



Connecting Fast, Frequent, and Reliable Transit Across NoVA and Beyond

# BUS RAPID TRANSIT ACTION PLAN

FINAL Engagement Report

November 2025





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# 1.0 INTRODUCTION

The Northern Virginia Transportation Authority (NVTA) is a regional organization responsible for preparing Northern Virginia's long-range transportation plan, TransAction. NVTA uses its revenues to fund multimodal projects that reduce congestion safely, sustainably, and equitably.

NVTA recognizes that a high-quality regional BRT system is best achieved in a collaborative manner that maximizes the return on investments. NVTA has already invested more than \$880 million towards building five different BRT routes in

the region, which are at different stages of implementation. These include Crystal City-Potomac Yard Transitway (Metroway), The One (Richmond Highway BRT), Duke Street Transitway, West End Transitway, and Route 7 BRT. This BRT Action Plan (previously referred to as a Preliminary Deployment Plan for a regional BRT system) builds upon NVTA's BRT investments to date to create a regionally connected BRT system providing fast, frequent and reliable transit service. Developed with the help of a multi-agency BRT Planning Working Group established by NVTA in early 2021, the Action Plan evaluates the impact of, and opportunities and challenges with, 28 potential BRT routes serving multiple areas in Northern Virginia, as well as popular destinations in Maryland and Washington, DC.

The BRT Action Plan was developed to provide a blueprint for jurisdictions and agencies to develop BRT lines incrementally in addition to supplying the information necessary to demonstrate how they can successfully function as an integrated system once fully implemented.

Figure 1 NVTA Goals and Core Values **ENHANCE MOBILITY INCREASE IMPROVE ACCESSIBILITY RESILIENCY ACCESSIBILITY RESILIENCY MOBILITY** Congestion Access to jobs ▶ Transportation reduction safety More travel ▶ Travel time options Reduction of vehicle emissions reliability

Over the course of the development of the BRT Action Plan, NVTA conducted two phases of community engagement. Phase 1 engagement focused on reaching out to members of the public to gauge their opinions on BRT and educate them on the potential benefits of a BRT system. Phase 3 engagement focused on collecting specific reactions to the routes proposed in the draft BRT Action Plan.



# 1.1 Purpose of Phase 1 Community Engagement

During Phase 1 of the project, which occurred between October 2023 – July 2024, NVTA engaged with an array of audiences to share information about the planning process in diverse communities and collect feedback that was used to guide the development of the BRT Action Plan. These activities included a perception survey, focus groups, an online survey, and pop-up events.

**Perception Survey**—NVTA conducted a new wave of the public perception survey that they have conducted regularly since 2016. The survey examines quality of life issues related to transportation, travel habits, awareness/recall of transportation issues in the news, perceptions of the Northern Virginia region and how well it performs relative to transportation priorities, and awareness/perceptions of NVTA. For 2023, the survey was updated to include questions about perceptions of BRT in addition to continuing to track travel changes that have occurred since the onset of the pandemic. This information is essential in understanding travel demand, and in updating the assumptions for a Post-Pandemic 'New Normal' scenario for Phase 2 of the plan development.

**Focus Groups**—As learned during TransAction, there are some types of insights that cannot be gleaned from surveys; more in-depth conversations are often needed to understand the underlying reasoning behind individual answers. To this end, NVTA conducted four focus groups. The focus groups prioritized understanding behavioral choice around transit use—attempting to answer the question of "how do we reduce dependence on driving alone?" in Northern Virginia. Two of the groups included transit riders (Those who have used public transit in Northern Virginia in the past 6 months), two other groups included non-riders (includes Lapsed Riders): Those who have either not ridden transit in Northern Virginia in the past 6 months, or have never ridden public transit in Northern Virginia). The results of these focus groups were used to shape the Phase 1 Online survey.

Online Survey—NVTA conducted an online survey, titled "Future of Transportation in NoVA", that was open from May 20,—June 23, 2024 to gather opinions and preferences related to defining routes within the regional BRT system, factors for prioritizing implementation, and BRT service levels necessary in order to encourage BRT ridership in Northern Virginia. The information gathered through this survey informs NVTA understanding of the public's transit preferences and provides input to Phase 2 analysis and plan development.

NVTA publicized the survey through several formats:

- Social Media—The survey was promoted through paid and earned social media.
- Toolkit—NVTA provided its Authority members and regional partners with a Stakeholder Communications Toolkit to raise project awareness and promote digital and in-person feedback opportunities.
- Pop-up events—To promote the public-facing survey, NVTA conducted a series of pop-events that helped spread the word about the BRT Action Plan effort and



encouraged people to participate in the survey. These events were strategically deployed to meet transit- and non-transit users where they are at locations with heavy foot traffic. In particular, several of these events were targeted to Equity Emphasis Areas (EEAs) where people may not have been otherwise exposed to other efforts to publicize the survey.



# 1.2 Purpose of Phase 3 Community Engagement

During Phase 3 of the project, NVTA developed the draft BRT Action Plan. This document was made available for public review and comment in the Spring of 2025. The purpose of the Phase 3 engagement was to gather feedback on the proposed BRT system, its constituent routes and to identify the extent to which they meet the needs of the community. This feedback was used to guide the finalization of the BRT Action Plan, and will be used in the future as the proposed BRT system and its individual routes continue to evolve. The main engagement activities conducted during this phase included:

Focus Groups—Following up on the focus groups conducted as part of Phase 1, four additional online focus groups were conducted in March 2025 to gain more in-depth insights into both perceptions of BRT, as well as the BRT network. These focus groups were also used to gather feedback on draft public engagement materials and messaging, to help identify how NVTA could best provide information that is relevant and understandable by non-technical audiences. The results of these focus groups were used to shape the Phase 3 Online survey, and ultimately resulted in a change in the name of the overall project – from "Preliminary Deployment Plan for a regional BRT system" to "BRT Action Plan".

Online Survey— Feedback on the draft BRT Action Plan and the proposed BRT system was primarily gathered through a structured survey that was designed to gather specific and general comments from transit riders and non-riders across Northern Virginia. The survey focused on building and understanding public perceptions, identifying potential benefits and concerns, and verifying that the planned routes meet the needs of the community. The survey was available on NVTA's website between April 18 and May 18, 2025, and was promoted through various channels, including traditional and social media and at pop-up events. NVTA received a total of 587 responses to the survey.

NVTA publicized the survey through several formats:

- **Media Outreach** As part of the BRT Action Plan, NVTA's communications team worked to strengthen the project's digital presence and ensured that there was clear and engaging outreach across multiple platforms.
  - NVTA developed the full suite of content, including copy and graphics, along with the overall approach and strategy to guide digital efforts. This included support for social media, LinkedIn, and the creation of a digital communications toolkit that partners could easily use to amplify messages. The media outreach resulted in 21 articles about the BRT Action Plan reaching an audience of 11.5 million.
- Pop-Up Events—NVTA conducted a series of pop-up events to raise project awareness and promote the online survey. The pop-ups helped spread the word about the BRT Action Plan and encouraged people to participate in the survey. These events involved a series of 10 strategically placed pop-ups across Northern Virginia, with each location selected for its close proximity to multiple proposed BRT route. This ensured that events were easily accessible to a wide range of transit- and non-transit users.





# 2.0 PHASE 1 ENGAGEMENT

During Phase 1 of the project, which occurred between October 2023 – July 2024, NVTA engaged with an array of audiences to share information about the planning process in diverse communities and collect feedback that was used to guide the development of the BRT Action Plan. These activities included a perception survey, focus groups, an online survey, and pop-up events.

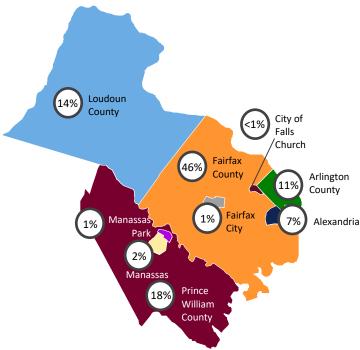
# 2.1 Perception Survey

NVTA periodically conducts a regional Perception Survey, addressing a wide range of transportation issues in Northern Virginia. This survey tracks changes in residents' perceptions of transportation issues by asking many of the same questions year after year. The fifth iteration of this survey was conducted as part of the BRT Action Plan project between November 28—December 14, 2023. The main goal of the survey was to identify current awareness and priorities and to assess any changes that may have occurred on any of the key measures from the earlier two waves of research, including:

- Transportation issue awareness and perceptions
- Perceptions of quality life in terms of transportation and future outlook
- Identification of key factors impacting transportation quality of life
- Identification of regional transportation priorities and key projects

To support the development of the BRT Action Plan, this version of the perception survey added questions designed to specifically understand perceptions of BRT among Northern Virginians. About 80% of the questionnaire remained unchanged to ensure continuity in tracking findings from previous NVTA survey waves. A complete report on the survey findings can be found in Appendix A.

