (Metrorail + Metrobus) is generally better for minorities and low-income residents than for non-minorities and non-low income residents. For example, 57% of minorities in the region either live within a ½ mile from a rail station or a ¼ mile from a bus stop, compared to 49% of non-minorities.

Minorities have slightly lower rail coverage than non-minorities, but there is less than a 5 percent difference between the two groups, and therefore the difference in coverage does not exceed the DI/DB threshold. See Appendix C for a map of service coverage, and Table 5 for results.

Table 5: Service Availability Results

	Min.	Non Min.	Min Diff.	Low-income	Non Low-income	LI Diff.
Percent of residents within walking distance of:						
1/2 Mile Metrorail	12%	15%	3.1%	18%	13%	-5.8%
1/4 Mile Metrobus	56%	47%	-9.0%	67%	49%	-17.9%
Within Either	57%	49%	-8.6%	68%	50%	-17.8%

Service Policies – Passenger Amenities, Vehicle Assignment

Metrorail:

Passenger Amenities: Staff determined that all stations in the Metrorail system met the established criteria. At a few other stations, certain amenities may not be present due to legitimate, non-discriminatory reasons. For example, the amenity guidelines call for a station escalator for each change in elevation. Due to the depth and configuration of the Forest Glen station, elevators provide a direct connection between the street and the platform levels, making an escalator impractical in this location. In another case, seating was removed along a busy platform at Gallery Place to better accommodate passenger circulation. As a result, staff has determined that there is an equitable distribution of passenger amenities.

Vehicle Assignment: The average age of a rail vehicle across the system is 23.3 years[4]. For minority and low-income passengers, the average vehicle age is essentially the same, at 22.9 years and 22.7 years, respectively. This analysis shows an equitable distribution of vehicles throughout the system.

Metrobus:

Passenger Amenities: Not applicable, other than for bus bay shelters at rail stations, which are included in the Metrorail analysis.

Vehicle Assignment: – The average age for a bus across all Metrobus lines is 6.87 years (weighted by passenger trip). For minority and low-income trips, the weighted averages are virtually the same as the system average, with both at 6.91 years. This analysis shows an equitable distribution of vehicles throughout the system.

For the reasons listed above, staff has determined that no significant difference

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4 Vehicle deployment as of April of 2016

exists between the service provided to Metro's minority and low-income passengers and the service provided to Metro's non-minority and non-low-income passengers.

Appendix A: Metro's Service Standards and Policies

Table 1: Rail Service Standards (2013 – 2016)			
FTA Standard[5]	WMATA Measure	WMATA Definition	WMATA Calculation
Vehicle Load	Passengers-per-car (PPC)	Average number of passengers in a Metrorail car at maximum load stations	Normal (rush and non-rush) weekday minimum of **80** and maximum of **120** passengers-per-car, with an optimal occupancy being **100** passengers-per-car, averaged during a weekday hour at locations in the system where the vehicle passenger loads are the greatest.[6]
Vehicle Headway	Time between trains (frequency)[6]	Maximum scheduled time interval between trains during normal weekday service	Normal weekday rush period maximums shall be **3** minutes on core interlined segments, **12** minutes at Arlington Cemetery, and **6** minutes on all other segments; normal weekday midday maximums shall be **6** minutes on core interlined segments, and **12** minutes on all other segments; normal weekday evening maximums shall be **15** minutes on core interlined segments, and **20** minutes on all other segments.[6]
OTP	Headway adherence	Percent adherence to scheduled weekday headways	During weekday rush service, number of station stops delivered within the scheduled headway plus 2 minutes, divided by total station stops delivered. During weekday non-rush, number of station stops delivered up to 150% of the scheduled headway divided by total station stops delivered. Station stops are tracked system-wide, with the exception of terminal and turn-back stations.[7]
Service Availability	Population served by Metrorail	Percent of a population living near a Metrorail station	Population living within ½ mile of a rail station divided by the total population living in the compact zone.

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5 As defined in FTA C 4702.1B IV §4a
6 As defined in WMATA Board Resolutions 2012-29, and 2013-20

Table 2: Rail Service Policies (2013 – 2016)

FTA Policy[7]	WMATA Policy
Distribution of Transit Amenities	WMATA will provide amenities such as seating, platform canopies, system maps, information signs, elevators, escalators, and waste receptacles at rail stations across the system.
Vehicle Assignment	Railcars are assigned to a line based on ridership demand, service schedules and maintenance infrastructure restrictions[8].

Table 3: Bus Service Standards (2013 – 2016)

FTA Standard[9]	WMATA Measure	WMATA Definition	WMATA Calculation
Vehicle Load	Load Factor	Average ratio of passengers per seat per bus during a service hour at the maximum load point	Peak service maximum load factors of 1.2 on radial lines, 1.1 on crosstown and 1.0 on express lines and off-peak service maximum load factors of 1.0 on all service types, averaged during a weekday service hour (peak or non-peak respectively) by line where vehicle passenger loads are the greatest.[10]
Vehicle Headway	Time between buses (frequency)	Maximum scheduled time interval between buses	Weekday peak-period maximums shall be 15 minutes for Urban and Radial lines, and 30 minutes for Suburban lines; Off-peak and weekend maximums shall be 30 minutes for Urban and Radial lines, and 60 minutes for Suburban lines. [10]
OTP	Schedule adherence	Percent adherence to scheduled service.	For delivered trips, difference between scheduled time and actual time arriving at a time point based on a window of no more than 2 minutes early or 7 minutes late.[11]

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7 As defined in FTA C 4702.1B IV §4b
8 Per Metrorail Fleet Management Plan, Revision 4G
9 As defined in FTA C 4702.1B IV §4a
10 WMATA Board Resolution 2010-39
11 Definition from Vital Signs Report

Service Availability	Population served by Regional and Non-Regional Metrobus	Percent of a population living near a Metrobus stop	Population living within ¼ mile of a bus stop (regional and non-regional) divided by the total population living in the compact zone.

Table 4: Bus Service Policies (2013 – 2016)	
FTA Policy[12]	WMATA Policy
Distribution of Transit Amenities	WMATA will provide amenities such as shelters, system maps, schedules, and waste receptacles at bus stops where WMATA has decision-making authority.
Vehicle Assignment	Vehicles are assigned to routes based on ridership demands, road conditions, service types, maintenance garage capacity and vehicle technologies[13].

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12 As defined in FTA C 4702.1B IV §4b
13 Board Resolution 2010-39 Attachment A – 2010 Metrobus Fleet Management Plan

Appendix B: Passenger Amenities

Rail Station Design and Planning Standards[14]	
Amenity	Title VI Standard
Trash Can	1 per mezzanine
	1 per platform
Bench	2 per platform
Rail System Map	1 per mezzanine
	1 per platform
Neighborhood Map	1 per mezzanine
	1 per platform
Passenger Information Display (PIDS)	1 per mezzanine
	1 per platform
Elevators	1 for every change in elevation
Escalators	1 for every change in elevation
Bus Shelters	1 per active bus bay at rail stations

14 "Manual of Design Criteria for Maintaining and Continued Operation of Facilities and Systems, May 2008, Release 9" and "WMATA Station Site and Access Planning Manual."

Appendix C: Combined Metrorail and Metrobus Walk Sheds