



MEMORANDUM

DATE: March 2, 2022

TO: ATC Board of Directors

FROM: Martin Barna, Director of Planning & Marketing

SUBJECT: **Consideration of New DASH Title VI Policies for Board Adoption**

Introduction/Background

As outlined in Title VI Circular 4702.1B and Environmental Justice Circular 4703.1, all transit agencies that receive federal funds must establish Title VI policies and standards that outline the policies and procedures that the agency will follow to ensure the fair and equitable provision of transit service and passenger amenities.

These policies must be subjected to a public outreach process and approved by the agency's Board of Directors.

Action Requested

The ATC Board of Directors is asked to consider for adoption two (2) new DASH Title VI Policies that were previously presented to the Board during the February 9, 2022 board meeting. The two policies are listed below and attached to this memorandum as Attachments A and B.

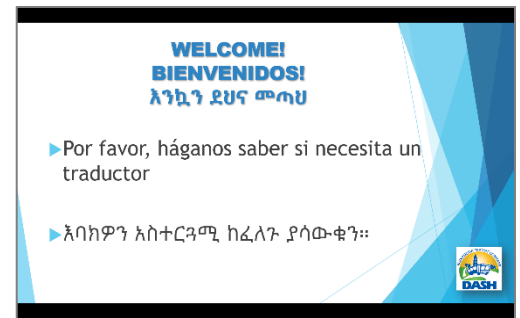
- 1. DASH Title VI Service Standards & Policies**
- 2. DASH Title VI Service Equity Analysis Policies**
 - a. Major Service Change Policy***
 - b. Disparate Impact Policy***
 - c. Disproportionate Burden Policy***

A memorandum providing the initial service monitoring findings based on the proposed Title VI Service Standards & Policies document is included as Attachment C.

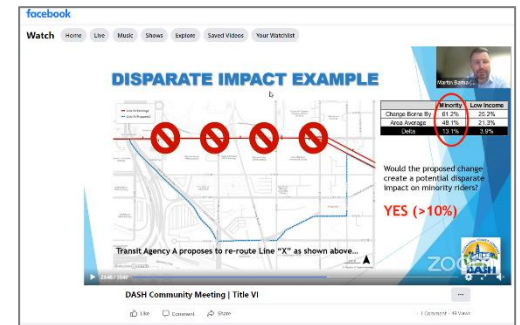
Title VI Outreach Summary

The draft DASH Title VI policy documents listed above were presented to the ATC Board of Directors in February 2022 and a public outreach process has been conducted over the last four weeks. A summary of the public outreach process is provided below:

- **Virtual Community Meeting.** A virtual community meeting was conducted on Wednesday, February 23rd at 6:00 PM in which staff presented the proposed Title VI policies to the public, answered questions and collected feedback. The meeting had 11 virtual attendees, and the recording of the meeting that was posted on Facebook has been viewed 54 times. Spanish- and Amharic-speaking translators were included as part of the meeting introduction with on-screen text, shown at right (Video - www.facebook.com/dashbus).



- **Virtual Public Hearing.** DASH is conducting a virtual public hearing as part of the March 9, 2022 Board of Directors meeting. This public hearing will be an opportunity for any members of the public to provide feedback on the Final DASH Title VI policies prior to Board consideration for adoption.



- **DASH Title VI Website (Spanish/Amharic).** DASH created a special “Title VI” website that serves as the central location for all policies and information relating to Title VI (www.dashbus.com/titlevi). The website has been used during public outreach but will also serve as a resource center for any individuals who want to learn more about the City/DASH Title VI program or submit a Title VI complaint.



In addition to the English version, DASH also created alternate versions of the Title VI website with information in Spanish (www.dashbus.com/titlevi/spanish) and Amharic (www.dashbus.com/titlevi/amharic). During the public outreach period, the DASH Title VI websites received a combined total of 66 unique visits.



- **Bus Posters/Flyers.** DASH posted flyers onboard all DASH buses that notified customers about the proposed Title VI policies and the ways in which interested parties could learn more or provide input. An example of the poster is shown in the picture, at right. The posters were also translated into Spanish and Amharic to promote engagement among non-native English speakers.



- **Community Group Outreach.** In addition to sending several e-mail blasts to the DASH email subscription list, DASH also sent personalized outreach emails to 35 individuals representing over 30 different community groups and civic associations. These groups included Casa Chirilagua, the Ethiopian Community Development Council (ECDC), the Senior Services of Alexandria’s Senior Ambassadors, and dozens of other civic associations.

Public Feedback

In the last two weeks, staff compiled and reviewed the public feedback that was received on the Title VI programs. A summary of the most relevant questions and feedback are included below.

Feedback Received during ATC Board Meeting (2/9/2022)

1. Add text to explicitly prohibit discrimination based on “dress or appearance”
2. Replace reference to “Public Works” with “T&ES” on page 9 of Title VI Service Standards & Policies.
3. Be sure to reach out to Senior Ambassadors for outreach opportunities.
4. Emphasize the availability of Spanish/Amharic translators at community meetings on website and all related outreach materials

Feedback Received During Virtual Community Meeting (2/23/2022)

5. Attendee suggests adding text about reviewing demographic statistics related to mobility impairments when looking at bus stop improvements and accessibility to the “Title VI Service Standards & Policies” document; attendee notes that minority groups tend to have a higher percentage of persons with disabilities.
6. Additional questions from Meeting Attendees (2/23):
 - a. How do you define “minority route”?
 - b. What service does DASH provide to/from schools for students?
7. Several attendees were members of the Alexandria Public Health Advisory Commission that developed Community Health Improvement Plan (CHIP). The CHIP seeks to promote public transit and DASH staff will be coordinating with these individuals to learn more about CHIP and
8. Facebook Comment: “It seems like you really are working on my problem. Sorry I missed most, there were no show on some buses coming home tonight.”

Based on input received from the ATC Board and the Alexandria community, the Title VI Service Standards & Policies and the DASH Title VI Service Equity Analysis Policies have been revised to incorporate the first, second, and fifth suggestions listed above. Staff also followed the Board guidance on the third and fourth items by emphasizing the translator availability and reaching out to Senior Services of Alexandria.

The final, approved DASH Title VI policies are included below as Attachments A and B, and will be posted on www.dashbus.com/titlevi. The staff memorandum summarizing the initial results of the new Title VI Service Standards & Policies monitoring process is also included as Attachment C. This memorandum includes several maps depicting the service area demographics and the distribution of service and passenger amenities.

Attachment A
Final DASH Title VI Service Standards & Policies



OFFICIAL COMPANY POLICY

ALEXANDRIA TRANSIT COMPANY (ATC)

Policy Name:	DASH Title VI Service Standards & Policies				
Section #:	N/A	Section Title:	N/A	Former Reference ID:	N/A
Approval Authority:	ATC Board of Directors		Adopted:	03/09/2022	Reviewed: 2/9/2022
Responsible Executive:	General Manager		Revised:	N/A	
Responsible Department:	Planning & Marketing		Contact:	Martin Barna	

1. Policy Statement

The Alexandria Transit Company (ATC) prohibits any discrimination in the provision of its fixed-route bus services on the basis of race, color or national origin, as outlined by the Federal Transit Administration's Title VI Circular 4702.1B and Environmental Justice Circular 4703.1. Discrimination based on appearance or dress as it relates to racial identity or cultural practices is also prohibited.

2. Reason for Policy

Title VI (codified at 42 U.S.C. S2000 et seq.) was enacted as part of the landmark Civil Rights Act of 1964. It prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance.

As outlined in Title VI Circular 4702.1B and Environmental Justice Circular 4703.1, the Federal Transit Administration (FTA) requires that all fixed route transit providers establish and monitor a set of service standards and policies that can be used to measure system performance and ensure that transit services are being provided in a fair and equitable manner. The purpose of this document is to establish the new Title VI standards and policies that will be used by the City of Alexandria, Alexandria Transit Company (ATC), and DASH, and submitted to the FTA as part of the triennial Title VI Program.

3. Who Should Read this Policy

These standards and policies apply to all DASH bus service and passenger facilities. General oversight for the policies is performed by the City of Alexandria's Office of Human Rights. The ATC/DASH Department of Planning & Marketing, with support from the City of Alexandria's Department of Transportation & Environmental Services, is responsible for the ongoing implementation and execution of these policies. ATC and the City of Alexandria have drafted a separate Memorandum of Agreement (MOA) that will outline city roles and responsibilities and will be subject to ATC Board review and approval.

4. Resources

[Federal Transit Administration \(FTA\) Title VI Circular](#) (2012)

5. Definitions

ATC: Alexandria Transit Company (DASH)

All policies are subject to amendment at any time. Finalized policies are subject to the approval of the Approval Authority as indicated on Page 1 in the head section.

6. Title VI Service Standards

In accordance with FTA Title VI requirements, ATC/DASH shall regularly monitor the performance of its bus routes relative to system-wide service standards for the following indicators to ensure that minority and non-minority routes are being operated in a fair and equitable manner:

- Vehicle Load;
- Vehicle Headways;
- On-Time Performance; and
- Service Availability

Any significant service deficiencies identified through this process must be evaluated further to determine the extent to which minorities are affected. If the negative effect on minority persons is proportionally higher than the effect on non-minority persons, additional steps may be necessary to address or mitigate any impacts that might result from the discrepancy.