Figure 2 Where Participants Live



#### Approach and Methodology

The approach was a scientific study using an opt-in online panel. Survey respondents were required to be 18 years of age or older and residents of Northern Virginia, more specifically, residents of Arlington County, Fairfax County, Loudoun County, Prince William County, and the cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park. The aim was to get an overall representation of regional demographics based on age, gender, and race according

Confidence Interval and Margin of Error: All sample surveys and polls, whether or not they use probability sampling, are subject to multiple sources of error which are most often not possible to quantify or estimate. Online opt-in panels such as the one used for this study do not use probability sampling and accordingly the strict calculation of sampling error is not typically done. In the hypothetical case of a perfectly random sample and no response or measurement errors, a sample of this size (n=606) would produce a margin of error of ± 3.98% at a 95% confidence interval. Margins of error for subgroups would be higher.



to the U.S. Census. The intentions for the survey also included achieving a proportionate sample that represents each county/city by population size according to the U.S. Census. Typically, sample quotas were used in order to hit these demographic targets; weighting was not needed for this survey.

# Summary of BRT- Related Results

Generally, this survey identified potential opportunity for BRT in Northern Virginia. Despite limited familiarity with BRT, residents had a favorable outlook on BRT, seeing many more benefits than drawbacks. The survey results highlight how important it will be to educate the public on how easy BRT is to use, and especially its travel time and reliability benefits. If BRT can deliver on these promises, there is strong potential to draw in new riders. Summarized below are some of the highlights of the survey results.

As shown in Figure 3, nearly half of respondents weren't aware of any of the initiatives that were specifically asked about in the survey such as Metroway Potomac Yard Line, Richmond Highway Bus Rapid Transit, Better Bus Network/Better Bus Network Redesign Study, etc.

Figure 3 Familiarity with Ongoing Bus Initiatives

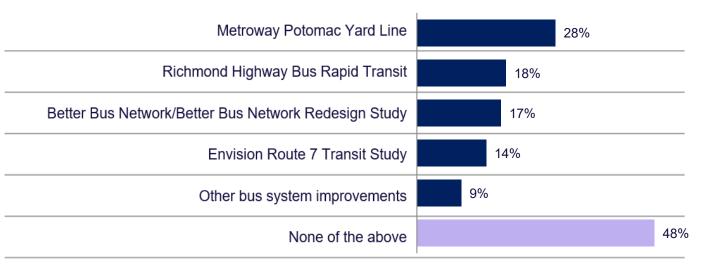


Figure 4 and Figure 5 show the results regarding familiarity of BRT among survey respondents and how favorable they are towards BRT in Northern Virginia. Familiarity with BRT is somewhat limited, with most respondents (69%) reporting that they were not too or not at all familiar with BRT, as shown in Figure 4. Despite this lack of familiarity, views are generally Favorable (51%) or Neutral (41%), as shown in Figure 5. Leveraging key benefits would help further strengthen interest. More than half would consider using BRT (54% for commuting and 63% for recreational/personal travel).



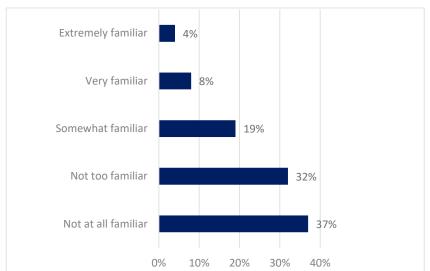
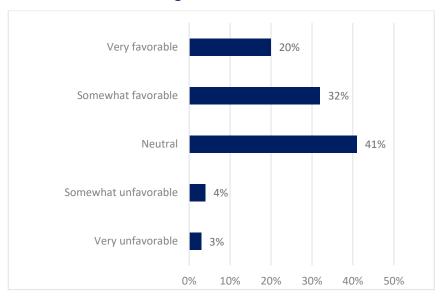


Figure 4 Response to Question "How familiar are you with Bus Rapid Transit (BRT)?"

Figure 5 Response to Question "How favorable are you towards Bus Rapid Transit (BRT) operating in Northern Virginia?"



The strong majority (84%) felt that the positives associated with BRT outweighed any negatives and the most influential benefits were Convenience (15%); Time savings compared to driving (12%); and Faster and more reliable trips (10%). Figure 6 shows the top influential benefits of using BRT.



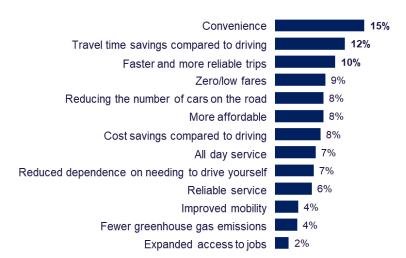


Figure 6 Top Influential Benefits of Using BRT

# 2.2 Focus Groups

In order to build an understanding of the public's baseline familiarity with, understanding of, and support for BRT in Northern Virginia, NVTA commissioned a research team to recruit, conduct, and analyze online discussion groups, examining current and future transportation needs in Northern Virginia. On March 5th and March 6th of 2024, the research team conducted virtual focus groups with residents of Northern Virginia. A summary of results of this research are presented in this section. Please see Appendix B for additional findings.

# Approach and Methodology

A total of four online discussion groups were held on Tuesday March 5<sup>th</sup> and Wednesday March 6<sup>th</sup>. In order to qualify, residents needed to be 18 years of age or older and live in one of the nine cities or counties that make up Northern Virginia.

The research team used a series of screening questions to identify participants. Participants were chosen to provide a mix of demographics, transit ridership, and location of residence. The research team chose 42 participants total (9-12 participants per group). Responses to the screening questions were used to place participants into one of two segments:

- Riders: Those who have used public transit in Northern Virginia in the past 6 months.
- Non-Riders (includes Lapsed Riders): Those who have either not ridden transit in Northern Virginia in the past 6
  months, or have never ridden public transit in Northern Virginia. Note that only those who indicated at least any
  likelihood to consider using transit were included.

The participants were invited to the group discussion that fit their segment (with two group discussions available for each segment). The focus groups were conducted in two parts: the day prior to their scheduled group session/interview, activities were made available to participants through an online platform to complete "assignments." The following day, the research team hosted online discussion groups.



Table 1 Segmentation of Groups

	Participants
Riders	15
Non-Riders	14
Total	29 <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Note that this is the total number of participants that attended the groups. There were some participants that filled out the activities prior to the groups but did not attend their assigned group.

#### Research Caveats and Limitations

Typically, qualitative research is used to provide answers to attitudinal questions, as well as to provide insight and indepth understanding of consumer perceptions and opinions.

By nature, this research method does not usually allow for statistical analysis and interpretation. Rather, it is a tool for decision-making purposes. The findings from this type of research should be used to provide insight and direction into decision-making rather than as a sole basis for decision-making.

Qualitative research tends to provide answers to questions like "Why?" and "How?," whereas quantitative research tends to provide answers to questions such as "How many?" or "How much?" The statements made in this report, including the conclusions and implications or any recommendations, are based upon the attitudes and opinions of the participants and are not necessarily projectable or generalizable to the population at large. Please note that the number of respondents answering a certain way has been cited in various instances only for the purpose of adding perspective to a statement, NOT for the purpose of quantitative analysis.

# **Summary of Results**

Unsurprisingly, Non-Riders were far more dependent on their personal vehicles to get around, with only the (very) occasional trip into Washington, DC using the Metro. On the other hand, while many Riders did actually have their own personal vehicle, they would more often opt for transit when available, with the most common mode of transportation for them being Metrorail. Aside from Metrorail, most Riders did have experience riding buses, though to varying degrees.

Safety was a large deterrent to public transit use and more specifically, bus usage in the region, especially among Non-Riders. They noted stories of crime or harassment that they had heard about from the news, family, or friends.

Riders pointed to the easy accessibility of Metrorail or other systems as their reason for choosing public transportation. These systems were near them and therefore easy to use. The disconnect between using Metrorail and using bus services in the region was often because participants had an easier time reading and understanding Metrorail schedules, understanding the locations of Metrorail stations, and ultimately understanding how they can get where they need to go. A handful of participants did say that they used buses to fill in the gaps of Metro service, whether that is geographically, or because they were traveling at a time of day when there was little to no service on Metrorail.



Some of the key findings from this set of focus groups related specifically to BRT in Northern Virginia are highlighted below.



Reducing congestion in Northern Virginia needs to be at the forefront of BRT development.

The first priority that all participants could agree on was that reducing congestion in Northern Virginia needs to be at the forefront of BRT development. This means that the areas in the region with the worst congestion should be the areas where a BRT line is first implemented.



Creating lines and networks that connect areas in Northern Virginia rather than feeding directly to DC should be a priority.

On top of relieving congestion, one other key priority was identified: creating lines and a network that connects areas in Northern Virginia and does not just feed directly to DC. As a few participants pointed out, there are enough ways for them to go into DC. A new network can avoid redundancies by connecting them across the Northern Virginia region, perpendicular to Metrorail. This can also allow BRT to connect commercial and employment hubs across the region.



People are not familiar with the terms "Bus Rapid Transit" or "BRT"

When participants were first asked about BRT and what they think it is, it was clear that both Riders and Non-Riders had little or no prior knowledge of BRT. Guesses as to what it could refer to mostly centered around "a faster bus service," express bus, or another type of limited stop service.

After defining BRT for participants, they tended to lean into the express bus comparisons, citing other express bus services they had seen in places like New York City or San Francisco. It should be noted that participants latched onto the word "Bus" in "Bus Rapid Transit." In their mind this meant that BRT was more similar to traditional bus service than anything else. They had a hard time imagining how it would be different from the current local bus system.

