



Executive Summary

Phase 1 Analysis Findings





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Building a Strong Foundation

Creating a Vision

As part of the Better Bus Network Redesign (BBNR) process, Metro conducted assessments of the region's travel market and existing bus service to focus on where the demand for bus service exists and where existing services can be improved. The analyses include both pre- and post-pandemic data to understand regional travel.

The Market Assessment identifies where existing and potential customers live, where and when they travel, and how well transit is currently serving these trips. This will be used to identify areas of opportunity for a redesigned bus network.

The Existing Conditions Assessment identifies which current bus lines provide customers with a useful, efficient, and reliable service—as well as where service could be improved based on availability, design, performance, and efficiency.

Market Assessment



WHERE
CUSTOMERS LIVE



WHERE & WHEN
CUSTOMERS
TRAVEL



HOW WELL
TRANSIT IS SERVING
CURRENT TRIPS

Metro will use these assessments to:

-  Design two comprehensive bus networks for the region:
 - A network developed within existing resources that can be implemented in FY2025 that better matches existing demand for transit service.
 - A visionary network that creates a great bus system for the region to make bus the mode of choice, that could be implemented as soon as more resources are available.
-  Identify areas that would benefit from enhanced transit infrastructure to support increased reliability across the system

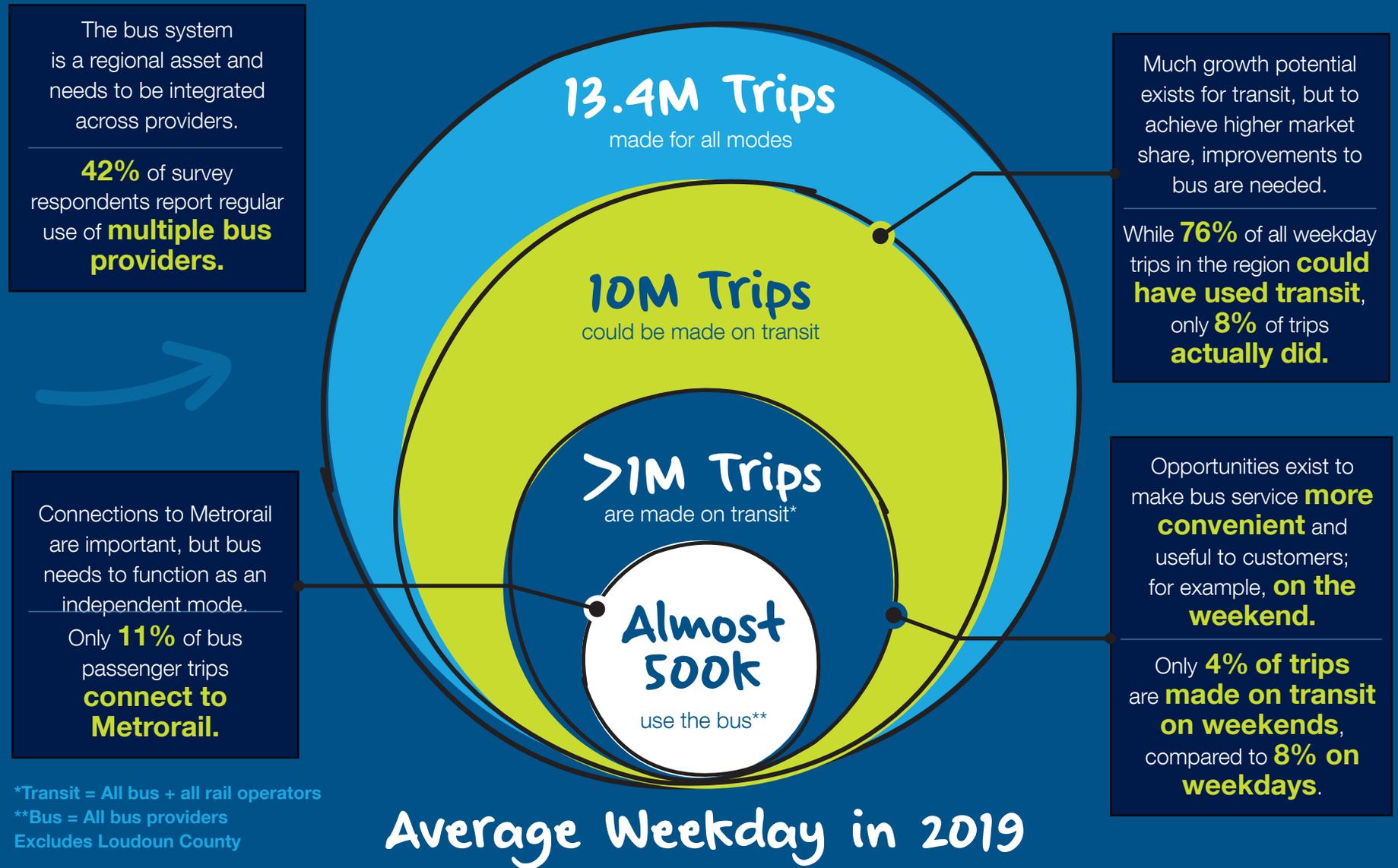


Our analysis helps us understand where bus service is:



Bringing these analyses together, we identify how, where, and when the bus system could be improved.

Travel in the WMATA Bus Compact Area





Available

Where and when is bus service currently available?



Do People Have Access to Frequent Service?

Access to frequent bus service is similar across most population groups, but highest for low-income residents and residents of Equity-Focus Communities (EFC).

Customers said that increasing frequencies is a top priority. Reducing wait times and eliminating reliance on schedules makes bus service more appealing.



While **74% of the region's residents have access to the bus system**, only **22% have access to high-frequency service**, even during the peak periods.



A similar percentage have access to service that only comes **every 60 minutes (or less)**.