ATC/DASH shall also monitor its vehicle assignments and the distribution of passenger amenities based on the policies outlined in this document to prevent discriminatory practices in the quality of the buses that are being used on different routes or the provision of bus shelters, benches or real-time information displays. Since bus stops, shelters and benches are owned and maintained by the City of Alexandria, ATC/DASH staff will coordinate with City staff on evaluating the distribution of these assets and addressing or mitigating any adverse impacts on minority passengers.

Route Categories

In order to develop appropriate service standards for the different types of routes, each DASH bus line is classified as belonging to one of the four categories listed below. These classifications are used to identify service standards which are specific to and appropriate for each route category.

- **Frequent.** Frequent routes are defined as the routes that operate every 15 minutes or better, all-day, seven days per week. The 15-minute service standard on these routes is maintained from at least 6am to 7pm on weekdays and from 7am to 6pm on weekends. The routes will typically operate earlier in the morning and later in the evening, but with less frequent service.
- **Local.** All other routes that operate seven days per week but do not meet the “frequent” standard are classified as “local routes.”
- **Commuter.** Any bus routes that are primarily intended for passengers who commute during the weekday peak hours are classified as “Commuter” routes. These routes typically do not operate on Saturdays or Sundays.
- **Trolley.** The King Street Trolley is classified with its own route category due to its distinct purpose and unique operating characteristics.

Tables 1 and 2 provide information on route categories for the DASH system and for each bus route.

Minority Routes

As part of the Title VI service monitoring evaluation procedure, each bus line is also designated as either a “minority route” or a “non-minority route”. The FTA definition of a “minority route” is “a route that has at least 1/3 of its revenue mileage in a Census Block or block group, or traffic analysis zone(s) with a percentage of minority population that exceeds the percentage of minority population in the transit service area.”

Based on this “minority route” definition, 5 of the 11 current DASH routes are classified as minority routes. This information is summarized in Table 1 and listed by route in Table 2.

Table 1 – DASH Route Classifications

Route Category	Minority	Non-Minority	Total	Percent
Frequent	2	1	3	27%
Local	2	2	4	36%
Commuter	1	2	3	27%
<u>Trolley</u>	0	1	1	9%
Total	5	6	11	100%
<i>Percent</i>	45%	55%	100%	

Table 2 – DASH Route Classifications by Route

Route	Name	Route Category	Minority Route?
30	Van Dorn Metro - Braddock Road Metro via Duke Street	Local	Minority
31	NVCC-Braddock Road Metro via King Street	Frequent	Non-Minority
32	Landmark Mall - King Street Metro via Eisenhower Avenue	Local	Minority
33	Potomac Yard - King Street Metro via Del Ray	Local	Non-Minority
34	Braddock Road Metro - Lee Center via City Hall	Local	Non-Minority
35	Van Dorn Metro - Pentagon via West End	Frequent	Minority
36A/B	Mark Center - Potomac Yard via Shirlington	Frequent	Minority
102	Mark Center - King Street Metro via Seminary Road	Commuter	Minority
103	Braddock Road Metro - Pentagon via Parkfairfax	Commuter	Non-Minority
104	Braddock Road Metro - Pentagon via Parkfairfax	Commuter	Non-Minority
KST	King Street Trolley	Trolley	Non-Minority

Systemwide Service Standards

The following sections outline the four primary service indicators that will be used to monitor ATC/DASH bus lines. Each standard is set based on the route categories listed above and monitoring will compare the performance of minority routes against those of non-minority routes to ensure that DASH service is being operated in an equitable manner.

The data samples used to compare route performance to these standards should be collected over a representative time period to ensure that they provide an accurate snapshot of each route. To ensure consistency, ATC/DASH typically uses data from March, April, September or October, which represent the busiest months of the year in terms of ridership. These months also serve as good comparison points because schools are in session and few major holidays are observed. Data collection time periods may also fluctuate based on data availability. Weekday peak periods are generally defined as 6:00 – 9:00 AM and 3:00 – 6:00 PM.

Vehicle Loads

The FTA Title VI Circular describes vehicle loads as follows:

Vehicle load can be expressed as the ratio of passengers to the total number of seats on a vehicle. For example, on a 40-seat bus, a vehicle load of 1.3 means all seats are filled and there are approximately 12 standees. A vehicle load standard is generally expressed in terms of peak and off-peak times. Transit providers that operate multiple modes of transit must describe the specific vehicle load standards for peak and off-peak times for each mode of fixed route transit service (i.e., bus, express bus, bus rapid transit, light rail, heavy rail, commuter rail, passenger ferry, etc., as applicable), as the standard may differ by mode.

ATC/DASH service planners monitor load factor data on all routes to prevent overcrowding and determine when additional capacity is needed. The load factor for each route is calculated based on the average maximum load of each trip on a route during the peak, off-peak, and weekend periods.

The following table outlines the vehicle load factor standards, which are based upon historical data, industry practices, and staff analyses. If a route exceeds its respective peak load factor standard, ATC/DASH staff will review the service to determine if additional capacity should be provided. Commuter routes are subject to a reduced load factor standard to ensure passenger safety on routes that operate on highways. The King Street Trolley includes a higher load factor standard due to the lower number of seats on Trolley vehicles, and the shorter average trip lengths.

Table 3 – DASH Peak Load Factor Standards

Route Category	Average Peak Load Factor		
	Weekday (Peak)	Weekday (Off-Peak)	Weekend
Frequent	1.2	1.0	1.0
Local	1.2	1.0	1.0
Commuter	1.0	1.0	-
Trolley*	1.5	1.5	1.5

*Trolley does not typically operate during AM peak periods or on weekends before 11:00 AM.

Vehicle Headways

The FTA Circular describes headways as follows:

Vehicle headway is the amount of time between two vehicles traveling in the same direction on a given line or combination of lines. A shorter headway corresponds to more frequent service. Vehicle headways are measured in minutes (e.g., every 15 minutes); service frequency is measured in vehicles per hour (e.g., 4 buses per hour). Headways and frequency of service are general indications of the level of service provided along a route. Vehicle headway is one component of the amount of travel time expended by a passenger to reach his/her destination.

As outlined in the 2022/2030 Alexandria Transit Vision Plan, ATC/DASH emphasizes frequent service with short headways of 15 minutes or less as the most important determinant of how useful a bus service will be for the average customer.

Based on changes in ridership levels, headways may be proposed for adjustment during the annual ATC/DASH Transit Development Process (TDP) process, or if needed during regular service changes throughout the year.

ATC/DASH calculates headways as the average length of time between the scheduled arrival times of subsequent vehicles on a specific route. Table 4 outlines the vehicle headway standards by route category and time of day. These standards represent typical headways for each route category.

Table 4 – Vehicle Headway Standards

Route Category	Minimum Headway Standard (minutes)		
	Weekday (Peak)	Weekday (Off-Peak)	Weekend
Frequent	15	15	15
Local	30	60	60
Commuter	30	60	-
Trolley*	15	15	15

*Trolley does not typically operate during AM peak periods or on weekends before 11:00 AM.

On-Time Performance

The FTA Title VI Circular describes on-time performance as follows:

On-time performance is a measure of runs completed as scheduled. This criterion first must define what is considered to be "on time." For example, a transit provider may consider it acceptable if a vehicle completes a scheduled run between zero and five minutes late in comparison to the established schedule. On-time performance can be measured against route origins and destinations only, or against origins and destinations as well as specified time points along the route. Some transit providers set an on-time performance standard that prohibits vehicles from running early (i.e., ahead of schedule) while others allow vehicles to run early within a specified window of time (e.g., up to five minutes ahead of schedule). An acceptable level of performance must be defined (expressed as a percentage).

ATC/DASH regularly monitors on-time performance to increase service reliability and determine if running time changes are needed. Running times on each route are reviewed on a monthly basis and adjusted as warranted by changing traffic conditions or other operating factors.

ATC/DASH has previously established an on-time performance goal of 85 percent for all routes based on industry-wide standards. A trip is considered to be "on time" when the bus arrives to timepoint no more than one minutes before or five minutes after the scheduled arrival time.

Table 5 – On-Time Performance Standards

Route Category	On-Time Performance (OTP)		
	Weekday (Peak)	Weekday (Off-Peak)	Weekend
Frequent	85%	85%	85%
Local	85%	85%	85%
Commuter	85%	85%	-
Trolley*	85%	85%	85%

*Trolley does not typically operate during AM peak periods or on weekends before 11:00 AM.

Service Availability

The FTA Title VI Circular describes service availability as follows:

Service availability is a general measure of the distribution of routes within a transit provider's service area. For example, a transit provider might set a service standard to distribute routes such that a specified percentage of all residents in the service area are within a one-quarter mile walk of bus service or a one-half mile walk of rail service.

The ATC/DASH approach to service availability is shaped largely by the Alexandria Transit Vision Plan (<https://www.alexandriava.gov/uploadedFiles/tes/Alexandria%20Transit%20Vision%20Final%20Report%202020-02-24.pdf>). One of the key statistics that was used during the development of the Alexandria Transit Vision Plan was the percentages of city residents who live within ¼ mile of a bus stop with “frequent” bus service, and the percentage within ¼ mile of a bus stop with any bus service. This metric was also calculated for percentages of minority residents, low-income residents, senior residents and jobs. These percentages help to measure the availability of bus service to residents, and the availability of useful, frequent, all-day service. These metrics will be calculated for each of these population groups as part of the regular service monitoring process.