As participants further explored the definition of BRT, some felt that assertions that the service would be "faster" were difficult to believe. They pointed out that ultimately it was very difficult to make anything in Northern Virginia "fast" given the current high level of congestion in the region.



There is an appetite for a more efficient system like BRT, even among Non-Riders



Notably, prior to talking about and introducing BRT, a handful of participants commented that they would love it if bus service was made more like rail service, with direct lines, more noticeable stations, and designated bus lanes. These comments exhibited that there was an appetite for a more efficient system like BRT, even among Non-Riders. Participants were clear that there were specific aspects of BRT service that they would like to see:

- All day service—commuting hours have changed greatly with the advent of remote work and many people who rely on the transit system most worked in service jobs or other professions that were not on a typical 9-5 schedule.

  Therefore, service needs to be all day with an adequate level of frequency to serve everyone.
- A new BRT system must be integrated with and connected to other regional transit systems—not only to avoid redundant service, but also to foster communications between jurisdictions on building and maintaining a new BRT network. Participants across all groups feel that the local jurisdictions in Northern Virginia did not currently communicate and work together enough.
- Similarly, a new BRT network needed to be integrated with Metrorail—while it should not be treated as solely a feeder system into the Metrorail network, it should connect people to Metrorail stations in Northern Virginia.
- A new BRT network should use fare media supported by the larger regional network. It is important that riders can, for example, transfer between BRT and other regional systems using simply their SmarTrip card or other fare media supported regionally.
- BRT should be built to accommodate the growth of the region. During discussions of sustainability, participants
  seemed wary of the ability of a BRT system to keep up with the growth of the region without needing an upgrade.
  Building a BRT network that supports and accommodates regional growth was very important. Additionally,
  ensuring that there is long-term funding to keep these projects and services in place while the region continues to
  grow was equally important.

# 2.3 Online Survey

During the Spring of 2024, NVTA conducted an online survey, titled "Future of Transportation in NoVA", to evaluate public awareness and priorities regarding the development of a BRT system in Northern Virginia. The survey was open from May 20, 2024—June 23, 2024 and was available for participants to participate in Korean, Spanish, and English. Members of the public could complete the surveys online, either through web access or on-site via digital devices at community pop-up events held across Northern Virginia. Please see Appendix C for the final questionnaire.

NVTA promoted the survey using several methods to strategically engage different communities:

- Social Media—The survey was promoted through paid and earned social media.
- Future of Transportation Toolkit—NVTA provided its Authority members and regional partners with a Stakeholder
  - Communications Toolkit to raise awareness and promote digital and in-person feedback opportunities. The toolkit included background information, recommended posts for social media platforms, draft email/newsletter text, and talking points.
- Pop-up events—NVTA conducted a series of pop-events that helped spread the word about the effort and encouraged people to participate in the survey. These events were strategically deployed to meet transit- and non-transit users at locations with heavy foot traffic. In particular, several of these events were targeted toward





Equity Emphasis Areas (EEAs) where people may not have been otherwise exposed to other efforts to publicize the survey. More information of the pop-up events can be found in section 2.4.

This approach ensured comprehensive data collection from diverse respondent groups, enhancing the survey's comprehensiveness and relevance to NVTA's objective. In total, the survey team collected a total of 1,239 completed surveys. Respondents were segmented by transit rider status and jurisdictions to facilitate detailed analysis as shown in Table 2. Approximately 65% of the survey respondents came from residents of Northern Virginia.

Table 2 Surveys Completed – Transit Rider Status (2024 Survey)

Rider Status	# of Completed Surveys	%
Riders	235	19%
Non-Riders	1,004	81%
Total	1,239	100%

Table 3 Surveys Completed - Area of Residence (2024 Survey)

Region	# of Completed Surveys	%
Northern Virginia	811	65%
Outside of Northern Virginia	398	32%
Preferred not to answer	30	2%
Total	1,239	100%

# Summary of Results

In the survey, the participants were asked "what three words best describe what you think transportation in Northern Virginia should look like in the future?"

As shown in Figure 7, the results suggested that future transportation in Northern Virginia should prioritize convenience, accessibility, reliability and affordability while improving public transportation, efficiency and safety. There were significant differences in transportation priorities between transit riders and non-riders, particularly regarding "Efficient" and "Reliable," with nearly one-fourth of riders (23%) choosing "reliable" compared to 13% of non-riders, whereas non-riders were more likely to say a system should be "efficient" (17% vs 10% of riders). Additionally, riders placed a strong emphasis on words related to being "Fast/Faster," indicating their crucial need for faster trips.

Figure 7 Top 3 Words



Overall, three in ten of Northern Virginia residents (30%) would like to consider using BRT. This was slightly higher for current transit riders (32%) than for non-riders (29%), indicating a similar level of interest in using BRT. Arlington County residents showed the greatest likelihood of using BRT (35%).



Figure 8 Response to Question "How likely would you be to consider using BRT?"



The survey participants were asked about their top three priorities regarding the "most important ways for local governments to prioritize routes when planning the development of BRT systems" in Northern Virginia. Figure 9 identifies the most common answers across all respondents and Table shows the top three priorities for riders and non-riders separately.

Figure 9 Responses to Question: Which of these is most important? A BRT system that... (Top 3)

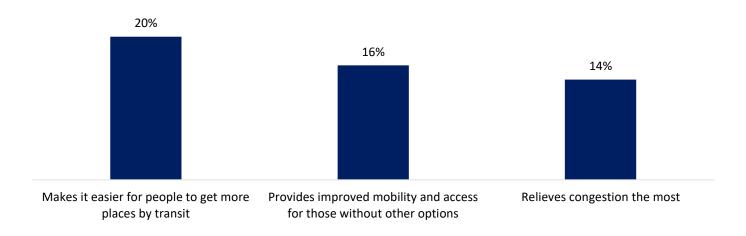


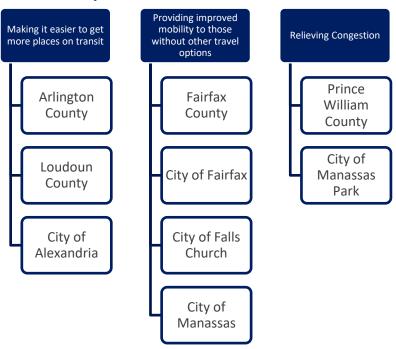
Table 4 The Top Three Priorities for Riders and Non-Riders

Riders	Non-Riders
Making it easier to get to more places on transit (23%)	Make it easier to get to more places on transit (19%)
Ensuring a safe and secure mode of travel (16%)	Providing improved mobility to those without other travel (16%)
Providing improved mobility to those without other travel (14%)	Relieving congestion (15%)

There was some variation in the top priority based on jurisdiction, indicating different priorities across the region. The top priority for each jurisdiction is in Figure 10.

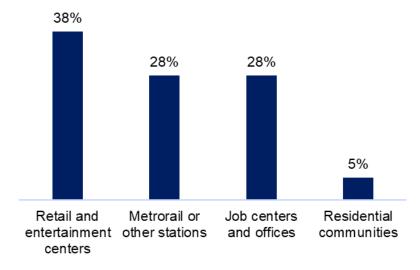


Figure 10 Top BRT Priorities by Jurisdictions



The survey asked participants to provide information about the types of places that they would want to use BRT to access. As shown in Figure 11, the most common response was "retail and entertainment centers." This was the most popular destination type across all Northern Virginia jurisdictions with the exception of Prince William County and City of Manassas, who preferred greater access to Metrorail stations or other transit.

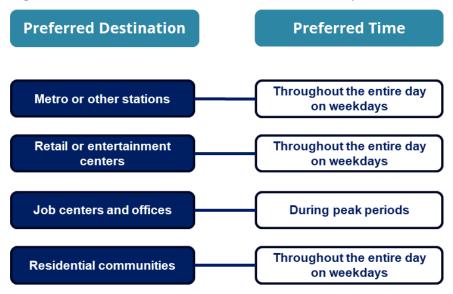
Figure 11 Responses to Question: What types of places would you want BRT to take you to?





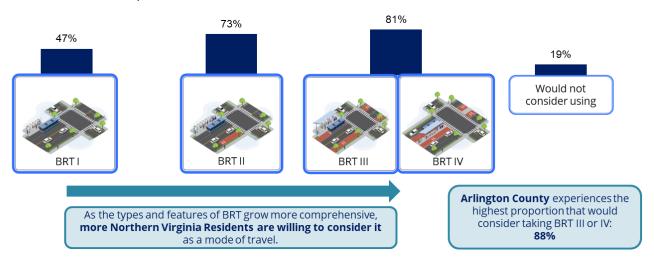
Depending on the type of location, priorities for peak or all-day service differ, as presented in Figure 12.

Figure 12 Preferred Destinations/Times of Day



To evaluate whether respondents would consider BRT over their current primary mode of transportation, four distinct types of BRT systems were defined in the survey, ranging from basic to advanced configurations. This helped to assess preferences of respondents related to different potential features of BRT. Images were utilized to help respondents visualize different BRT types and their features. Using a laddering technique, this set of questions attempted to identify the necessary BRT features to spur additional ridership on BRT.