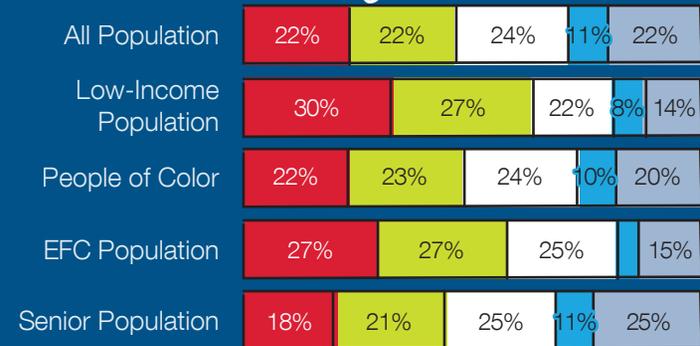
Metro will identify ways to provide more people with access to high-frequency service.

Equity-Focus Communities are informed by Census data that identifies areas with high concentrations of people of color, low-income people, and people with disabilities.

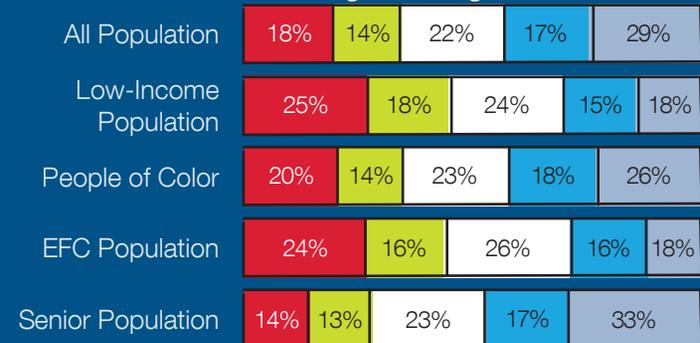
Percent of Population with Access to Bus Service

■ Every 12 minutes or less
 ■ Every 12-20 minutes
 ■ Every 20-30 minutes
 ■ Every 30-60 minutes
 ■ More than every 60 minutes

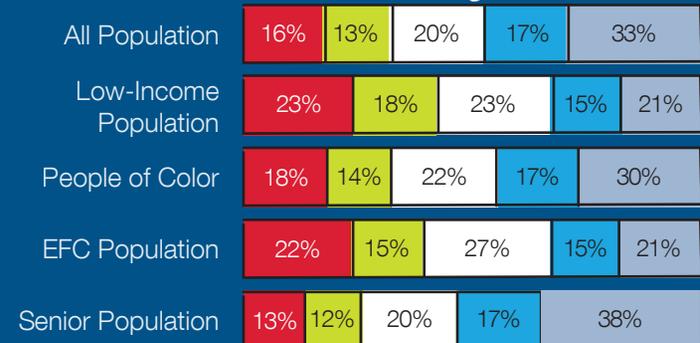
Weekday Peak



Weekday Midday



Weekend Midday





Useful

Do buses connect people to where they want to go?

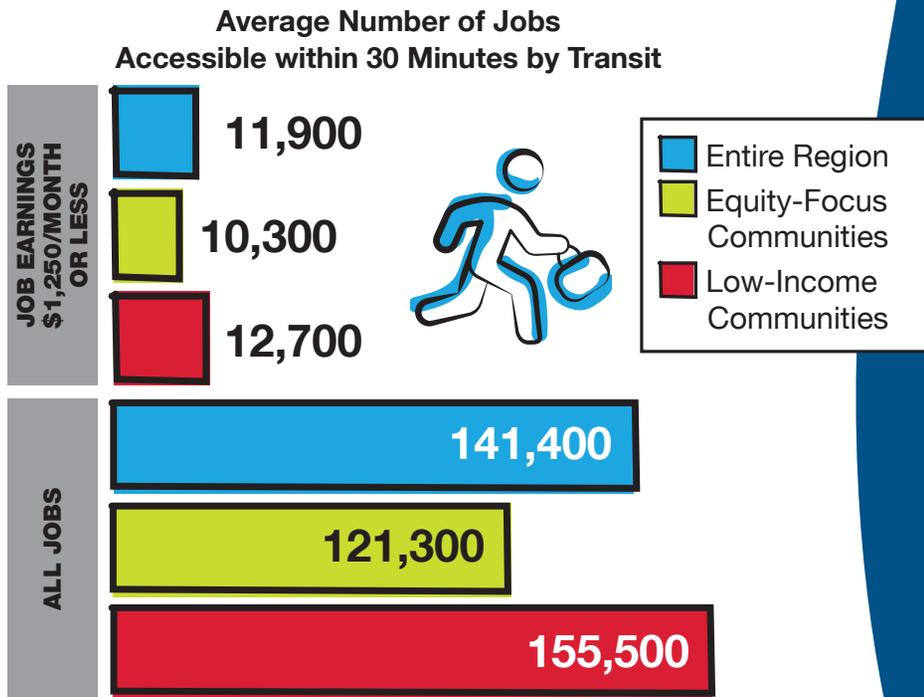


Does the Bus System Connect People to Jobs?

Equity-Focus Communities have fewer jobs accessible by transit, including low-wage jobs, while low-income communities have above average jobs access.

An efficient and reliable bus network should allow customers to access jobs (including low-wage jobs).

Areas that have low transit access to a variety of jobs may need improved service and new connections.