The Alexandria Transit Vision Plan, which was adopted by the ATC Board of Directors in 2019, called for a bus network that increases total ridership by providing more useful, frequent bus service in high-ridership transit areas as opposed to providing more infrequent service across a wider geographic area. This approach guided the development of the 2022/2030 Alexandria Transit Vision Plan and the resulting New DASH Network, which provides frequent, all-day bus service in key corridors across the City of Alexandria. This focus on increasing the amount of useful, frequent service in areas where lots of people can use it has proven to be particularly effective at increasing ridership as well as fulfilling the transit needs of the City of Alexandria's minority and low-income populations.

Table 6 – Service Availability Standards

Service Availability	City Residents
Within 1/4 Mile of a Frequent Route	50%
Within 1/4 Mile of Any Route	90%

7. Systemwide Service Policies

These policies are intended to provide guidance and instruction to ensure that vehicle assignment and passenger amenity distribution practices do not result in discrimination on the basis of race, color or national origin.

Vehicle Assignment

The FTA Title VI Circular describes vehicle assignment as follows:

Vehicle assignment refers to the process by which transit vehicles are placed into service in depots and on routes throughout the transit provider's system. Policies for vehicle assignment may be based on the age of the vehicle, where age would be a proxy for condition. For example, a transit provider could set a policy to assign vehicles to depots so that the age of the vehicles at each depot does not exceed the system-wide average. The policy could also be based on the type of vehicle. For example, a transit provider may set a policy to assign vehicles with more capacity to routes with higher ridership and/or during peak periods. The policy could also be based on the type of service offered. For example, a transit provider may set a policy to assign specific types of

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vehicles to express or commuter service. Transit providers deploying vehicles equipped with technology designed to reduce emissions could choose to set a policy for how these vehicles will be deployed throughout the service area.

The ATC/DASH bus fleet is comprised of roughly 100 buses in active revenue service. The DASH fleet operates out of the DASH William B. Hurd Maintenance & Operations Administration Facility, which is located at 3000 Business Center Drive in Alexandria, Virginia. The current fleet includes a mix of buses of varying lengths and propulsion types, which are shown in Table 7, below:

Table 7 – Active DASH Bus Fleet (2022)

Vehicle ID's	Year	Make	Type	Length	# of Vehicles
200-206	2011	Gillig	Hybrid	35'	7
300-302	2011	Gillig	Hybrid	40'	3
400-404	2011	Gillig (Trolley)	Hybrid	29'	5
207-211	2012	Gillig	Hybrid	35'	5
303-307	2012	Gillig	Hybrid	40'	5
212-216	2014	Gillig	Hybrid	35'	5
308-309	2014	Gillig	Hybrid	40'	2
217-229	2015	Gillig	Hybrid	35'	13
405	2015	Gillig (Trolley)	Hybrid	35'	1
230-233	2017	Gillig	Hybrid	35'	4
310-311	2017	Gillig	Hybrid	40'	2
501-514	2018	Gillig	Clean Diesel	35'	14
515-527	2019	New Flyer	Clean Diesel	35'	13
528-530	2020	New Flyer	Clean Diesel	35'	3
701-705	2020	New Flyer	Clean Diesel	40'	5
801-803	2020	New Flyer	Electric	40'	3
804-806	2021	Proterra	Electric	40'	3
807-810	2021	Proterra	Electric	40'	4
901-904	2021	New Flyer	Electric	60'	4
TOTAL ACTIVE FLEET					101

The majority of the DASH fleet is comprised of 35- and 40-foot low-floor transit buses, however, DASH also has several 60-foot articulated buses. DASH also operates the King Street Trolley on behalf of the City of Alexandria and has several 30- and 35-foot buses that have been equipped with specialized Trolley replica features for this purpose. All DASH buses are handicap-accessible and compliant with the Americans with Disabilities Act (ADA) of 1990.

In terms of vehicle propulsion, most of the DASH fleet consists of either hybrid diesel-electric or clean diesel buses, however, DASH has acquired over a dozen 100% electric buses over the last two years and will continue to transition its fleet to 100% electric over the next decade.

Vehicle Assignment refers to the process by which transit vehicles are assigned to routes for revenue service. A summary of the ATC/DASH Vehicle Assignment Process is included below:

- DASH Operations staff typically assign buses at random, based on fleet availability at the time when a bus is scheduled to pull out. In most instances, whichever bus is most accessible or near the front of the garage is used for pullout.

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- DASH employs a significant amount of “interlining”, which is a vehicle blocking strategy whereby a single bus and operator will rotate through multiple routes during the course of the day to maximize operating cost efficiency. In addition to lowering operating costs, this approach also results in buses being rotated through the system in a more fair and equitable manner.
- Exceptions to the vehicle assignment policy described above are employed for several routes with increased ridership or specific operating or branding constraints. Examples include:
 - Dispatchers typically avoid assigning the larger, 40- and 60-foot buses to routes that operate on narrow streets or tight turns, including those on Lines 36A/B, 103 and 104;
 - Dispatchers try to assign these larger buses to routes with higher ridership that may be more susceptible to overcrowding. These high-ridership routes include Lines 30 and 35 in West Alexandria, which has a higher percentage of low income and minority residents than the rest of the service area.
 - DASH has a series of buses that have been specifically wrapped and branded for Line 35 service in West Alexandria. These buses include a mix of 35- and 40-foot vehicles and are used almost exclusively on Line 35.
 - The King Street Trolley service is also operated with a dedicated sub-fleet of six buses that have been equipped with a custom livery package that emulates historic trolley design features. These trolley buses are used exclusively on the King Street Trolley.

ATC/DASH maintains extremely high safety standards and closely monitors the age and condition of its vehicles to determine when repairs are needed and when the buses are due for replacement. Buses are typically replaced at the end of their useful 12-year lifespan in accordance with the ATC/DASH Fleet Replacement Plan. DASH has a comprehensive Preventive Maintenance (PM) program which outlines regular maintenance procedures that are performed on all buses to ensure a high level of vehicle reliability. The oldest vehicles in the active DASH revenue fleet date were manufactured in 2011, while the average age of the fleet is 5.7 years old.

Transit Amenities

The FTA Title VI Circular describes transit amenities as follows:

Transit amenities refer to items of comfort, convenience, and safety that are available to the general riding public. Fixed route transit providers must set a policy to ensure equitable distribution of transit amenities across the system. Transit providers may have different policies for the different modes of service that they provide. Policies in this area address how these amenities are distributed within a transit system, and the manner of their distribution determines whether transit users have equal access to these amenities. This ... is not intended to impact funding decisions for transit amenities. Rather, this ... applies after a transit provider has decided to fund an amenity.

The City of Alexandria provides a wide array of transit amenities such as bus shelters, benches, trash cans, lighting, and real-time bus arrival displays. These amenities are distributed throughout the service area based on ridership data, income/ethnicity/disability status demographics, staff analysis, funding opportunities, development conditions and customer requests. General policies for the distribution of bus shelters, benches, trash cans, lighting fixtures and posted schedule information are outlined below. ATC/DASH and City staff monitor the locations of all transit amenities to ensure that they are equitably distributed to minority and low-income areas.

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Bus Shelters

Bus shelters are provided at roughly 60 stops throughout the City of Alexandria. The installation of bus shelters is generally based upon ridership data and staff input, but many shelters have been installed as part of developer agreements on construction projects. Generally, bus shelters are prioritized for bus stops with at least 50 average boardings per weekday.

Benches

Benches are provided at approximately 180 stops throughout the City of Alexandria. The installation of benches is based upon ridership, customer requests and staff input. Stops located near medical and senior facilities are also furnished with benches as much as possible. Generally, bus shelters are prioritized for bus stops with at least 20 average boardings per weekday, however, stops located near significant populations of seniors, the disabled, students, or other special uses (e.g., hospitals, medical offices, tourist attractions) may receive special consideration.

Trash Cans

Trash cans are installed at roughly 150 stops in the City of Alexandria. Trash cans are typically installed at stops where there is a demonstrated issue with littering, but ridership data, customer requests, maintenance trends and staff input are also considered. Trash cans are regularly maintained by the City of Alexandria's Department of Transportation & Environmental Services (T&ES).

Lighting

As part of its focus on passenger safety, the City of Alexandria installs lighting at many of its bus stop locations, including those with bus shelters. The distribution of lighting fixtures is primarily based upon ridership, customer requests, safety considerations, and staff recommendations.

Real-Time Information Displays

ATC/DASH have installed real-time information displays at more than 60 stops across the City of Alexandria. These displays provide customers with information on when the next buses will arrive based on real-time bus locations. Most of the displays are solar-powered tablets mounted on bus stop poles, but several larger TV screens or real-time kiosks have been installed at major transit hubs or transfer locations across the City. Installation decisions on real-time information displays is generally based upon ridership, transfer activity, grant opportunities, developer considerations, operating factors, sunlight exposure, and staff input.

In addition to these real-time information displays, DASH also makes real-time bus arrival information available via the DASH Tracker website, third-party real-time apps, SMS text message, and an interactive voice response (IVR) on the DASH Customer Service telephone hotline. A static display featuring QR Codes with links to the "Schedules" page on the DASH website is also provided at several dozen bus stop locations.