Figure 13 BRT Types and Percent Willing to Consider Each BRT Type over Their Current Primary Mode of Transportation



Participants were asked to select from a list the three most important features they would like a new public transportation system to have for them to consider using it. The results showed that both riders and non-riders prioritize features that make BRT a faster travel option with consistent all-day service (49% and 40%-43%, respectively). However, riders placed greater emphasis on features that make the bus show up on time every time (46%) compared to non-riders (35%). While the majority of jurisdictions valued features that make public



transportation a fast travel option, Prince William County, City of Manassas, and City of Manassas Park preferred service that runs all day/all week and late into the night.

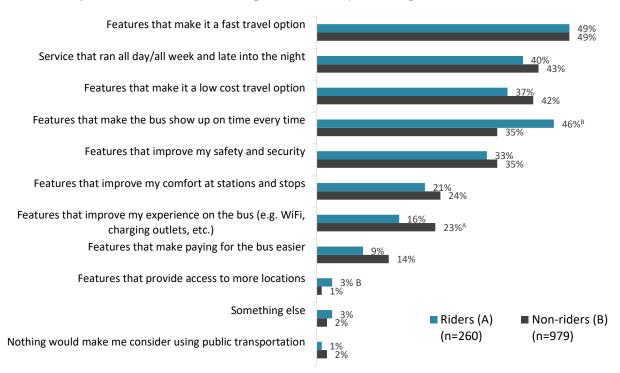


Figure 14 Key Features for Considering Public Transport Usage

The results indicate that about six in ten of Northern Virginia residents (61%) showed that they were likely to support the removal of traffic lanes or reducing on-street parking to accommodate BRT. Among riders, two-thirds (66%) expressed some level of support, as compared with 64% of non-riders. While the number of respondents reporting support were similar, the portion that were extremely likely to support these types of changes were higher for transit riders than non-riders (43% compared to 31% non-riders). Arlington County showed the greatest likelihood among jurisdictions (81%).

# 2.4 Pop-Up Events

Phase 1 of the BRT Action Plan kicked off the project's community engagement with a focus on educating transit users and drivers in the Northern Virginia region. NVTA's Perception Survey confirmed that the public remained generally unaware of BRT, as well as its purpose, goals, and opportunities for the region. Consequently, NVTA prioritized the opportunity to educate and inform the public in this phase of community engagement while utilizing the outreach as a means to also recruit future BRT riders.







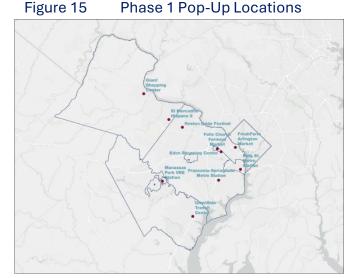
A series of community pop-up events throughout Northern Virginia were targeted to drivers and transit users to educate, inform, and collect feedback with a survey tool and on-site polling activity to inform NVTA's investment in the future of transportation in Northern Virginia. These events were strategically deployed to meet transit- and non-transit users where they are at locations with heavy foot traffic. In particular, several of these events were targeted in Equity Emphasis Areas (EEAs) where people may not have been otherwise exposed to other efforts to publicize the survey.

With priority goals to educate, inform, and collect feedback, the BRT Action Plan team utilized a comprehensive suite of multilingual engagement tools at events to:

- Expand awareness of NVTA and its mission by sharing NVTA's Annual Report, QR code to BRT page, and providing an NVTA subject matter expert on site
- Expand BRT education, awareness, and recruit future BRT and transit riders
- Inform the community about the BRT project
- Collect feedback on various aspects of BRT via the online survey described in the previous section

Pop-up events were strategically dispersed across Northern Virginia to maximize reach across the region and engage a balance of both drivers and transit users. The event booth featured innovative and engaging branded pop-up banners, a-frames, tablecloth, takeone flyers, table-top signs, and premium giveaways, including a snack bag of candy with a customized card to thank participants for taking the survey or to remind them to take the survey later if not completed on site. The multilingual team wore a BRT branded t-shirt to demonstrate a professional presentation and further validate the team efforts. Each event featured Spanish

speakers and/or Korean and Vietnamese speakers.



The pop-up events utilized a digital on-site survey and printed one-word activity cards to actively engage

community members and collect feedback to inform the BRT Action Plan's next steps. Across 10 pop-events the NVTA team had more than 4,200 interactions with members of the public, as outlined in Table 5.

Table 5 Phase 1 Pop-Up Results Summary

Total Number of Pop-up	10 Events
Total Rack Cards	2,654
Survey's Submitted On-Site	269
One Word Activities complete	406
Total Interactions in English	3,687
Total Interactions in Spanish	326
Total Number of Interactions	4,233



The event teams encouraged participants to distill their thoughts into a single word, capturing succinctly, yet powerfully, what they envisioned for future transportation improvements in Northern Virginia. This dual approach provided the project team with valuable quantitative and quantitative data, while also collecting concise, impactful, and constructive input.

Event participants were asked to provide a one-word response to two questions:

- TODAY, transportation in Northern Virginia is...
- IN THE FUTURE, transportation in Northern Virginia should be...



The larger and bolded words in the below word clouds provide a visual artifact to represent the majority of one-word responses provided at the pop-up events. Below, 'Today' is represented in the red bus graphic on the next page and 'Future' is represented in the blue bus graphic.

Figure 16 Pop-One-Word Responses

"TODAY, transportation in Northern Virginia is...

"IN THE FUTURE, transportation in Northern Virginia should be







# 3.0 PHASE 3 ENGAGEMENT

# 3.1 Focus Groups

Building on previous public engagement in Phase 1, this phase of community research was focused on learning more about how likely people are to use the proposed BRT system and their priorities for implementation. Additionally, NVTA wanted to gather public feedback on the best ways to communicate the proposed BRT system and its benefits to the public. NVTA commissioned a research team to recruit, conduct, and analyze online discussion groups to provide insight into these questions. Due to the nature of the questions under consideration, these focus group discussions were held before the full draft BRT Action Plan was available; participants reacted to draft versions of various materials. What follows is a summary of the results of this research; more detailed findings can be found in Appendix D.

# Methodology

A total of four online discussion groups were held on Tuesday March 11<sup>th</sup> and Wednesday March 12<sup>th</sup>, 2025. In order to qualify, residents needed to be 18 years of age or older and live in one of the nine cities or counties that make up Northern Virginia.

The research team used a series of screening questions to identify participants (see Appendix E). Responses to the screening questions were used to place participants into one of two segments: current transit riders and non-riders. Participants were chosen to provide a mix of demographics, transit ridership, and location of residence (see Demographic Profile in Appendix D). The research team recruited and invited 41 participants in total (9-12 participants per group). In total, 34 of those invited actually participated in the groups. The rider and non-rider segments were defined as:

- Riders: Those who have used public transit in Northern Virginia in the past 6 months. To ensure the rider group
  reflected a mix of usage patterns, a limit was placed on those who only use Metrorail and do so with low frequency.
  This was done to avoid over-representation of occasional event-based riders (e.g., someone who rode Metrorail
  once in the past six months for a special outing).
- Non-riders (includes lapsed riders): Those who have either not ridden transit in Northern Virginia in the past 6
  months, or have never ridden public transit in Northern Virginia. Note that only those who indicated at least any
  likelihood to consider using transit were included.

Participants were invited to the group discussion that fit their segment (with two group discussions available for each segment). Participants were also asked to join the Quallie online bulletin board to participate in individual activities the day prior to their group discussion.

Table 6 Segmentation of Groups

	Participants
Riders	17
Non-Riders	17
Total	34

Note that this is the total number of participants that attended the groups. There were some participants that filled out the activities prior to the groups but did not attend their assigned group.



Table 7 Schedule of Discussions

Group	Recruited Participants	Assigned Discussion Group Time
Non-Riders	11	March 11 <sup>th</sup> , 5:30 PM
Riders	8	March 11 <sup>th</sup> , 8:00 PM
Riders	9	March 12 <sup>th</sup> , 5:30 PM
Non-Riders	6	March 12 <sup>th</sup> , 8:00 PM
Total	34	

Note that this is the total number of participants that attended the groups. There were some participants that filled out the activities prior to the groups but did not attend their assigned group.

The discussion and activity guides used during the Focus Groups can be found in Appendix F.

#### Research Caveats and Limitations

Typically, qualitative research is used to provide answers to attitudinal questions, as well as to provide insight and indepth understanding of consumer perceptions and opinions.

By nature, this research method does not usually allow for statistical analysis and interpretation. Rather, it is a tool for decision-making purposes. The findings from this type of research should be used to provide insight and direction into decision-making rather than as a sole basis for decision-making.

Qualitative research tends to provide answers to questions like "Why?" and "How?", whereas quantitative research tends to provide answers to questions such as "How many?" or "How much?" The statements made in this report, including the conclusions and implications or any recommendations, are based upon the attitudes and opinions of the participants and are not necessarily projectable or generalizable to the population at large.

Please note that the number of respondents answering a certain way has been cited in various instances only for the purpose of adding perspective to a statement, NOT for the purpose of quantitative analysis.