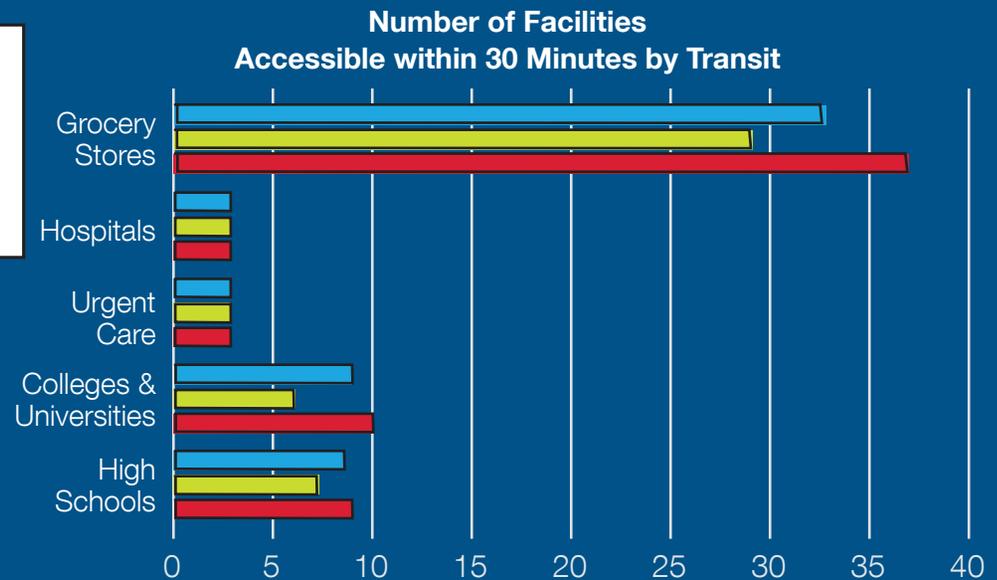


Does the Bus System Connect People to Essential Services?

Equity-Focus Communities have fewer grocery stores and educational institutions accessible by transit, while low-income communities have above average accessibility.

An efficient and reliable bus network should allow users to access essential services – including educational institutions (schools, colleges, and universities), medical facilities (hospitals, urgent care), and grocery stores.

Areas that do not have easy transit access to these types of facilities need improved service and new connections.



Transit = All bus + all rail operators Bus = All bus providers Excludes Loudoun County

Source: 2019 LBS Data, Homeland Infrastructure Foundation-Level Data (HIFLD), Longitudinal Employer-Household Dynamics (LEHD) Data, 2022 Google Maps Data

Relationship to Metrorail

Metrobus often functions as a complement to the Metrorail system, providing access to a range of destinations across the region.

Framework and coverage lines are effective at providing Metrorail connections.

Most Metrobus lines are either:

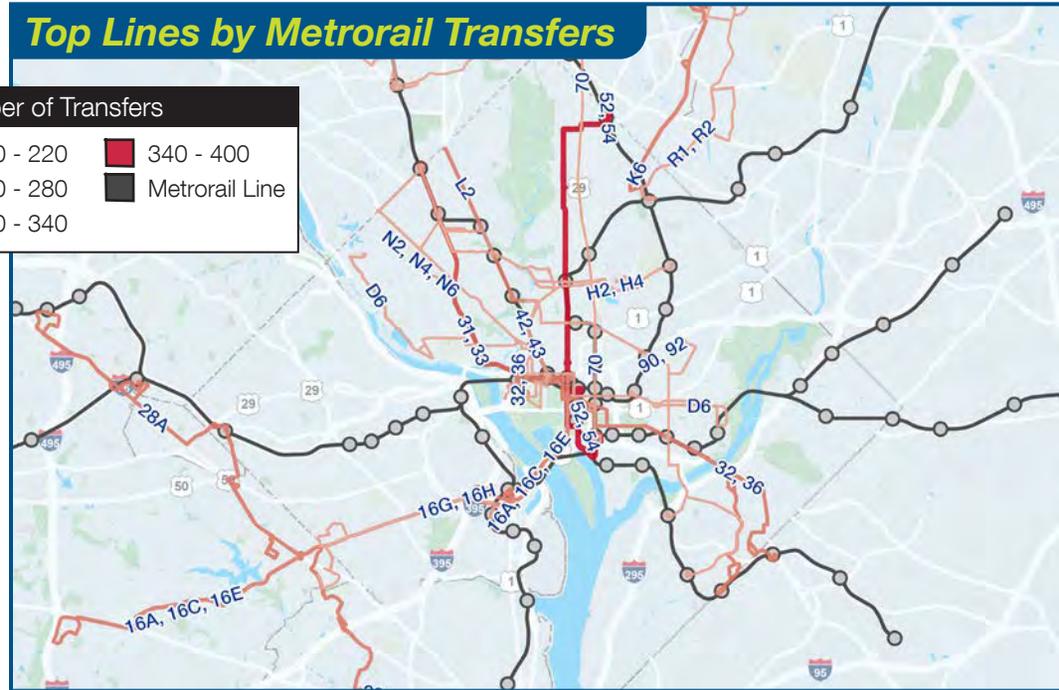
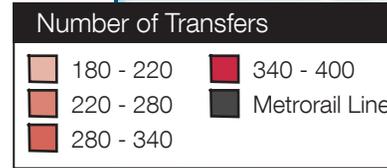
- Complementary to Metrorail, providing connections to Metrorail but also connecting to a range of other locations
- Independent from Metrorail, operating in mostly separate geographies and not used as feeder service.

No services were identified as purely substituting for Metrorail service.