Attachment B
Final DASH Title VI Service Equity Analysis Policies



OFFICIAL COMPANY POLICY

ALEXANDRIA TRANSIT COMPANY (ATC)

Policy Name:	DASH Title VI Service & Fare Equity Analysis Policies				
Section #:	N/A	Section Title:	N/A	Former Reference ID:	N/A
Approval Authority:	ATC Board of Directors		Adopted:	03/09/2022	Reviewed: 2/9/2022
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2. Reason for Policy

In order to comply with the Federal Transit Administration's (FTA) Title VI Circular 4702.1B and Environmental Justice Circular 4703.1 requirements, the Alexandria Transit Company (ATC) and DASH are required to create and adopt Major Service Change, Disparate Impact, and Disproportionate Burden Policies. These policies are used during the planning process to evaluate the impact of major service and fare changes on minority and low-income passengers.

In the development of these policies, ATC/DASH is also required to seek input from the community including low-income, minority and limited-English proficiency (LEP) populations, which are traditionally under-represented in planning decision-making processes.

The ATC Board of Directors must approve the Major Service Change, Disparate Impact, and Disproportionate Burden policies before they can be incorporated into the Title VI Program and be submitted to the FTA. Any future amendments to the policies are also subject to Board review.

3. Who Should Read this Policy

General oversight for the following Title VI policies is performed by the City of Alexandria's Office of Human Rights. The ATC/DASH Department of Planning & Marketing, with support from the City of Alexandria's Department of Transportation & Environmental Services, is responsible for the ongoing implementation and execution of these policies. ATC and the City of Alexandria have drafted a separate Memorandum of Agreement (MOA) that will outline city roles and responsibilities and will be subject to ATC Board review and approval.

4. Resources

[Federal Transit Administration \(FTA\) Title VI Circular](#) (2012)

5. Definitions

ATC: Alexandria Transit Company (DASH)

All policies are subject to amendment at any time. Finalized policies are subject to the approval of the Approval Authority as indicated on Page 1 in the head section.

6. Title VI Service Equity Analysis Policy

In accordance with FTA Title VI requirements, ATC/DASH shall perform a Service or Fare Equity Analysis to evaluate the positive and negative impacts that all major service changes and fare changes will have on minority and low-income passengers. The Major Service Change policy determines which proposed service changes require equity analyses. The Disparate Impact and Disproportionate Burden policies are intended to provide guidance to staff in their analysis of the equity of the impacts of the proposed changes.

The Disparate Impact and Disproportionate Burden policies apply to all “major” service changes, and to all fare changes, regardless of magnitude, except as specifically defined herein. General oversight for the following Title VI policies is performed by the City of Alexandria’s Office of Human Rights. The ATC/DASH Department of Planning & Marketing, with support from the City of Alexandria’s Department of Transportation & Environmental Services, is responsible for the ongoing implementation and execution of these policies.

Major Service Change Policy

ATC/DASH implements service and fare changes based on the annual ATC Transit Development Plan (TDP), which is adopted by the ATC Board of Directors each spring after an extensive public outreach process. Most ATC/DASH service and fare changes are identified and proposed through this process.

Service Changes

Any proposed “major” service changes must be submitted to the ATC Board of Directors for review and approval. For Title VI purposes, all “major” service changes will require a Service Equity Analysis to identify any disparate impacts they may create on minority passengers, or disproportionate burden that they place on low-income riders.

The following service modifications shall be considered “major” service changes:

- The establishment of a new bus line or service;
- The elimination of a bus line or service;
- A routing change that impacts 25 percent or more of the line’s route mileage;
- A frequency or service span change that increases or decreases the revenue hours of the line by 25 percent or more;
- A series of changes on a single route within a two-year period that cumulatively meet any of the above criteria;
- Proposed changes that are anticipated to be controversial with a particular community or interested parties based on public feedback; and
- A systemwide change that concurrently increases or decreases the total system-wide revenue hours by five (5) percent or more.

The following types of modifications are exempted from the above criteria and shall not be classified as major service changes or be subject to Service Equity Analysis.

- Special Event service;
- Routing changes due to construction, or other road/facility closures;
- Special service operated during emergencies, including but not limited to rail replacement services; and
- Temporary service or route changes that are expected to operate for a period of time that is six months or less.

All policies are subject to amendment at any time. Finalized policies are subject to the approval of the Approval Authority as indicated on Page 1 in the head section.

Service change proposals that do not meet the criteria for “major” service changes are still subject to an appropriate level of public review and comment.

Fare Changes

For the purposes of this policy, a “fare change” is defined as any increase or decrease in a transit provider’s base fare or any fare product or pass with the following exceptions:

- Promotional or pilot fare programs (e.g. “Spare the Air” fare-free promotions) that last for less than six months, per the FTA definition of “permanent” fare changes; and
- Temporary fare reductions that are mitigation measures for other projects or actions such as rail closures or bus re-routes.

Any transition to or from 100% “fare-free” operation would be subject to a Fare Equity analysis.

Disparate Impact Policy

The Disparate Impact Policy establishes a threshold for determining if proposed service or fare changes would result in a fair distribution of positive and negative effects on minority passengers.

As defined by FTA Title VI Circular 4702.1B:

Disparate impact refers to a facially neutral policy or practice that disproportionately affects members of a group identified by race, color, or national origin, where the recipient's policy or practice lacks a substantial legitimate justification and where there exists one or more alternatives that would service the same legitimate objectives but with less disproportionate effect on the basis of race, color, or national origin.

The policy shall establish a threshold for determining when adverse effects of fare/service changes are borne · disproportionately by minority populations. The disparate impact threshold defines statistically significant disparity and may be presented as a statistical percentage of impacts borne by minority populations compared to impacts borne by non-minority populations. The disparate impact threshold must be applied uniformly ... and cannot be altered until the next Title VI Program submission.

For Service or Fare Equity Analyses conducted by ATC/DASH, a disparate impact threshold of **10 percent** shall be used to determine if minority riders are more negatively affected - or less positively affected - by the proposed change (s) than DASH riders as a whole. The 10 percent threshold applies to the difference between the aggregate impacts of the proposed change(s) on minority passengers and the aggregate impacts of the proposed change(s) on overall DASH ridership. Analyses shall be based on the most recent DASH passenger survey data but may also use census data if survey data is inadequate or unavailable. Analyses will only compare ridership survey data with ridership survey data, or census data with census data, and will not mix and match different data types.

If ATC/DASH finds that a disparate impact exists with the proposed change(s), it shall analyze alternatives to determine if another alternative could serve the same legitimate objective with less of a disparate impact. If a less discriminatory alternative does not exist and ATC/DASH has substantial legitimate justification that cannot otherwise be accomplished, ATC/DASH shall take steps to mitigate the impact of the change on affected minority riders.

Disproportionate Burden Policy

The Disproportionate Burden Policy establishes a threshold for determining if a given service or fare change would result in a fair distribution of positive and negative effects on low-income riders.

As defined by FTA Title VI Circular 4702.1B:

All policies are subject to amendment at any time. Finalized policies are subject to the approval of the Approval Authority as indicated on Page 1 in the head section.

A disproportionate burden refers to a neutral policy or practice that disproportionately affects low-income populations more than non-low-income populations. A finding of disproportionate burden requires the recipient to evaluate alternatives and mitigate burdens where practicable.

The policy shall establish a threshold for determining when adverse effects of service changes are borne disproportionately by minority populations. The disparate impact threshold defines statistically significant disparity and may be presented as a statistical percentage of impacts borne by minority populations compared to impacts borne by non-minority populations. The disparate impact threshold must be applied uniformly, regardless of mode, and cannot be altered until the next Title VI Program submission.

For Service or Fare Equity Analyses conducted by ATC/DASH, a disproportionate burden threshold of **10 percent** shall be used to determine if low-income riders are more negatively affected – or less positively affected – by the proposed changes(s) than DASH riders as a whole. The 10 percent threshold applies to the difference in the aggregate impacts of the proposed change(s) on low-income passengers compared to the aggregate impacts of the proposed changes(s) on overall DASH ridership. Analyses shall be based on the most recent DASH survey data but may also use census data if survey data is inadequate or unavailable. Analyses will only compare ridership survey data with ridership survey data, or census data with census data, and will not mix and match different data types.

If ATC/DASH finds that low-income populations will incur a disproportionate burden from proposed change(s), ATC/DASH shall identify alternatives available to affected low-income riders and take steps to avoid, minimize or mitigate impacts where practicable.

Service Equity Analysis Example

As an example, Table 1 below provides the results of a Service Equity Analysis for a proposed service reduction on a fictitious bus route (Line X). For the purposes of this example, staff have already determined that the proposed change to Line X meets at least one of the minimum thresholds to be considered a “Major Service Change”.

For the Disparate Impact and Disproportionate Burden analyses, staff compare the demographic percentage of riders who are negatively impacted by the proposed change with the demographic percentages of DASH riders as a whole. Since the percentage of minority passengers who would be adversely affected by the proposed change is 12 percent higher than the overall percentage of minority passengers across the DASH system, this proposed change would exceed the 10 percent threshold and create a “disparate impact”. The difference between low-income passengers who are affected by this change and the overall DASH systemwide average is less than 10 percent so no “disproportionate burden” would be created by the proposed change.

Table 1 – Service Equity Analysis for Proposed Reduction to Line X
(For demonstration purposes only)

	<u>Minority</u>	<u>Low Income</u>
Adversely-Impacted Riders	60.3%	22.4%
<u>DASH Service Area Average</u>	<u>48.1%</u>	<u>21.3%</u>
<i>Delta</i>	12.2%	1.1%

In this example, staff would be required to conduct further assessments to determine if there are alternatives that would achieve the same objectives without creating a disparate impact, or to mitigate the impact of the proposed change on affected minority riders.