### **Key Findings**

Both groups expressed general support for BRT, especially for its potential to reduce traffic congestion, improve transit reliability, and save time. Non-riders particularly emphasized the importance of direct routes and more frequent, reliable services, while riders valued time savings and reduced congestion most highly.

#### **Benefits and Priorities**

- More frequent and more reliable services: Both groups preferred the benefit of better transit services, specifically more frequent and reliable options to key destinations.
- **Reduced traffic congestion**: Both groups agreed that one of the primary benefits of BRT would be the alleviation of congestion, benefiting both public transit riders and drivers.
- **Direct routes & efficiency**: Non-riders and riders alike favored the potential for BRT to offer direct routes, eliminating transfers and reducing overall travel time.



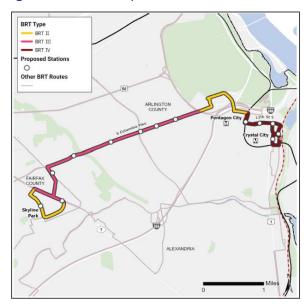
- Cost-effectiveness & affordability: Non-riders highlighted the financial benefits of BRT, particularly as a more affordable alternative to personal vehicles. Riders also noted the importance of affordability but were more focused on service quality and frequency.
- Environmental sustainability: Both groups expressed interest in BRT's potential to reduce emissions and
  contribute to environmental sustainability, though it was a secondary concern compared to time savings and costeffectiveness.

Both groups emphasized the importance of prioritizing routes that would address *high traffic areas* and *connect underserved regions*. Non-riders stressed equity, highlighting the need for routes that enhance mobility for low-income populations and people with disabilities. Riders supported these priorities but also emphasized the importance of routes that would attract high ridership, particularly in suburban areas with limited public transit options.

#### **Comments on Draft Materials**

Participants were asked to review and react to a number of draft materials that NVTA was considering using as part of the public engagement. The discussions around these materials were used to refine the materials that were ultimately shared with the public, especially the route profiles which included a route map, operational details, and performance metrics for each route as shown in Figure 17.

Figure 17 Sample Route Profile Materials used in Focus Groups





Some of the key discussion points related to these materials included:

- Both groups expressed confusion regarding the BRT route map, citing issues with understanding the proposed routes, stops, and connections. Suggestions included clearer labeling, the inclusion of recognizable landmarks allowing people to orient themselves, and better integration with existing transit systems such as Metrorail and VRE. Riders were specifically concerned about the color coding of lines and the relationship between overlapping routes, finding the map more difficult to interpret than it would need to be in order to be useful.
- Both riders and non-riders appreciated the frequency information provided in the Level of Service section of the draft route profile, with riders particularly valuing the inclusion of weekday and weekend schedules. However, there was a call for more context, including average travel times and a clearer understanding of how the BRT



- system would compare to existing transit services in terms of convenience, pricing, and service quality. Non-riders specifically questioned the sufficiency of service frequency and raised concerns about whether the system could meet actual demand, particularly during peak hours.
- Both groups had mixed reactions to the Key Metrics and Overall Performance sections of the draft route profile. While some found the information on operating costs and potential ridership helpful, most felt the metrics were too abstract or difficult to relate to their own experiences. A desire for more tangible, user-centric data was evident, such as clearer comparisons to existing transportation options, statistics related to reductions in travel time and the environmental impact of BRT. On the whole, participants thought these measures were more useful for planners and stakeholders than for the general public.

Based on these comments, the route profiles were redesigned so that metrics were clearly defined, the information that was most important to the public was located together on the same page, and more labels were added.

### **Branding and Messaging**

Participants were asked to react to the proposed project name and tagline. Some of the key insights from these discussions are outlined below. Both riders and non-riders emphasized the importance of highlighting qualities like speed, reliability, and convenience in the BRT name. Words such as "efficient," "affordable," "energy-efficient," and "equitable" were also suggested.

**Bus Rapid Transit (BRT) Action Plan** – Connecting fast, frequent and reliable transit across Northern Virginia and beyond.

- Initial Impression: The proposed project name was generally understood but considered too generic. Terms like "fast," "frequent," and "reliable" were clear, but "Action Plan" felt abstract, making it seem more like a concept than an actual service.
- **Desire for Simplicity**: Many participants felt the name was too long and recommended something more direct and memorable.
- **Distinguishing BRT from Regular Buses**: Another concern was that the proposed name didn't clearly differentiate BRT from regular bus services. Suggestions included using terms like "Express" or "Plus" to emphasize the enhanced service level.
- Perception of "Action Plan": The term "Action Plan" was seen by some as making the BRT feel temporary, which
  could affect perceptions of its long-term viability. A more concrete and finalized name was suggested to establish
  a stronger identity.
- "Connecting" vs. Other Terms: The term "connecting" received mixed reactions. While it reflected the BRT's goal of linking destinations, some felt it was redundant and suggested alternatives like "expanding" or "linking."
- Local vs. Regional Focus: There was strong support for the BRT system serving both local and regional areas.
   Some participants felt that the primary focus should be on improving local transit within Northern Virginia, while others emphasized the need for comprehensive regional connectivity, including connections to DC, to ensure access to key destinations.

# 3.2 Online Survey

Feedback on the Draft BRT Action Plan was primarily obtained through a structured survey designed to gather specific and general comments from transit riders and non-riders across Northern Virginia. The survey focused on building and



understanding public perceptions, identifying potential benefits and concerns, and verifying the planned routes meet the needs of the community. This section provides a detailed overview of the general findings of this survey.

The survey was available on NVTA's website between April 18 and May 18, 2025, and was promoted through various channels, including digitally through social media platforms and published in several news articles, in addition to being promoted in person during a series of pop-up events. NVTA received a total of 587 responses to the survey. For a full copy of the survey instrument, please refer to Appendix G. The survey was available in English and Spanish.



Table 8 Responses by Language

	Number of Responses
English	531
Spanish	56
Total	587

As detailed in Section 4, NVTA hosted a number of in-person events at key locations across the region where staff was available to introduce the plan, answer questions, and assist in filling out the survey on tablet computers. This was done to boost visibility of the Draft BRT Action Plan and gather feedback from members of the public who are typically underrepresented in such processes. In order to adjust the data to more accurately represent each jurisdiction's relative population, smoothing weights were created and applied to each record. A full weighting sheet can be found in Appendix H.

#### **Survey Limitations**

This survey relied on non-probability (convenience) sampling rather than probability sampling. While this allowed for the collection of data from a large group of people relatively quickly, it also yields a sample that is not necessarily representative of the region's population as certain groups are likely over- or under-represented. The results should not be considered representative of the population at large or of various sub-groups within the population. Rather, results should be viewed as indicative of the attitudes and opinions of those who engaged with or had the opportunity to engage with the BRT Action Plan at various levels throughout the engagement period.

# Margins of Error

Statistical significance means there is a 95% chance that a difference found in this research would also have been found if all members of the population had been surveyed. Statistical differences are shown, when applicable, using letters shown next to relevant percentages to compare between groups.

For example, if the percentage for Riders (B) was significantly greater than the percentage for Non-Riders (C), there would be a 'C' next to the greater Rider percentage. Due to differing response rates, the standard error varies from question to question and from segment to segment. The standard error for the entire dataset is ±4.0 percentage points at the 95% confidence level, though that will increase for individual questions or segmented analyses with smaller base sizes.



Table 9 Margins of Error by Rider Type

Margins of Error by Day							
he percentage found is around:		40%	30%	20%	10% or	1% or	
	<u>50%</u>	or <u>60%</u>	or <u>70%</u>	or <u>80%</u>	90%	99%	
Then, the standard error, in percentage points would be:							
Total (n=587)	±4.0	±4.0	±3.7	±3.2	±2.4	±0.8	
Riders (n=247)	±6.2	±6.1	±5.7	±5.0	±3.7	±1.2	
Non-Riders (n=329)	±5.4	±5.3	±5.0	±4.3	±3.2	±1.1	

# **Topline Findings**

What follows are topline findings from the survey. Sample comments are also shown to illustrate the type of feedback that was received.

### **Primary Mode of Transportation**

The survey first asked respondents to indicate what mode of transportation they primarily use to travel. This is the basis of the rider and non-rider designations, with riders being those who specified using some form of public transportation as their primary mode, and non-riders being those who selected something else. In total, 61% of the respondents can be considered non-riders (77% of those non-riders specifically identifying driving a single-occupancy vehicle as their primary mode). The remainder are classified as riders.

Figure 18 Rider Type

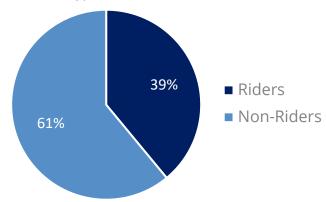




Table 10 Primary Mode of Transportation by Rider Type

Q1. What is your primary	way of traveling?		
	Total	Riders (B)	Non-Riders (C)
n=	587	247	329
Drive a car, truck, SUV, or motorcycle	47%	-	77%
Metrorail	21%	56%	=
Take a local or commuter bus	14%	38%	-
Walk	4%	-	7%
Personal bicycle	3%	-	5%
Ride in a car, truck, SUV or motorcycle driven by a friend	3%	-	5%
Commuter rail	2%	4%	=

Base = Those Answering

**Top Mentions** 

Note that those who answered "something else" as their primary mode of travel are not classified as Riders or Non-riders.