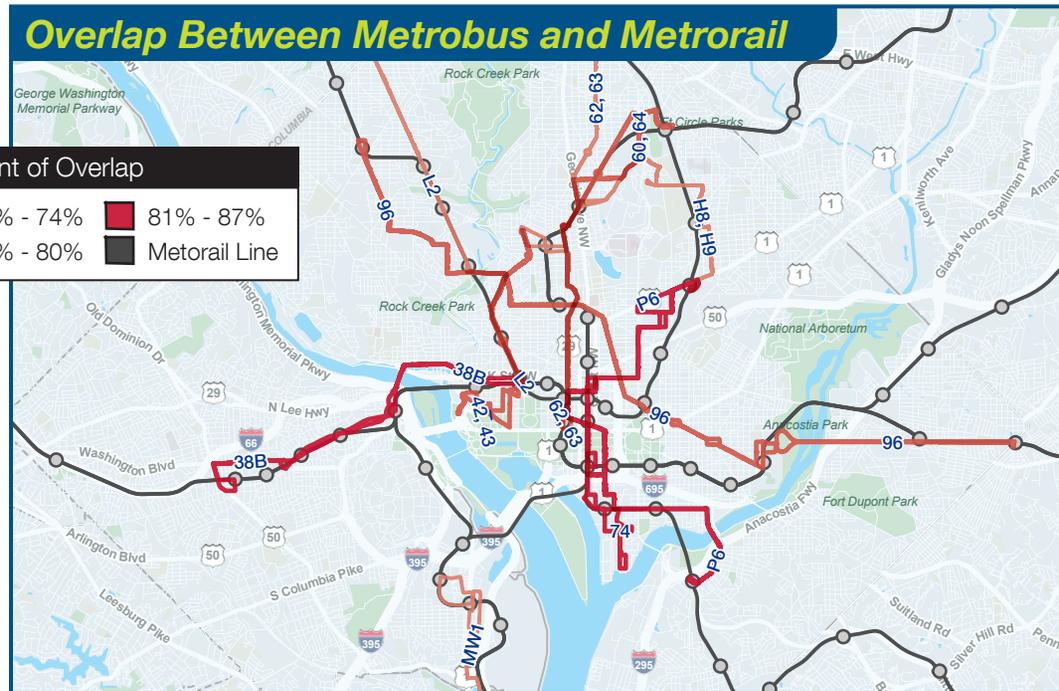
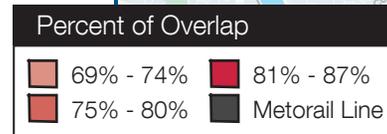
Metro will maintain and strengthen existing connections and identify new connections with Metrorail. The redesign will also consider ways to supplement and enhance, Metrorail services, for instance providing late-night connections outside of Metrorail's operating hours.



Top Lines by Metrorail Transfers



Overlap Between Metrobus and Metrorail





Needed

Do buses serve communities who are most likely to ride?

Who Needs Bus Service?

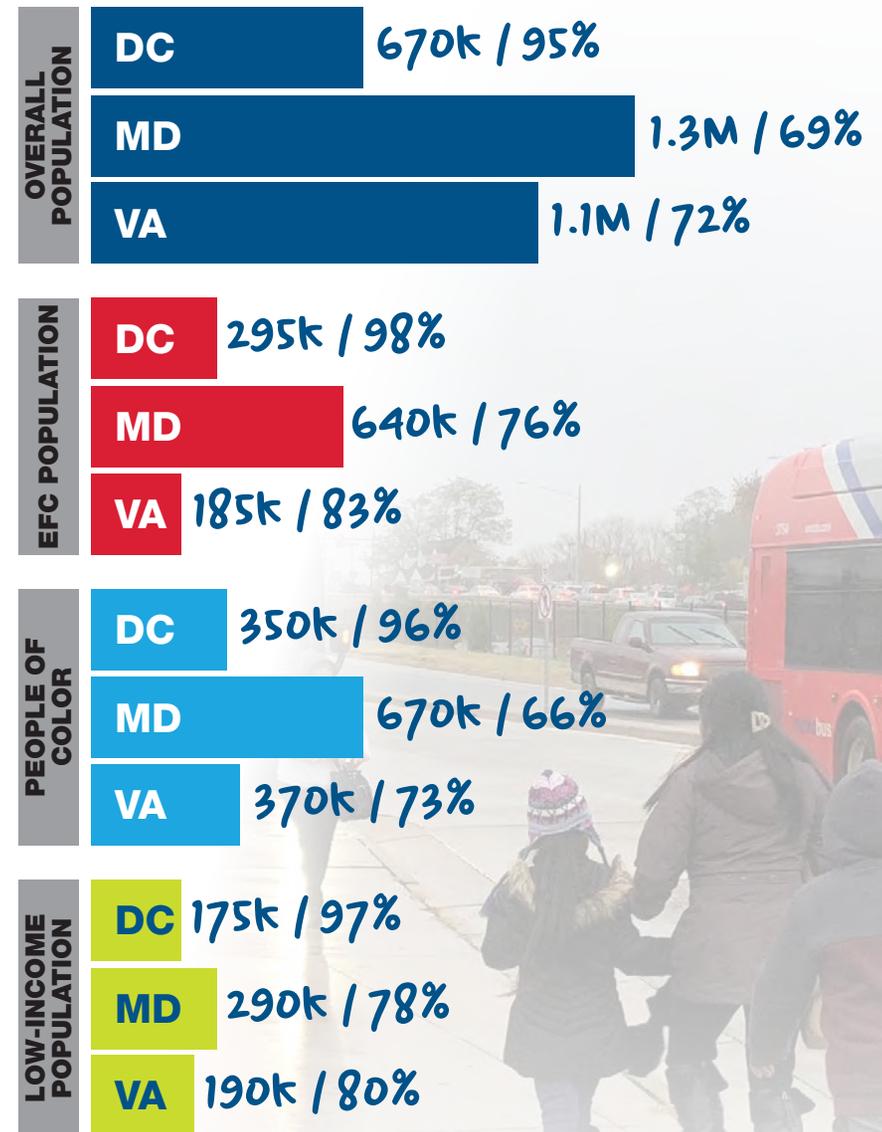
Building a bus system that advances equity in the region is a goal of the Better Bus Network Redesign. By providing fast, frequent, and reliable connections to jobs and essential services, transit can be a powerful tool for addressing the racial and socioeconomic inequities that exist in our region. Residents of Equity-Focus Communities make 32% of transit trips.

Across the Metrobus Compact Area, 74% of residents, 74% of people of color and 83% of low-income populations have access to bus*. Low-income populations have better access to bus service than the average resident.