Attachment C
Board Memorandum for Service Monitoring Results



MEMORANDUM

DATE: March 2, 2022
TO: ATC Board of Directors
FROM: Martin Barna, Director of Planning & Marketing
SUBJECT: **FTA Title VI Standards & Monitoring Results**

Introduction

The following memorandum presents the findings of an initial review of ATC/DASH fixed-route bus service and passenger amenities based on the proposed “DASH Title VI Service Standards & Policies”, which were presented to the ATC Board on February 9, 2022 and will be considered for adoption on March 9, 2022. The findings in this memo are intended to provide additional information about the proposed Title VI Service Standards & Policies to help inform any feedback from the ATC Board, community groups, or members of the public.

As outlined in Title VI Circular 4702.1B and Environmental Justice Circular 4703.1, the Federal Transit Administration (FTA) requires that all fixed route transit providers establish and monitor a set of service standards and policies that can be used to measure system performance and ensure that transit services are being provided in a fair and equitable manner. These standards apply to all DASH bus service and passenger facilities.

For a full summary of the monitoring process methodology and data requirements, please review DASH Title VI Service Standards & Policies document.

Based on the findings summarized by this memo, DASH staff finds no instances in which fixed-route services or passenger amenities are being provided in an unfair or inequitable manner.

Title VI Service Standards

In accordance with FTA Title VI requirements, ATC/DASH shall regularly monitor the performance of its bus routes relative to system-wide service standards for the following indicators to ensure that minority and non-minority routes are being operated in a fair and equitable manner:

- Vehicle Load;
- Vehicle Headways;
- On-Time Performance; and
- Service Availability

Any significant service deficiencies identified through this process must be evaluated further to determine the extent to which minorities are affected. If the negative effect on minority persons is proportionally higher than the effect on non-minority persons, additional steps may be necessary to address or mitigate any impacts that might result from the discrepancy.

Route Categories

In order to develop appropriate service standards for the different types of routes, each DASH bus line is classified with a route category and as a “minority” or “non-minority” route. These classifications are used to identify appropriate service standards for each route category and to compare the operating characteristics of “minority” routes to “non-minority” routes to ensure that service is being provided in an equitable manner.

A summary of the route categories and “minority” classifications are provided in Tables 1 and 2 below. Maps depicting the route categories and classifications are included in Appendix A.

Table 1 – DASH Route Classifications

Route Category	Minority	Non-Minority	Total	Percent
Frequent	2	1	3	27%
Local	2	2	4	36%
Commuter	1	2	3	27%
Trolley	0	1	1	9%
Total	5	6	11	100%
<i>Percent</i>	<i>45%</i>	<i>55%</i>	<i>100%</i>	

Table 2 – DASH Route Classifications by Route

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Route	Name	Route Category	Minority Route?
30	Van Dorn Metro - Braddock Road Metro via Duke Street	Local	Minority
31	NVCC-Braddock Road Metro via King Street	Frequent	Non-Minority
32	Landmark Mall - King Street Metro via Eisenhower Avenue	Local	Minority
33	Potomac Yard - King Street Metro via Del Ray	Local	Non-Minority
34	Braddock Road Metro - Lee Center via City Hall	Local	Non-Minority
35	Van Dorn Metro - Pentagon via West End	Frequent	Minority
36A/B	Mark Center - Potomac Yard via Shirlington	Frequent	Minority
102	Mark Center - King Street Metro via Seminary Road	Commuter	Minority
103	Braddock Road Metro - Pentagon via Parkfairfax	Commuter	Non-Minority
104	Braddock Road Metro - Pentagon via Parkfairfax	Commuter	Non-Minority
KST	King Street Trolley	Trolley	Non-Minority

Systemwide Service Standards

The following sections outline the four primary service indicators that will be used to monitor ATC/DASH bus lines. Each standard is set based on the route categories listed above and compares the performance of minority routes against those of non-minority routes to ensure that DASH service is being operated in an equitable manner.

The ridership, schedule, and on-time performance data included below is based on system performance during November and December 2021. These months were selected as a representative sample of system performance in light of COVID recovery trends and the introduction of the New DASH Network and fare-free operations in September 2021. For purposes of this analysis, weekday “peak” periods are generally defined as 6:00 AM to 9:00 AM and 3:00 PM to 6:00 PM.

For more information on the standards included below and the FTA requirements for monitoring, please review the “DASH Title VI Service Standards & Policies” document.

Vehicle Loads

Vehicle loads are generally shown as a ratio of passengers to the total number of seats on the vehicle. A vehicle load of 0.5 indicates that half of the available seats are occupied. A vehicle load of 1.2 indicates that all available seats are occupied, and that there is an excess of passengers who are likely having to stand in the aisle. Vehicle load factors are typically measured as the maximum or “peak” vehicle load on a given trip and the average of multiple trips on the same route or group of routes.

A full summary of the peak load factors by route category is provided in Table 3 below.

Table 3 – DASH Peak Load Factor by Route Category & Time Period

Route Designations (Line #'s)	Average Peak Load Factor (Max Load/Seated Capacity)		
	Weekday (Peak)	Weekday (Off-Peak)	Weekend
Frequent (Standard)	1.2	1.0	1.0
Minority Routes (35, 36A/B)	0.3	0.2	0.2
Non-Minority Routes (31)	0.2	0.2	0.2
Local (Standard)	1.2	1.0	1.0
Minority Routes (30, 32)	0.2	0.3	0.3
Non-Minority Routes (33, 34)	0.2	0.2	0.2
Commuter (Standard)	1.0	1.0	-
Minority Routes (102)	0.2	0.2	-
Non-Minority Routes (103, 104)	0.1	-	-
Trolley (Standard)*	1.5	1.5	1.5
Minority Routes (N/A)	-	-	-
Non-Minority Routes (KST)*	0.6	0.5	0.7

*Trolley does not typically operate during AM peak periods or on weekends before 11:00 AM.

The peak vehicle load data shows that no routes are operating near the peak load factor standards of 1.0 or above. This is likely due to the reduced ridership that has occurred during the COVID pandemic. In most cases, the “minority” routes have slightly higher peak load factors than the “non-minority” counterparts due to their higher ridership, but none of the minority routes are in danger of frequent overcrowding.

Vehicle Headways

Vehicle headways measure the average amount of time (in minutes) between scheduled trips in the same direction on the same route. For example, the frequent routes shown below are scheduled to run every 15 minutes or better all day, seven days per week.

A full summary of the vehicle headways by route category is provided in Table 4 below.

Table 4 – Vehicle Headways by Route Category & Time Period

Route Designations (Line #'s)	Vehicle Headways (minutes between scheduled trips)		
	Weekday (Peak)	Weekday (Off-Peak)	Weekend
Frequent (Standard)	15	15	15
Minority Routes (35, 36A/B)	10-15	10-15	15
Non-Minority Routes (31)	10	15	15
Local (Standard)	30	60	60
Minority Routes (30, 32)	10-30	30-60	30-60
Non-Minority Routes (33, 34)	30	30-60	30-60
Commuter (Standard)	30	60	-
Minority Routes (102)	30	60	-
Non-Minority Routes (103, 104)	30	-	-
Trolley (Standard)*	15	15	15
Minority Routes (N/A)	-	-	-
Non-Minority Routes (KST)*	15	15	15

*Trolley does not typically operate during AM peak periods or on weekends before 11:00 AM.

The vehicle headway data that is summarized above shows that all routes are currently meeting or exceeding the designated headway standards for their respective route categories. For the “Frequent” and “Local” route categories, the minority routes are operating with equivalent or better headways than the non-minority routes in the same category.

On-Time Performance

On-Time performance measures the percentage of times across an entire trip or route that a bus arrives at a timepoint “on-time”. DASH defines “on-time” as no more than one minute prior to the scheduled arrival time and no more than five minutes late.

A full summary of on-time performance by route category is provided in Table 5 below.

Table 5 – On-Time Performance Standards by Route Category & Time Period

Route Designations (Line #'s)	On-Time Performance (%)		
	Weekday (Peak)	Weekday (Off-Peak)	Weekend
Frequent (Standard)	85.0%	85.0%	85.0%
<i>Minority Routes (35, 36A/B)</i>	83.6%	87.0%	87.4%
<i>Non-Minority Routes (31)</i>	86.4%	86.6%	80.3%
Local (Standard)	85.0%	85.0%	85.0%
<i>Minority Routes (30, 32)</i>	90.3%	94.0%	88.5%
<i>Non-Minority Routes (33, 34)</i>	90.4%	94.1%	89.5%
Commuter (Standard)	85.0%	85.0%	-
<i>Minority Routes (102)</i>	82.8%	93.8%	-
<i>Non-Minority Routes (103, 104)</i>	86.7%	-	-
Trolley (Standard)*	85.0%	85.0%	85.0%
<i>Minority Routes (N/A)</i>	-	-	-
<i>Non-Minority Routes (KST)*</i>	93.0%	95.1%	91.4%

*Trolley does not typically operate during AM peak periods or on weekends before 11:00 AM.