#### Likelihood to Use BRT

While 72% of respondents indicated they were very or extremely likely to use BRT if it was available, it is well known that survey respondents typically overpredict how likely they are to purchase or use products or services in the future. They do this for many reasons, including optimistic bias and hypothetical bias. To account for these common problems and sources of bias in survey research, a factor can be applied to those who said they were extremely or very likely to consider using BRT in the future. This factor assumes only **60**% of those who rated **extremely likely** would seriously consider using BRT in future and **20**% of those saying they would be just **very likely** to consider would actually do so.

Results indicate that three in ten (31%) are likely to consider using BRT. With this factor applied, among riders, 38% can be considered likely to consider BRT. Similarly, 28% of non-riders can be considered likely to consider using BRT. Arlington County and City of Falls Church show the greatest level of interest (86% each), indicating these jurisdictions are more receptive to BRT.

Table 11 Likelihood to Consider BRT by Rider Type

Q17. If BRT was available in your area, overall how likely would you be to use it?		<b>Factored</b> (Extremely likely = 0.6, Very likely = 0.2)				
	Total	Riders (B)	Non-Riders (C)	Total	Riders (B)	Non-Riders (C)
n=	587	247	329	587	247	329
Extremely/Very likely	72%	<b>82</b> % <sup>c</sup>	66%	31%	38%	28%
Extremely likely	42%	53% <sup>c</sup>	36%	25%	32%	22%
Very likely	30%	28%	30%	6%	6%	6%
Somewhat likely	21%	18%	23%			
Not very likely	5%	1%	8% <sup>B</sup>	69%	62%	72%
Not at all likely	2%	-	3%			

Base= Those Answering

Note that those who answered "something else" as their primary mode of travel are not classified as Riders or Non-riders.



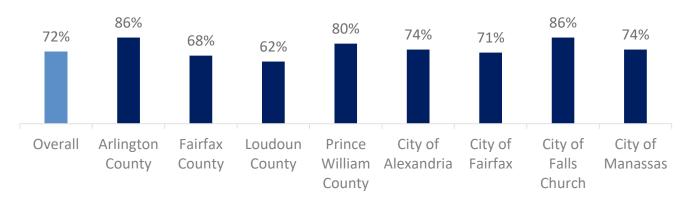


Figure 19 Likelihood of Using BRT by Jurisdiction

#### **Prioritization of Features**

The most important characteristics of a BRT system, according to respondents, were mainly focused on two features, both centered around reliability:

- Dedicated lanes and other features that allow for BRT to travel quickly and reliably (27% overall); and
- Service that shows up reliably on time (25% overall).

Table 12 Most Important Characteristics of a BRT System by Rider Type

	Total	Riders (B)	Non-Riders (C)
n=	577	245	321
Dedicated lanes and other features that allow for BRT to travel quickly and reliably	27%	19%	32% <sup>B</sup>
Service that reliably shows up on time	25%	30%	22%
Ability to get to my destination without transferring	16%	21%	14%
Service that is cheap to use	11%	10%	12%
Simple connections to other BRT lines or other transit systems	10%	10%	11%
Features that make stops/stations nicer	2%	3%	2%
Features that improve your experience while onboard the bus	2%	3%	1%

Base = Those Answering

Up to three responses accepted

**Top Mentions** 

Note that those who answered "something else" as their primary mode of travel are not classified as Riders or Non-riders.

Interestingly "dedicated lanes and other features that allow for BRT to travel quickly and reliably" was chosen more frequently as the most important characteristic among non-riders (32%, compared to 19% of riders). This indicates that providing these types of features will likely be important in driving mode shift and encouraging new users to use BRT.



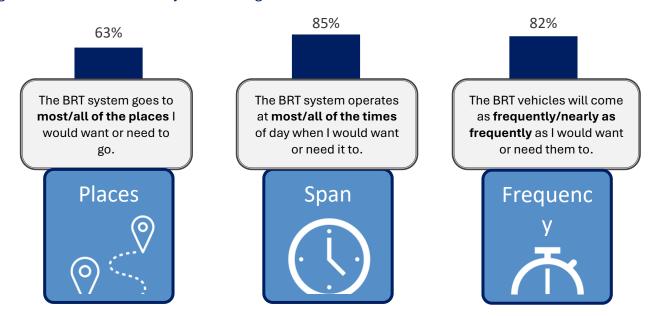
#### **Comments on the Proposed BRT System**

One of the main purposes of this survey was to provide an avenue for the public to weigh in on and provide comments for the proposed BRT system and plan. The questions in the survey, and therefore the comments received, centered mainly around three elements of service: coverage, span, and frequency, with additional opportunities for respondents to provide general comments. For each element, the respondents gave a rating on how well the system meets their needs prior to providing their comments.

Regarding span and frequency, riders were first asked to specify the three routes that they would be most likely to consider using of the 28 proposed routes. One of these routes was then randomly selected by the survey program, and the respondents were then asked to rate the span and frequency of that route and provide comments.

While about two-thirds of respondents (63%) feel that the proposed BRT system goes to all or most places they would want or need to go, more than eight in ten (82%-85%) feel that their selected routes will operate at all or most of the times and will come as frequently or nearly as frequently as they would want or need them to.

Figure 20 Overall BRT System Ratings



## Coverage

Overall, **63%** of respondents feel that the proposed BRT system goes to all or most places they would want or need it to go. This was consistent across both riders and non-riders.

Notably, younger respondents (age 18-34) were more likely to feel the system goes to all or most of the places they want to go (78%, compared to 56% of those 35 or older).



Table 13 How Well Coverage Meets Needs by Rider Type

Q4A. How well would you say this proposed BRT sys	tem meets you	r needs?	
	Total	Riders (B)	Non-Riders (C)
n=	587	247	329
Net: Most/All places	63%	65%	61%
5 – The BRT system <b>goes to all</b> the places I would want/need it to go	27%	32%	24%
4 – The BRT system <b>goes to most</b> of the places I would want/need it to go	36%	34%	37%
3 – The BRT system <b>goes to some</b> of the places I would want/need it to go	21%	17%	24%
2 – The BRT system <b>goes to a few</b> of the places I want/need it to go	9%	12%	8%
1 – The BRT system <b>doesn't go to any</b> of the places I would want/need it to go	6%	6%	7%

Base = Those Answering

Note that those who answered "something else" as their primary mode of travel are not classified as Riders or Non-riders.

When asked why they gave the rating they did, three-fourths of all respondents identified specific service requests, including places they want or need to go that they feel are not addressed adequately by the plan. Note that even those who rated the system positively also had the opportunity to make comments about additional service. Two in ten respondents (21%) specifically pointed out areas where they would like service that are in Fairfax County, with 4% overall each identifying Tysons and Burke. This is particularly notable because while Tysons is served by multiple routes in the proposed network, many respondents were seeking more direct connections to Tysons, without the need to transfer. Burke itself is not served by the proposed BRT network; future studies could consider potential extensions of the routes shown to Burke Center.

Outside of Fairfax County, respondents' top responses to the system's coverage involved ensuring the system coverage complements and integrates into existing transit services in the region (18%), and that it provides direct service to specific locations in DC (13%). Less than one in ten requested service to additional locations in Arlington or Alexandria (7% and 6%, respectively).

In addition to specific service requests, about two in ten (19%) had general concerns about the plan's coverage, including concerns about transfers and connectivity (10%). Specifically, they mentioned more direct connections to specific locations; many of these locations were served by the proposed BRT system, but respondents preferred a direct connection without the need to transfer. Some of the locations mentioned included City of Fairfax, City of Falls Church, Tysons, Great Falls, Burke, Ashburn, Dunn Loring, Van Dorn, Vienna, and various Northern Virginia Community College campuses.

A similar proportion left positive comments about the overall coverage and the plan itself (18%), specifically saying they appreciate the extensive coverage of the proposed plan.

Table 14 Comments on BRT System Coverage

Q4B. Why do you say that? Are there places you would like the BRT to go that aren't in the plan?	
	Total
n=	405
Net: Service requests	75%
Service/Routing of BRT (general)	72%
Fairfax County	21%



	Total
Tysons	4%
Burke	4%
Integration with other transit services	18%
Need connection to Metro stations	14%
Request DC Connections	13%
Request service in Arlington	7%
Request service in Alexandria	6%
Stops not close enough to where I live/go	6%
Request service in Loudoun County	4%
Request service in Prince William County	4%
Feel plan doesn't go to needed destinations (general)	3%
Request Maryland connections	2%
Service to schools	2%
Request service to additional parks and natural areas	2%
Worry about lack of coverage in general	2%
Request for specific stops	2%
Serve major roads/arteries	2%
Falls Church	1%
Worry plan lacks direct routes	1%
Stafford	1%
Concerned about service hours	1%
Extend routes	1%
Request service in Manassas	1%
Other routing comments/locations	10%
Need direct route from home to work	5%
Concerns about travel times	1%
Improve connections to key locations	1%
et: Concerns about plan coverage	19%
Concerned about transfers and connectivity	10%
Concerned about frequency	6%
Desire more cross-connections between routes	4%
et: Evaluation of proposed BRT plan – Positive	18%
Appreciate extensive coverage of proposed plan	10%
No additional locations	5%
Consider plan a significant improvement	4%
Feel plan complements Metrorail system well	1%
let: Infrastructure and traffic/congestion concerns	4%
Needs to be competitive with driving	2%
Infrastructure improvements needed	1%
Potential impact of/on traffic congestion	
let: Evaluation of proposed BRT plan - Negative	1% <b>4%</b>



Q4B. Why do you say that? Are there places you would like the BRT to go that aren't in the plan?	
	Total
Requires dedicated lanes	1%
Concerns about dedicated lanes	<1%
Other	9%

Base = Those Answering

Top Mentions

"I live in Burke There's a big empty triangle on this map with no bus lines at all."