Metro will continue to serve these communities, focusing on the needs and travel patterns of those who rely on and can benefit the most from bus service, and where demand for bus is the highest. This is important to build a more equitable region and grow ridership.



Total Population / Percent of Population's Proximity to Bus Service



*Residents located within a 1/4 mile of a Metrobus, The Bus, CUE, Ride On, Connector, ART, DASH or Circulator bus stop

Where has Metrobus Ridership Recovered from the Pandemic?

Over the last few years travel patterns have changed dramatically across the region. Being able to react to these changes with a redesigned network will allow Metro to create a visionary network that meets the region's changing needs.



Framework routes have recovered the most ridership, while commuter services are still struggling to return to normal.



Over 50% of lines have recovered at least 60% of their pre-pandemic ridership, and 14% have recovered more than 80% of their pre-pandemic ridership.



Weekday off-peak recovery has been stronger for all service classifications.



Weekend ridership has recovered at a faster rate than weekday, at 74% and 63%, respectively.



DC

2019 Ridership

69M

2022 Ridership

46M



66% Ridership Recovery

MD

2019 Ridership

31M

2022 Ridership

22M



68% Ridership Recovery

VA

2019 Ridership

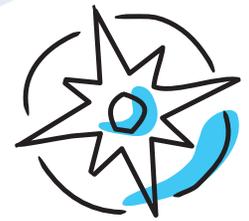
17M

2022 Ridership

10M



59% Ridership Recovery



Where is Metrobus Meeting the Need?

Metrobus routes that meet or exceed their productivity target are concentrated in the eastern half of the region.

Productivity measures the number of passengers carried per unit of service provided; the target varies based on surrounding development and service type.

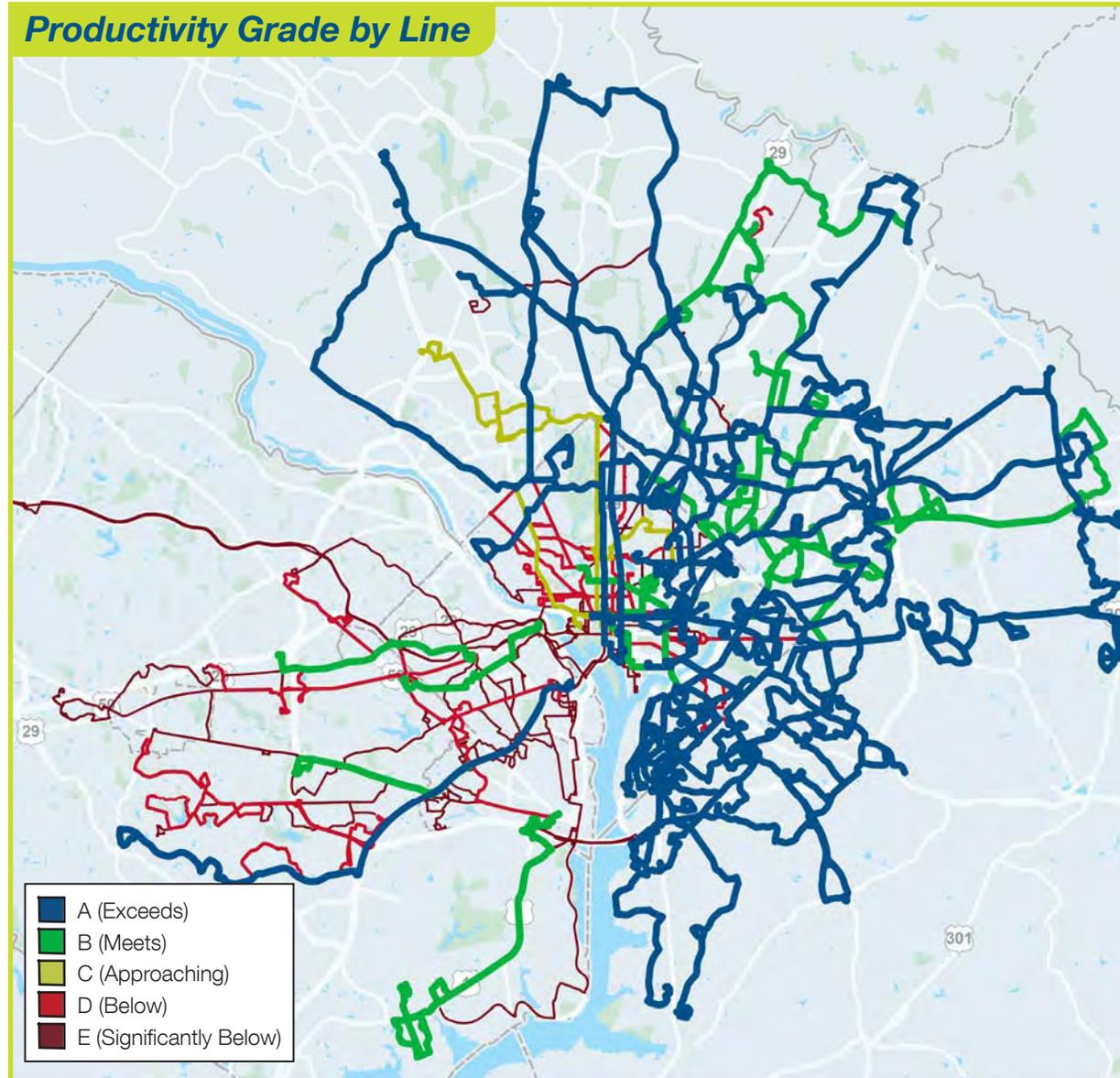
- Lines that exceed their productivity target may be too crowded, or have spans that are too short and need more service.
- Lines with productivity significantly below the standard might indicate areas where there may be too much service or service could be strengthened to attract riders.

Productivity is only one component of overall route effectiveness.