Based on the on-time percentage data provided above, most routes and route categories meet or exceed the 85 percent standard for on-time performance. Several routes fall below the 85 percent threshold for parts of the day, but none are consistently unreliable for the entire weekday or throughout the entire week. Most of the “minority” routes are running on time the same amount of time or more than the “non-minority” routes in their route categories.

The main exception to this is the frequent, minority route category, which has two routes that are only shown to operate “on-time” 84 percent of the time, compared to an 87 percent on-time performance for frequent, non-minority routes. The reason for this is that Line 35, which operates the most service of any route in the DASH system, runs on a “headway management” schedule in which buses do not have a public-facing schedule and are permitted to run early or late, as needed, to maintain consistent 10-minute headways. DASH will also monitor Line 102 on-time performance during weekday peaks to determine if any schedule adjustments are needed to improve reliability.

Service Availability

The ATC/DASH approach to service availability is shaped largely by the Alexandria Transit Vision Plan (www.dashbus.com/transitvision). One of the key statistics that was used during the development of the Alexandria Transit Vision Plan was the percentages of city residents who live within ¼ mile of a bus stop with “frequent” bus service, and the percentage within ¼ mile of a bus stop with any bus service. This metric was also calculated for percentages of minority residents, low-income residents, senior residents and jobs. These percentages help to measure the availability of bus service - and the availability of useful, frequent, all-day service – to city residents.

A summary of Service Availability for each the demographic groups noted above is included as Table 6. Note that these values include both DASH and Metrobus routes within the City of Alexandria to accurately capture the degree to which residents are effectively served by public transit.

Table 6 – Transit Service Availability for the City of Alexandria

	Total within 1/4 mile of frequent bus service	% within 1/4 mile of frequent bus service	Total within 1/4 mile of any bus service	% within 1/4 mile of any bus service
<i>System Standard</i>	-	>50%	-	>90%
All Residents	114,150	73%	148,492	95%
Minority	13,046	81%	15,499	96%
Low Income	55,654	78%	68,389	96%
Seniors (65 years+)	12,252	69%	16,639	94%
Jobs	55,518	73%	71,984	95%

The Service Availability data provided above shows that the City of Alexandria’s bus network does an exceptional job of providing frequent service to a large percentage of the community, particularly minority and low-income households. Nearly 3 out of every 4 city residents lives within close proximity of a bus stop with “frequent” service (15 minutes or better, all-day, seven days per week), while 95 percent of all residents have access to bus service. In terms of low income and minority communities, roughly 4 out of every 5 individuals are served by the frequent bus network, while 96% have access to any bus service. Prior to the launch of the City’s New DASH Network, fewer than 30 percent of residents had access to frequent, all-day service, including less than 25 percent of minority residents. These statistics demonstrate that the new bus network has significantly increased the number of residents with access to frequent, useful bus service while maintaining baseline service availability for the vast majority of city residents.

Systemwide Service Policies

The following section is intended to provide insights into current vehicle assignment and passenger amenity distribution practices to ensure that they are not resulting in discrimination on the basis of race, color or national origin. Based on these maps and analyses, no discriminatory practices have been identified in the assignment of vehicles or the distribution of passenger amenities.

Vehicle Assignment

The ATC/DASH bus fleet is comprised of roughly 100 buses in active revenue service. The DASH fleet operates out of the DASH William B. Hurd Maintenance & Operations Administration Facility, which is located at 3000 Business Center Drive in Alexandria, Virginia. The current fleet includes a mix of buses of varying lengths and propulsion types, which are shown in Table 7.

Table 7 – Active DASH Bus Fleet (2022)

Vehicle ID's	Year	Make	Type	Length	# of Vehicles
200-206	2011	Gillig	Hybrid	35'	7
300-302	2011	Gillig	Hybrid	40'	3
400-404	2011	Gillig (Trolley)	Hybrid	29'	5
207-211	2012	Gillig	Hybrid	35'	5
303-307	2012	Gillig	Hybrid	40'	5
212-216	2014	Gillig	Hybrid	35'	5
308-309	2014	Gillig	Hybrid	40'	2
217-229	2015	Gillig	Hybrid	35'	13
405	2015	Gillig (Trolley)	Hybrid	35'	1
230-233	2017	Gillig	Hybrid	35'	4
310-311	2017	Gillig	Hybrid	40'	2
501-514	2018	Gillig	Clean Diesel	35'	14
515-527	2019	New Flyer	Clean Diesel	35'	13
528-530	2020	New Flyer	Clean Diesel	35'	3
701-705	2020	New Flyer	Clean Diesel	40'	5
801-803	2020	New Flyer	Electric	40'	3
804-806	2021	Proterra	Electric	40'	3
807-810	2021	Proterra	Electric	40'	4
901-904	2021	New Flyer	Electric	60'	4
TOTAL ACTIVE FLEET					101

Vehicle Assignment refers to the process by which transit vehicles are assigned to routes for revenue service. A summary of the ATC/DASH Vehicle Assignment Process is included below:

- DASH Operations staff typically assign buses at random, based on fleet availability at the time when a bus is scheduled to pull out. In most instances, whichever bus is most accessible or near the front of the garage is used for pullout.

- DASH employs a significant amount of “interlining”, which is a vehicle blocking strategy whereby a single bus and operator will rotate through multiple routes during the course of the day to maximize operating cost efficiency. In addition to lowering operating costs, this approach also results in buses being rotated through the system in a more fair and equitable manner.
- Exceptions to these vehicle assignment policies are employed for several routes with increased ridership or specific operating or branding constraints. Examples include:
 - Dispatchers typically avoid assigning the larger, 40- and 60-foot buses to routes that operate on narrow streets or tight turns, including those on Lines 36A/B, 103 and 104;
 - Dispatchers try to assign these larger buses to routes with higher ridership that may be more susceptible to overcrowding. These high-ridership routes include Lines 30 and 35 in West Alexandria, which has a higher percentage of low income and minority residents than the rest of the service area.
 - DASH has a series of buses that have been specifically wrapped and branded for Line 35 service in West Alexandria. These buses include a mix of 35- and 40-foot vehicles and are used almost exclusively on Line 35.
 - The King Street Trolley service is also operated with a dedicated sub-fleet of six buses that have been equipped with a custom livery package that emulates historic trolley design features. These trolley buses are used exclusively on the King Street Trolley.

ATC/DASH maintains extremely high safety standards and closely monitors the age and condition of its vehicles to determine when repairs are needed and when the buses are due for replacement. Buses are typically replaced at the end of their useful 12-year lifespan in accordance with the ATC/DASH Fleet Replacement Plan. DASH has a comprehensive Preventive Maintenance (PM) program which outlines regular maintenance procedures that are performed to ensure a high level of vehicle reliability.

The oldest vehicles in the active DASH revenue fleet date were manufactured in 2011, and the newest were delivered in 2021. The average age of the fleet is 5.7 years old, which is less than half of the typical 12-year lifespan. Based on a random sampling of bus utilization from December 2021, the average age of the buses used on minority routes is 5.5 years, while the average age of the buses used on non-minority routes is 5.8 years. This finding indicates that buses are being used in a fair and a equitable manner.

Transit Amenities

The City of Alexandria provides a wide array of transit amenities such as bus shelters, benches, trash cans, lighting, and real-time bus arrival displays. These amenities are distributed throughout the service area based on ridership data, staff analysis, funding opportunities, development conditions and customer requests. General policies for the distribution of bus shelters, benches, trash cans, lighting fixtures and posted schedule information are outlined below. ATC/DASH and City staff monitor the locations of all transit amenities to ensure that they are distributed equitably.

Table 8 – City of Alexandria Bus Amenities in Minority Areas

	Minority Areas	Non-Minority Areas	Totals	% in Minority Areas
Bus Shelters	49	69	118	42%
Benches	60	98	158	38%
Trash Cans	93	142	235	40%
Real-Time Display	30	32	62	48%
Total Bus Stops	308	525	833	37%

As shown in Table 8, roughly 37 percent of bus stops are in census block groups that are below the citywide average minority percentage. By comparison, 42 percent of bus shelters are located in minority communities. Similarly, 48 percent of real-time information displays have been deployed to areas with higher concentrations of minority populations. Additional maps depicting the locations of passenger amenities are provided in Appendix A. These maps and tables indicate that passenger amenities are distributed in an equitable manner.