- Non-Rider

"First would be a station in Burke Center Shopping Mall, VA, on the Chain Bridge Road Line. It would be nice to connect to VRE in some fashion, going south from GMU, and it would be a great way to go home without a car. Second Old Town Clifton, VA. It was my mom's favorite place in NOVA. Even if there were no BRT, a VRE station would be nice too."

- Non-Rider

"It looks like most of the neighborhoods that are hotspots for me (Eden center, Annandale, Centreville) are served by the proposed plan. A lot of these places aren't already covered by Metrorail."

- Non-Rider

# Span of Service

Overall, across all routes selected by respondents, 85% feel that the routes will operate at all or most of the times that they need or want them to. This is consistent across both riders (84%) and non-riders (85%). However, those respondents who identify as White were slightly more likely to feel the system operates at most or all times they need it to (91%) compared to those who are people of color (80%).

Table 15 How Well Span Meets Rider Needs by Rider Types

Q5A. How well would you say the [line] meets yo	ur needs?		
	Total	Riders (B)	Non-Riders (C)
n=	551	237	303
Net: Most/all times	85%	84%	85%
5 – The BRT system operates at <b>all the times</b> of day when I would want/need it to	61%	60%	62%
4 – The BRT system operates at <b>most of the times</b> of day when I would want/need it to	24%	24%	23%
3 – The BRT system operates at <b>a some of the times</b> of day when I would want/need it to	9%	8%	10%
2 – The BRT system operates at <b>a few of the times</b> of way when I would want/need it to	3%	5%	2%
1 – The BRT system does <b>not operate</b> when I would want/need it to	3%	3%	3%

Base = Those Answering

Note that those who answered "something else" as their primary mode of travel are not classified as Riders or Non-riders.



Four in ten respondents (40%) felt that the operation times presented suited their needs; however, an equal proportion (40%) also requested extensions to the service hours, most notably requesting that service continues later in the evening (25%). One in ten would like to see later service on weekends (13%), later service into the evenings and nights on weekdays (12%), or earlier service in the mornings (12%).

For reference, the majority of the proposed routes were assumed to operate between the hours of 6 am and midnight seven days per week with a few exceptions:

- One route, Route #25: Fort Belvoir Express which was assumed to operate between 5 am and 7 pm on weekdays.
- Five of the proposed routes were assumed to operate between 7 am and 7 pm only on weekends.

Table 16 Comments on BRT System Span of Service

	Total
	n= 219
Operation time suits needs	40%
Net: Extended service	40%
Need later service	25%
Need later service on weekends	13%
Need later service into evening/night	12%
Start service earlier in the morning	12%
Need service for late night events and activities	7%
Need 24/7 service	3%
Need extended service for airports/early/late flights	3%
Net: Greater frequency	6%
Service not frequent enough	6%
Net: Would use it	4%
Would use to/from work	3%
Would use it (general)	1%
Needs to go to different areas	2%
Should work with Metro schedules	2%
Need more/different stops	1%
Greater span (not specific)	1%
Travel time too long	1%
Requires bus lanes	1%
Needs to be cheaper than other modes	1%
Needs to be faster than other modes	1%
Operation time limits connections	<1%
Doubts reliability	<1%
Helps reduce congestion	<1%
Safety concerns	<1%
Other	10%

Base = Those Answering



#### **Top Mentions**

"Maybe extend service a tad bit later in the evening. 6-12 is generous but perhaps extending it to 1 am because sometimes I do find myself caught out later at night, and it would be better especially for later night service workers."

- Non-Rider

### Frequency

Across all routes selected by respondents, *more than eight in ten (82%) felt that the BRT lines will come as frequently or nearly as frequently as they would want or need them to*. This is consistent across both riders and non-riders.

Table 17 How Well Frequency Meets Needs by Rider Type

Q6A. How well would you say the [line] meets your needs?				
		Riders	Non-Riders	
	Total	(B)	(C)	
n=	551	237	303	
Net: As frequently/Nearly as frequently	82%	82%	82%	
5 – The BRT vehicles will come <b>as frequently</b> as I would want/need them to	58%	59%	57%	
4 – The BRT vehicles will come <b>nearly as frequently</b> as I would want/need them to	24%	23%	25%	
3 – The BRT vehicles will <b>come somewhat as frequently</b> as I would want/need them to	9%	10%	9%	
2 – The BRT vehicles will come <b>barely as frequently</b> as I would want/need them to	4%	5%	4%	
1 – The BRT vehicles <b>will not come frequently enough</b> for me to use them	4%	3%	5%	

Base = Those Answering

Note that those who answered "something else" as their primary mode of travel are not classified as Riders or Non-riders.

Nearly one-half of respondents (46%) felt that the frequency presented to them meets their needs, though an equivalent proportion of respondents indicated that they would like to see better frequencies. Nearly two in ten (19%) would like BRT to operate every 5-10 minutes and similarly, 13% would like more frequent service in general.

For reference, proposed frequencies varied by route, but were generally between 6 minutes and 15 minutes during the peak (with a single route assumed to operate every 20 minutes) and between 12 and 30 minutes during off-peak periods and on the weekends.

Table 18 Comments on BRT System Frequencies

Q6B. Why do you say that? How frequently would you like [PROPOSED ROUTE] to operate?			
Total			
n=	243		
Net: Frequency meets needs	46%		
Frequency is good (general)	22%		



	Total
15 minute frequency is good	13%
10 minute frequency is good	8%
Prefer 10-12 minute BRT frequency	3%
30 minute frequency is good	1%
Faster/Better than current bus frequencies	1%
Headways mean no need for schedule	<1%
Net: Better frequencies	46%
Operate BRT every 5-10 minutes	19%
Needs to operate more frequently (general)	13%
Operate BRT every 15 minutes	7%
Frequent service on weekends	3%
Want better frequency than 20 minutes	2%
Operate BRT every 10-15 minutes	2%
Longer than 15 minute wait is unreliable	2%
Operate BRT every 8 minutes	1%
Operate BRT every 20 minutes	1%
Long waiting time	1%
Net: Service characteristics	9%
Adjust span/hours (general)	4%
Needs to serve other areas/more stops	2%
Align with Metro schedules	1%
Needs to operate later in the evening	1%
Adjust span/hours on weekends	1%
Need to operate earlier in the morning	1%
Bus stops are good (general)	<1%
Requires bus lanes	<1%
Net: Travel time and reliability	2%
Travel time is important (not specific)	1%
Do not trust it would run this frequently	1%
Net: Would use it	2%
Would use it (general)	2%
Would use it to travel to/from work	<1%
Safety concerns	1%
Other	7%

Base = Those Answering Top Mentions

"If it were 10-15 minute intervals instead of 15-20, I would feel less of a need to plan my day/travel around the bus schedule."

- Non-Rider



"8-12 minute headways are amazing IF the buses come on time. Bus bunching is the bane of my existence but in an ideal world, 8-12 minutes is as good as Metrorail, which is a good standard to compare to."

- Rider

#### **BRT Usage**

Overall, 72% of respondents would use their selected routes to commute to work or other job-related business. While riders were more likely to use their selected routes for this purpose (81%, compared to 67% of non-riders), non-riders are more likely than riders to use their selected lines for:

- Shopping, entertainment, restaurants or bars;
- Concerts or sporting events;
- Traveling to or from the airport; or
- To access other modes of transit.

Table 19 Potential Trip Purpose by Rider Type

Q8B. For what purposes would you use [line]?				
	Total	Riders (B)	Non-Riders (C)	
n=	552	237	304	
Travel to or from work/job-related business	72%	81% <sup>c</sup>	67%	
Shopping, entertainment, restaurants/bars	65%	57%	71% <sup>B</sup>	
Visiting friends or family	44%	42%	44%	
Visiting parks, natural areas, fishing, hiking, etc.	32%	26%	35%	
Medical, bank, post office, government services	27%	29%	25%	
Concert or sporting event	23%	17%	27% <sup>B</sup>	
Travel to or from school (student)/education related	17%	16%	18%	
Gym/fitness center	13%	14%	12%	
Church, synagogue, mosque, or other religious venue	8%	10%	7%	
To travel to/from the airport	6%	2%	8% <sup>B</sup>	
Parent/guardian picking up child from school	5%	5%	6%	
To access other modes of transit	5%	2%	7% <sup>B</sup>	
For some other reason	15%	13%	17%	

Base = Those Answering

Multiple Responses

Note that those who answered "something else" as their primary mode of travel are not classified as Riders or Non-riders.