Metro is developing a variety of tactics that can improve productivity, ranging from adjusting the frequency or span of a service, to shortening a route, or linking to a new location to make the route more useful.

Productivity Grade by Line

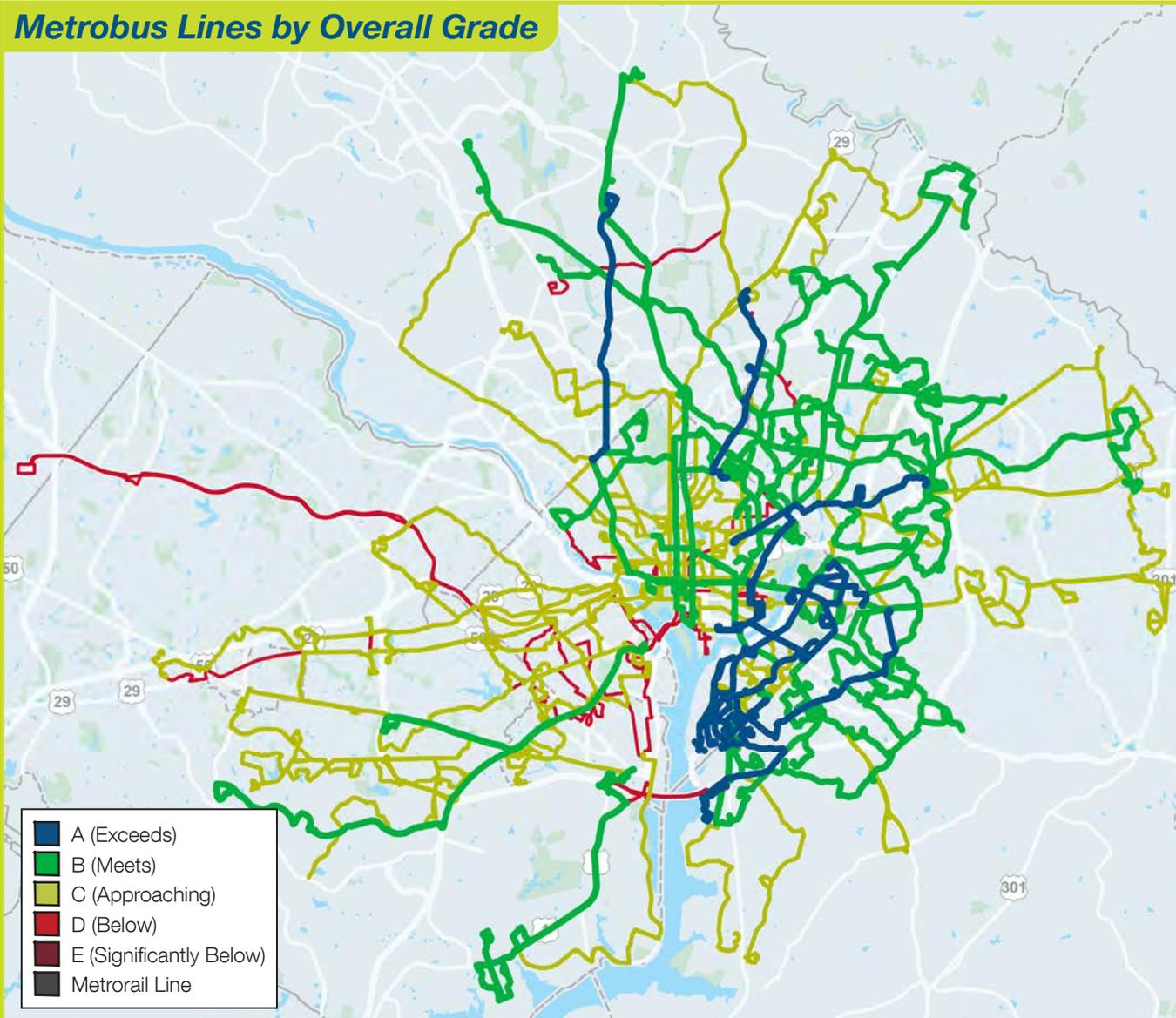




How Well Does Bus Serve Customers and the Region?

Each Metrobus line is assigned an overall grade which rates the line on availability, productivity, reliability, and cost-effectiveness of service. Overall, 43% of Metrobus lines meet or exceed the standards, while 46% of lines are approaching their service standards. Lines that serve more Equity-Focus Communities perform better overall.

Metrobus Lines by Overall Grade



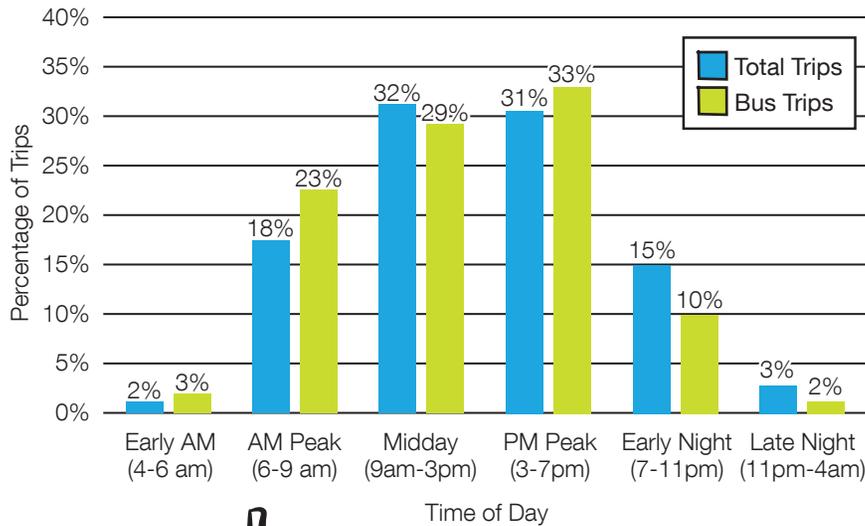
Metro will use information to identify where route changes are necessary within the existing Metrobus system.