Appendix A

Title VI Demographic & Service Profile Maps

Figure A1 – City of Alexandria Bus Service & Passenger Amenities

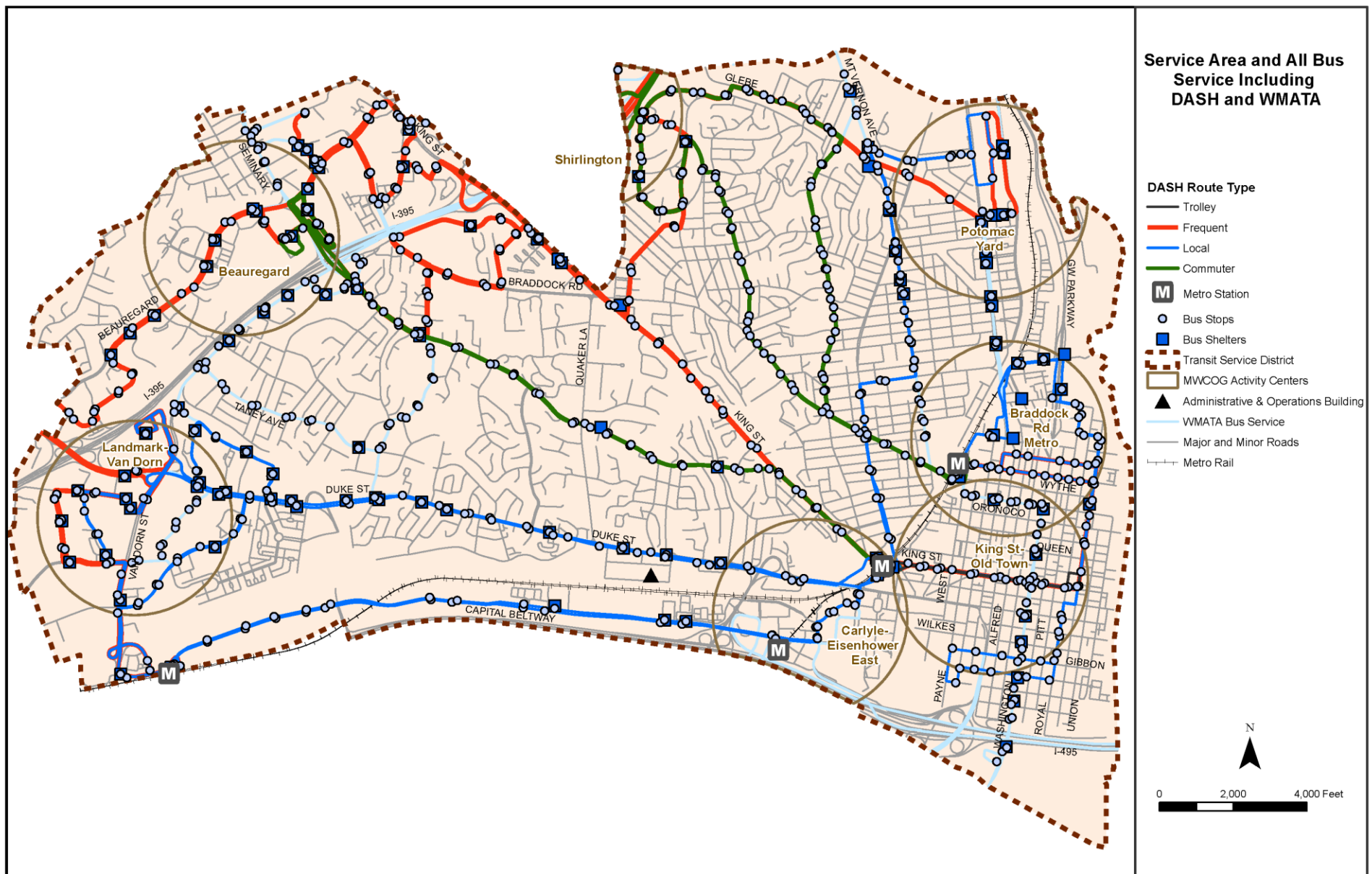


Figure A2 – DASH “Minority” Route Classifications & Minority Populations

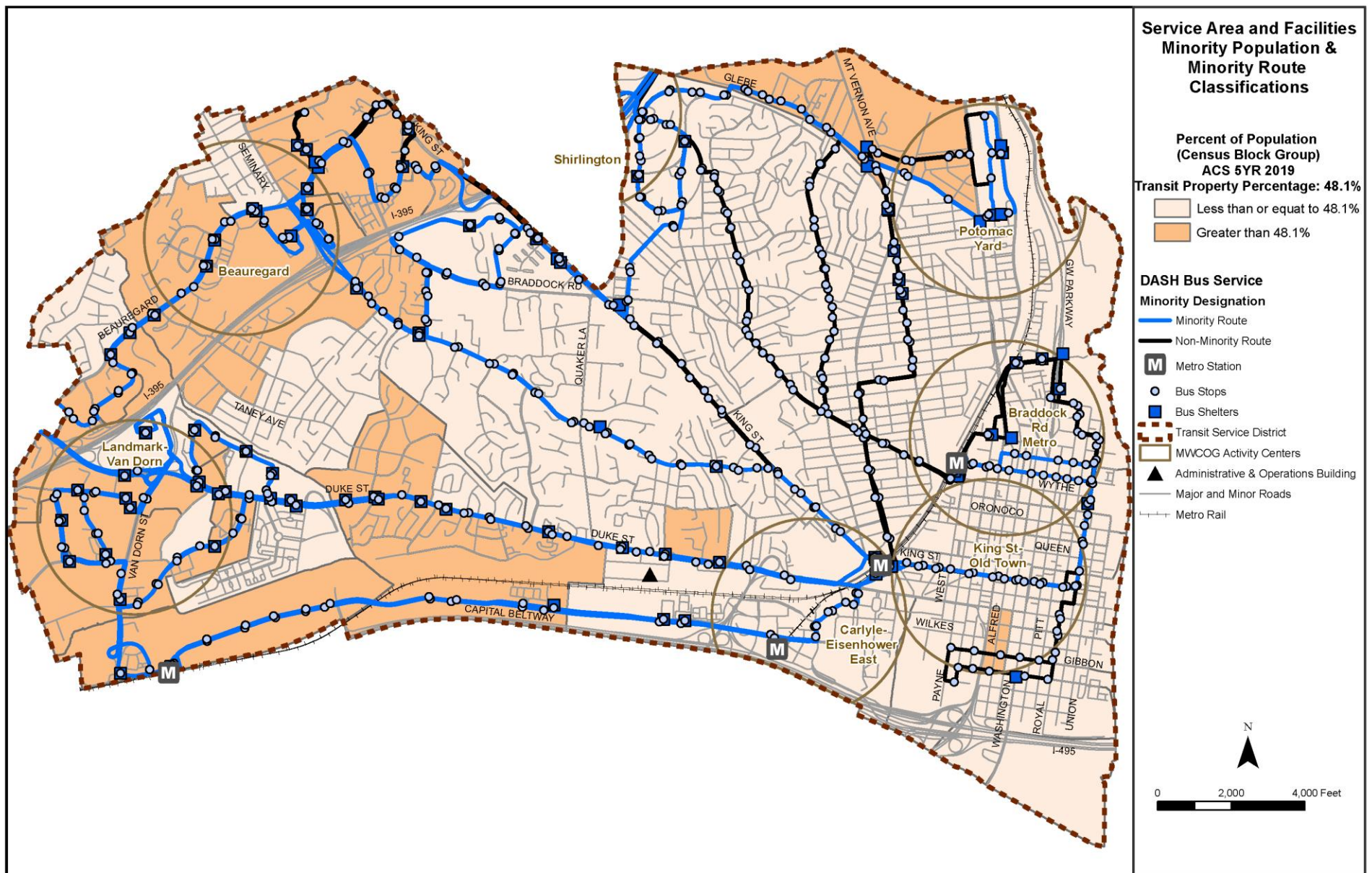


Figure A3 –Low Income Populations & DASH Bus Service