When is Bus Service Needed?

A higher share of trips are taken on bus during the peak period (57%) than share of trips across all modes during the peak (49%). A lower share are taken on bus during the midday and early night (39%) than occur overall at these times (47%).

- Metro can continue to build on its successes at peak periods, when more than half of bus trips are taken, and take actions to increase off-peak trips to better match overall travel.

Weekday Distribution of All Trips and Bus Trips in the Region



Metro identified areas in need of improved midday service based upon availability:

<p>DC</p> <ul style="list-style-type: none"> • DuPont Park (SE) • Takoma (NE) • Foxhall Village (NW) 	<p>ARLINGTON</p> <ul style="list-style-type: none"> • Highland Park/ Westover • Radnor Heights 	<p>ALEXANDRIA</p> <ul style="list-style-type: none"> • Cameron Station (East of Van Dorn)
<p>MONTGOMERY</p> <ul style="list-style-type: none"> • S Bethesda • S Rockville (Wootton Pky) • King Farm/ Shady Grove Rd • Chestnut Hill (Wheaton) 	<p>PRINCE GEORGE'S</p> <ul style="list-style-type: none"> • Chillum • Laurel • Hyattsville (Edmonston Area) • Landover (Landover Hills and Pennsy Dr) • Glendale (Lanham Severn Rd) • Bowie 	<p>FAIRFAX</p> <ul style="list-style-type: none"> • Centreville • Chantilly (Walney Rd) • Dulles East (Sully Rd to Centreville Rd) • Fair Oaks to Fairfax City Center • S Merrifield (Prosperity Ave) • Falls Church (Broad St) • Annandale • Bren Mar Park Industrial Area

A full map of areas of opportunity can be found in the Market Assessment.



Convenient

Where do buses provide reasonable travel times?

Where is More Transit Needed?

Customers make decisions about how to travel based on what is most convenient for them and their trip.

Convenient travel time on transit considers:

-  How far do I have to walk to the bus stop?
-  How long do I have to wait for the bus?
-  Do I have to transfer?
-  If I have to transfer, how long do I have to wait for the second bus?
-  Does the bus travel directly and quickly to my destination?
-  How long do I have to walk from the bus stop?



On Average
Bus trips take **4.5X**
as long as driving



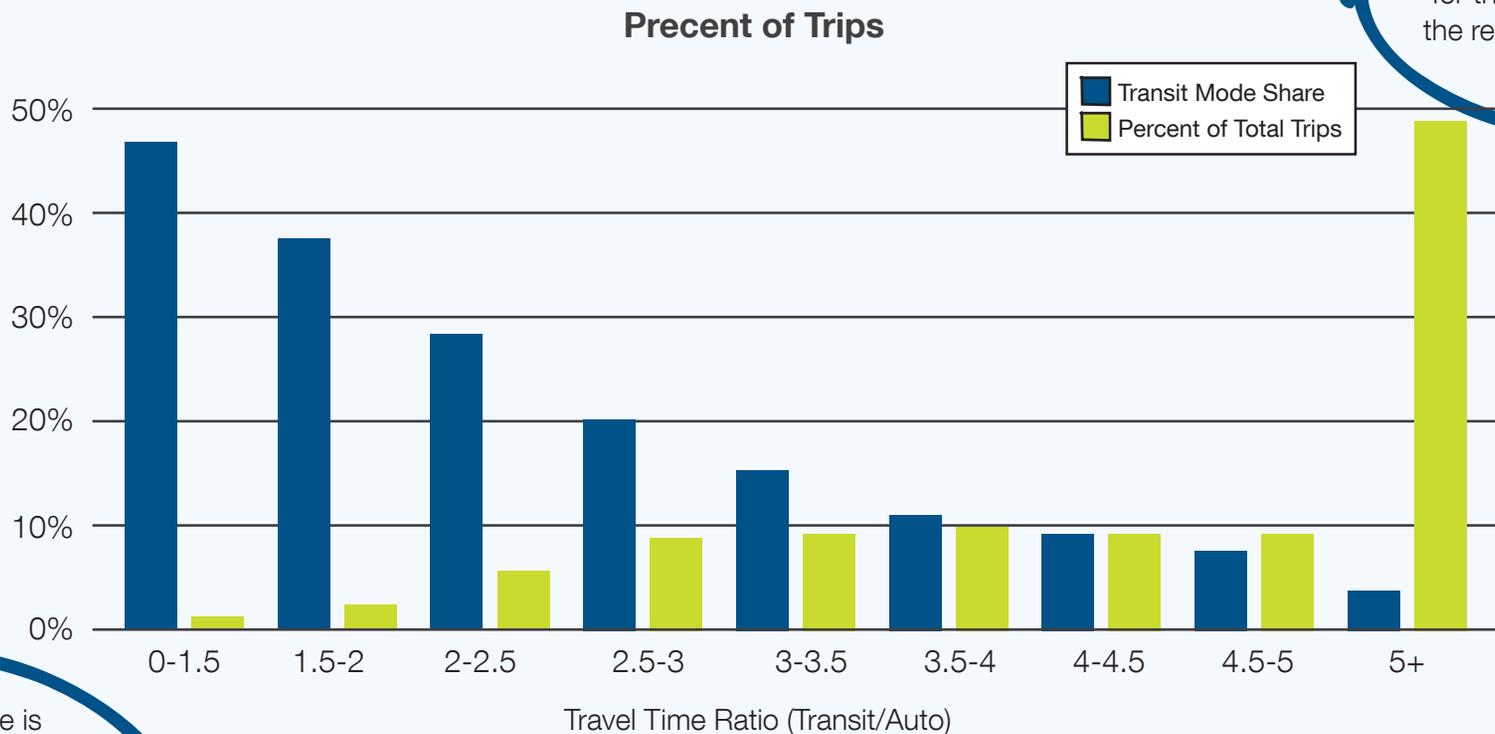
“I absolutely hate driving, but it’s hard to want to take a bus when it turns a 15-20 minute drive into an hour, and I’m forced to walk for half of it.”