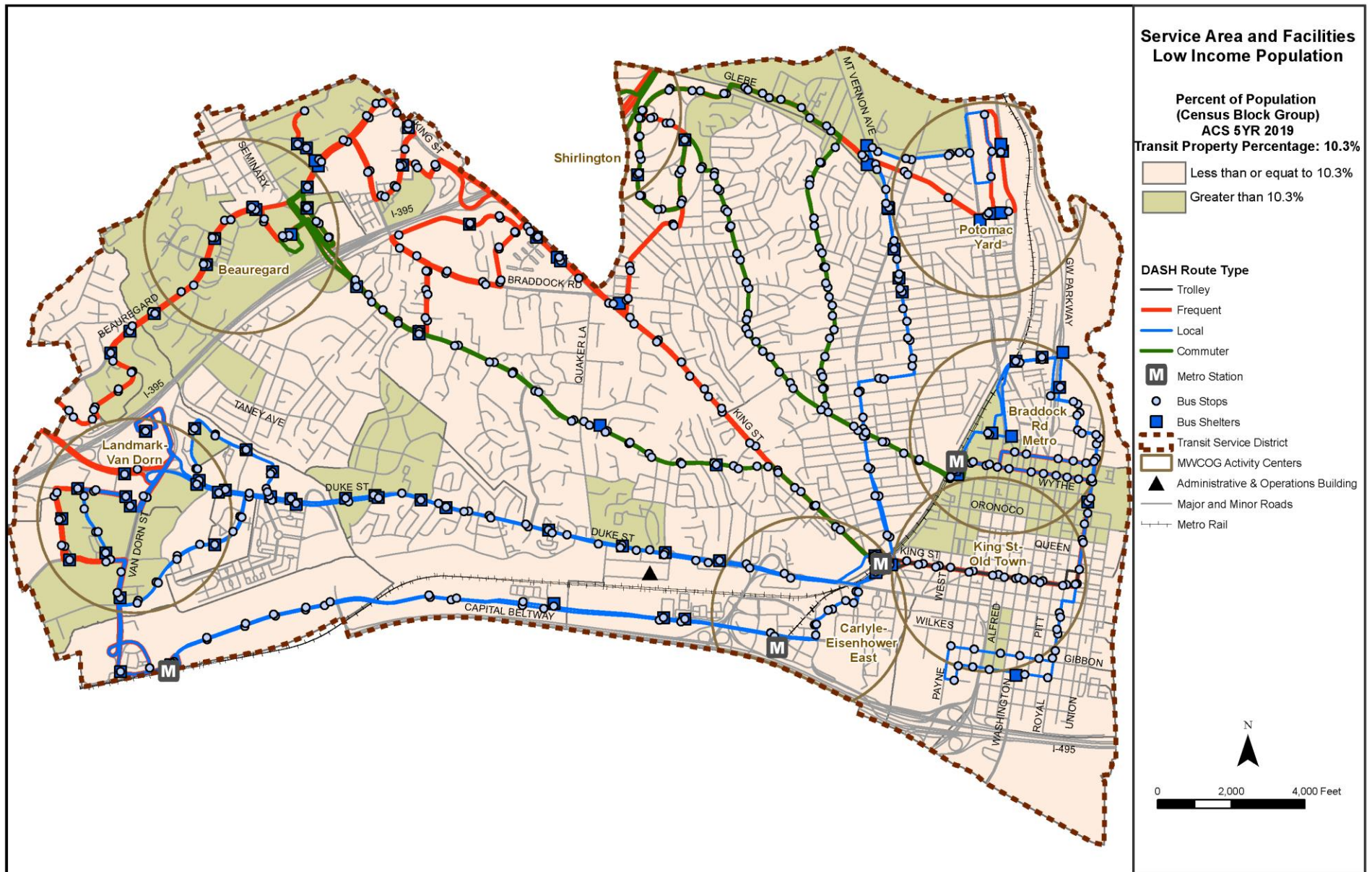


Figure A4 –Limited English Proficiency (LEP) Populations & DASH Bus Service

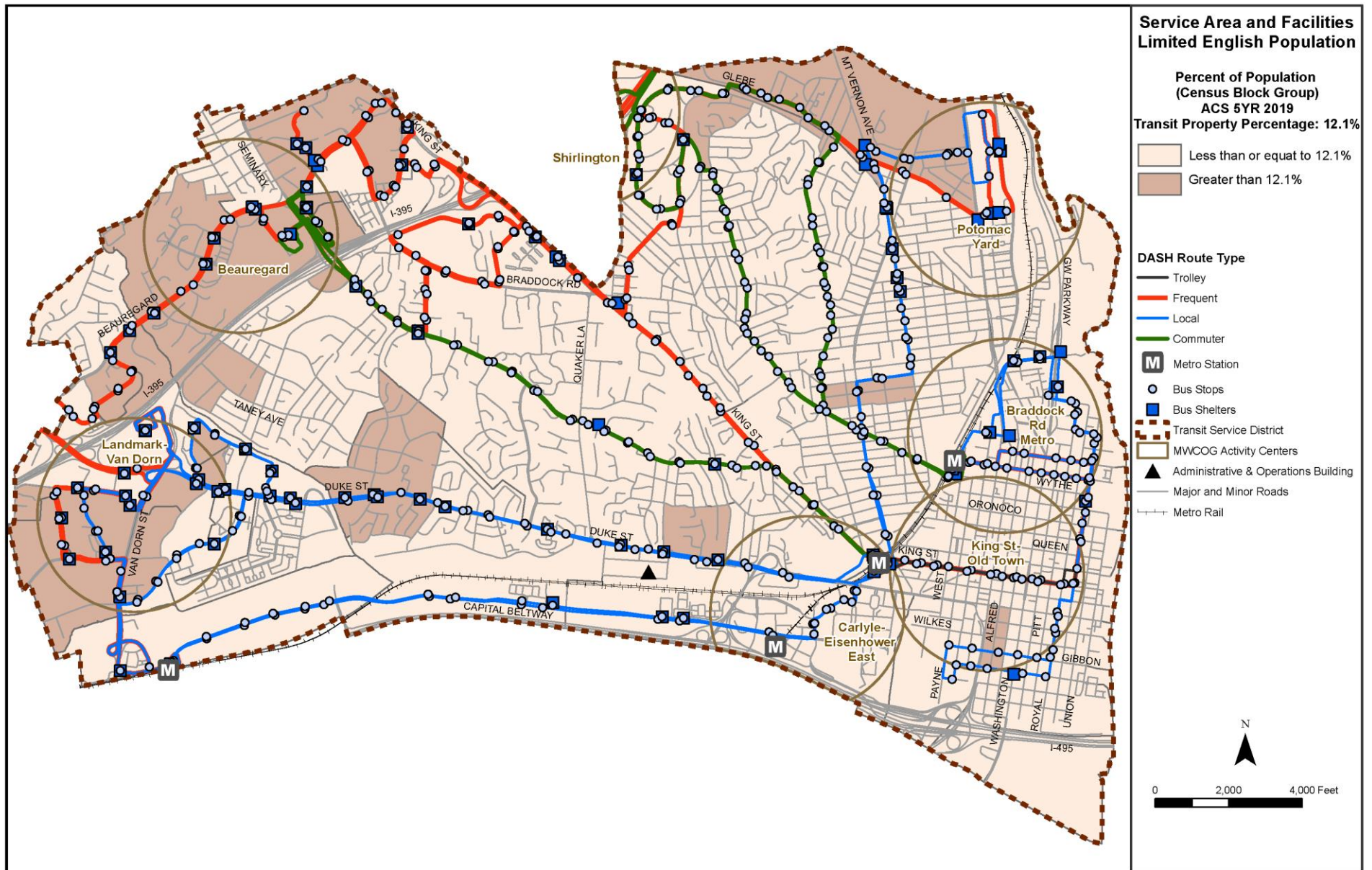


Figure A5 – City of Alexandria Bus Passenger Amenities & Minority Populations

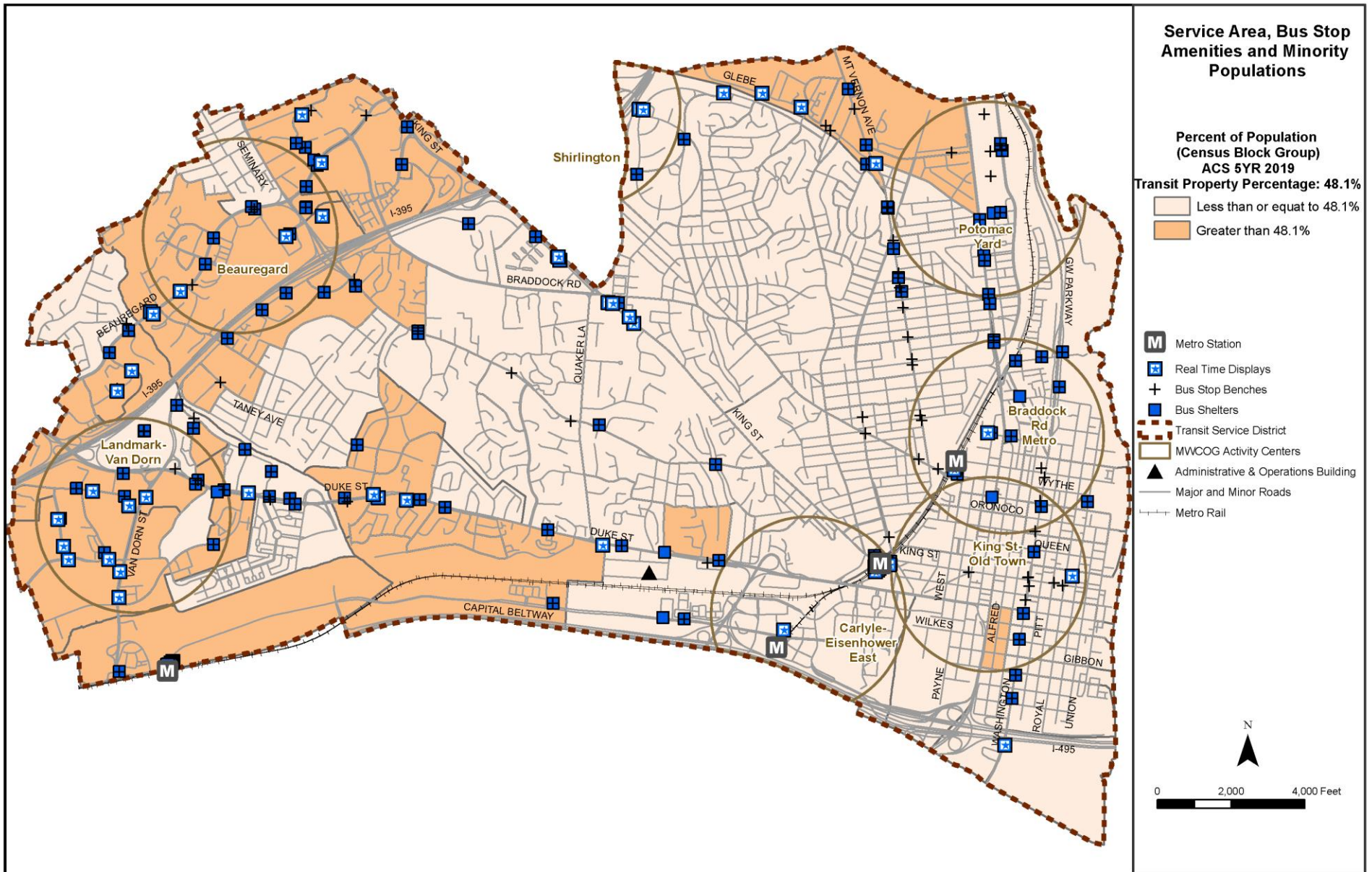


Figure A6 – City of Alexandria Bus Passenger Amenities & Low-Income Populations