- Customer Social Media Comment

Customers are more likely to use transit when it is a convenient option for their trip. Although many transit customers may not have another option for all of their trips, inconvenient trips that take too long are still seen as unpleasant and represent an undesirable experience that customers would prefer to avoid, leading them to desert transit as soon as they can.

Is Bus a Convenient Option for Customers?

People use transit when it is convenient. Providing convenient service for more trips should increase ridership and provide a better customer experience.



Transit is inconvenient for the majority of trips in the region, resulting in low transit use.

Transit mode share is high where transit is most convenient, but it is only very convenient for a small portion of trips.

Mode share is above **20%** when transit travel time is within **3 times** as long as auto travel time... but less than **15%** of all trips are that convenient.



Preferred

Does bus service align with public preferences?

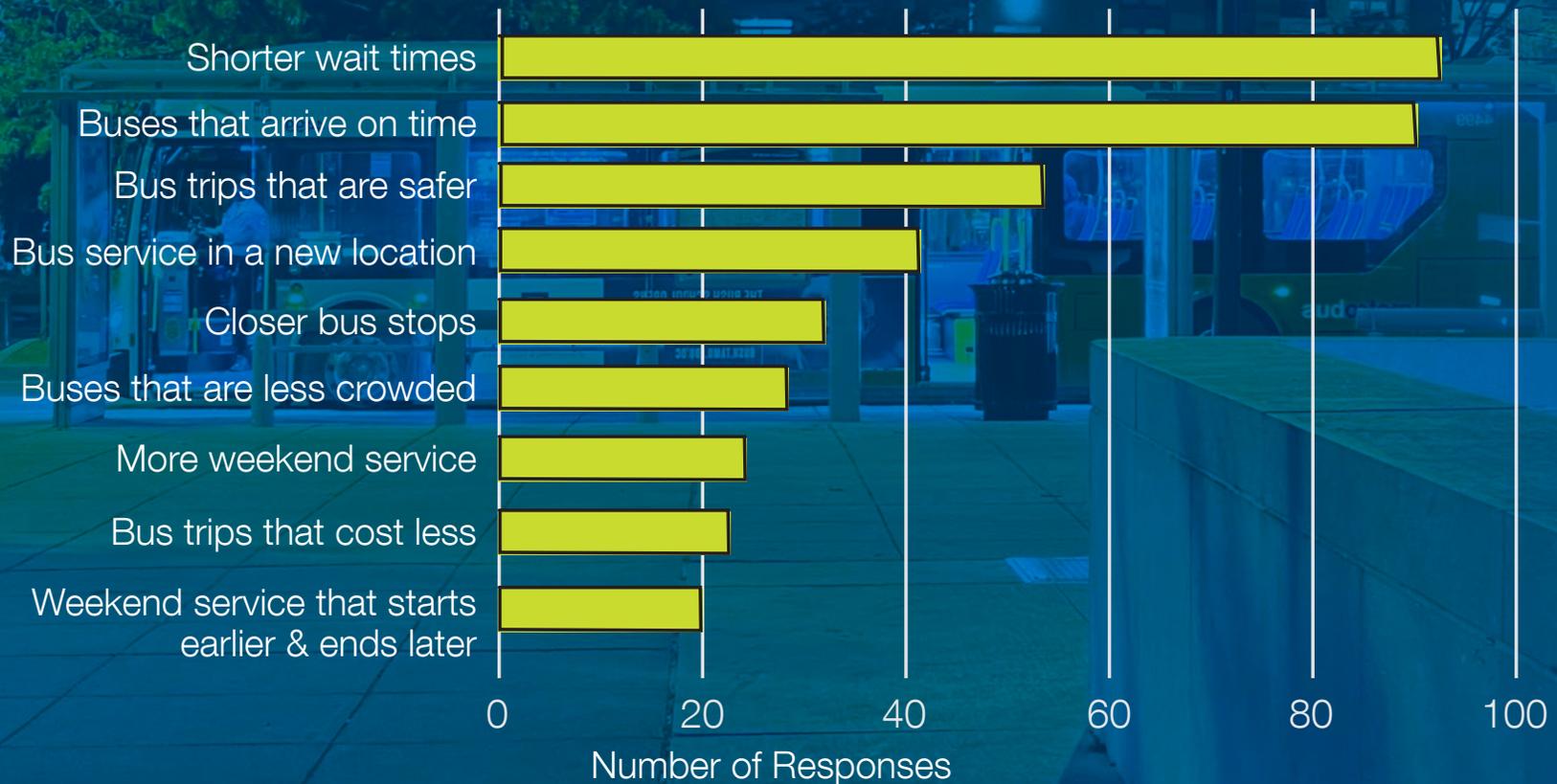


Customer and Potential Customer Priorities for Improvement

Customers tell us that long wait times and unreliable buses are their biggest barriers to using the bus more often.



Top 10 Desired Bus Service Improvements





What's Next...



Looking Ahead



Metro will advance brand new bus networks geared toward the preferences of customers. The market analysis and detailed evaluation of existing services will inform the effort to ensure that bus better meets the region's needs.

Through the market assessment, Metro identified markets that need improved transit service to better serve customers who rely on it. Metro also discovered opportunities to provide convenient service and useful connections to help build ridership and improve the customer experience based on insightful feedback.

The existing conditions assessment was used to identify which current bus lines provide customers with a useful, efficient, and reliable service—as well as where service could be improved based on availability, design, performance, and efficiency.

Moving forward, Metro now has the tools to build a better bus network for the National Capital Region.