More than one-third of respondents *(37%) indicated they would use their chosen line 5 days or more each week*. However, among riders, 59% would use their lines 5 days or more per week (notably higher than 24% among non-riders). The same is true for people of color, where one-half would use BRT 5 days or more per week (51%, compared to 21% of White respondents).



Non-riders were far more likely to say they would use their chosen lines 1 to 3 days a month or a few times a year (19% and 14%, compared to 10% and 3% among riders).

Table 20 Potential Frequency of Use by Rider Type

		Riders	Non-Riders
	Total	(B)	(C)
n=	528	230	289
Net: 5 days or more	37%	59% <sup>c</sup>	24%
More than 5 days a week	17%	28% <sup>C</sup>	10%
5 days a week	20%	31% <sup>c</sup>	14%
3 to 4 days a week	22%	18%	24%
1 to 2 days a week	14%	10%	16%
1 to 3 days a month	16%	10%	19% <sup>B</sup>
A few days a year	10%	3%	14% <sup>B</sup>
Less than once a year	2%	-	3%

Base = Those Answering

Note that those who answered "something else" as their primary mode of travel are not classified as Riders or Non-riders.

Nine in ten respondents (92%) would ride their chosen lines on weekdays, with riders being slightly more likely to do so than non-riders (95% compared to 90%). About six in ten respondents would use their chosen lines on the weekend (61%), this is consistent across both riders and non-riders.

Table 21 Potential Time of Day of Use by Rider Type

Q8D. For what purposes would you use [line]?				
			Non-Riders	
	Total	(B)	(C)	
n=	513	225	281	
Net: Weekdays	92%	95% <sup>c</sup>	90%	
Net: Peak times	78%	87% <sup>c</sup>	72%	
On weekdays in the afternoon peak times (3PM up to 7PM)	65%	69%	62%	
On weekdays in the morning peak times (before 9AM)	64%	75% <sup>c</sup>	57%	
On weekdays during the midday (from 9AM up to 3PM)	42%	40%	44%	
On weekdays in the evening (after 7PM)	42%	39%	43%	
Net: Weekends	61%	56%	63%	
On Saturdays	60%	55%	62%	
On Sundays	53%	49%	55%	

Base = Those Answering

Multiple Responses Accepted

Note that those who answered "something else" as their primary mode of travel are not classified as Riders or Non-riders.

Notably, those who indicated they were not likely to use any of the proposed routes were asked follow-up questions about why they wouldn't use any of the routes and what might convince them to try BRT. Among the 7% overall who did not select any routes they would be likely to use, two-thirds (67%) indicated that none of the proposed lines take them where they want to go, and one-fourth (26%) indicated that it's faster for them to just use a different mode for their trips.



Among those whose reasoning for not using the system was not because it didn't take them where they want to go or because it was faster to use other modes, the main way that they could be convinced to use BRT would be if it was faster than driving (38%) or if it was free to use the BRT (21%).

#### **Additional Overall Comments**

When providing additional comments, *nearly one in five respondents (19%) expressed support or encouragement for the plan and only 3% expressed opposition* or felt overall negative about the plan. Other additional comments centered primarily around coverage (18%), mainly that they are happy with the coverage (11%). Connectivity was also a commonly mentioned theme (15%), with 10% requesting that BRT integrate and align with other transit options, including Metro.

Respondents continued to be clear that fast, frequent, and reliable transit are important to them when evaluating the proposed BRT network and plan. One in eight (13%) commented on the travel time of BRT and that it should be fast, direct, and measure up against other modes of travel. A similar proportion of respondents (9%) pointed out that a high-frequency BRT service is important to them and/or that BRT needs to be reliable, particularly as it compares to current service.

"Northern Virginia has needed a large-scale transit expansion for decades now, so this 28-line system is long overdue...This system honestly can't come soon enough, traffic is terrible in NOVA and we need better buses now. Thank You for this proposed system!"

- Non-Rider

"Bus lanes!! Separated traffic and good bus stops with streetcar-like stations."

- Rider

"Reliable time, with good stops that match Metro hot spots, but also that hit places the metro doesn't (Georgetown, Adams morgan, Columbia heights), and a fair price. Waiting for a bus that's not on schedule is very annoying and can mess with the rest of my transportation plans."

- Non-Rider

"There may be places I would go that aren't in the BRT plan, but this system covers uncountably more destinations than simple Metrorail or bus routes. Plus, with higher reliability and dedicated bus lanes it will be faster and more reliable."

- Non-Rider



### Table 22 Additional Comment by General Theme

THEMES		
	Total n= 587	
Support for Plan	19%	
Theme: Coverage	18%	
Happy with coverage	11%	
Extend routes	5%	
Concern about stop location/accessibility	5%	
Requests for specific stops/to add stops	<1%	
Theme: Connectivity	15%	
Integrate/align with Metro and other transit options	10%	
Want direct routes	5%	
Need to be able to transfer across routes	3%	
Theme: Travel Time	13%	
BRT needs to be fast/Travel time is important (general)	6%	
Provide fast/express/direct routes	4%	
Potential impacts to congestion can help travel time	4%	
Needs to be faster than/compete with other modes of travel	<1%	
Theme: Frequency	9%	
High frequency service is important	8%	
Request/need/prefer higher frequency schedule	1%	
Theme: Reliability	8%	
Needs to be reliable/consistent/doubts reliability	7%	
Offer real-time arrival information and reliable schedules		
Needs to improve upon reliability of current service	1%	
Theme: Amenities	7%	
Passenger experience and accessibility	4%	
Bus stop amenities	3%	
Clean buses	1%	
Provided integrated fare payment with Metro/SmarTrip	1%	
Theme: Cost	6%	
Affordability/cost of fares	5%	
Concerns about cost of BRT system overall	2%	
Other fare comments	1%	
Theme: Dedicated Lanes	6%	
BRT requires dedicated lanes	6%	
Comments about existing transit/other agencies	5%	
Theme: Congestion	5%	
Reduce dependency on cars	4%	
Good for when cars are not an option	1%	
Suggestions for improving plan documentation	4%	
Negative comments about plan	3%	
Theme: Safety	2%	



THEMES	
THEMES	Total
Safe environment	2%
Safety concerns (general)	<1%
Prioritize pedestrian and driver safety	<1%
Prioritize safety (general)	<1%
Theme: Span	<1%
Adjust span (general)	<1%
Theme: Walkability and Bikeability	4%
Integrate with pedestrian and bike infrastructure	3%
Need more dedicated bike lanes and pedestrian infrastructure	2%
Questions/Concerns about implementation timeline	2%
Other themes/comments	9%
Concerns about toll-roads	1%
Concerns about road widening/capacity	<1%
Requests to fix the roads	<1%
Concerns about BRT service levels	2%
Consider impact on existing transportation	1%
Impact on community	1%
Equity and accessibility	1%
Enhance bus service quality	1%
Specific route recommendations	<1%
Promote sustainable transportation options	1%
Concerns about funding	<1%
BRT types are confusing/Want full BRT	1%
Sustainability and environmental considerations	1%
Explore potential for electrification and future conversion to light rail	2%
BRT will compete with/be measured against other modes	1%

Base = Those Answering

### **Route Specific Comments**

Respondents had the opportunity to make suggestions about additional routes or changes to the proposed routes that would make the system more useful to them. The most common suggestions about the Routes are included in Table 23.



### Table 23 Summary of Route Specific Comments

Route/ Location	Summary of Comments
Duke Street Transitway (3) & Little River Turnpike (12)	Suggestion to combine Duke Street Transitway (Route 3) with the proposed Little River Turnpike (Route 12) to eliminate a transfer.
Route 7 (5)	Suggested connection to West Falls Church Metro station in addition to, or instead of, connection at East Falls Church
	Multiple comments suggesting extending Route 7 BRT to King St-Old Town.
	Suggestion to extend the proposed Route 6 north past Marymount University, or further north to connect to the proposed Route 15's (Chain Bridge Road) terminus in McLean
Glebe Road (6)	Several comments suggesting to connect the proposed Route 6 to West End Transitway (Route 4) in Shirlington.
	Several comments suggesting routing the portion of the route immediately east of I-395 along W Glebe Road in Alexandria, like the DASH 33.
Columbia Pike to D.C. (8)	Suggestion to extend Route 8 south to start near Franconia-Springfield Metro like the proposed Gallows Road route (Route 13).
Arlington Boulevard (9)	Suggestion to have an east-west route (like the proposed Route 9 - Arlington Blvd) stop at Inova Fairfax Hospital.
Beltway South (11)	Suggestion to add a "commuter hour spur" to allow the proposed Route 11 to reach Joint Base Andrews.
Beltway North (14)	Suggestion to end the proposed Route 14 in downtown Bethesda.
Chain Bridge Road (15)	Suggestion to have this route leave Chain Bridge Rd and stop at Vienna Metro.
	Many suggestions (10+) to connect proposed Route 15 with proposed Route 28 (Old Keene Mille Road) near Fairfax Station or Burke Centre VRE.
VA 28 South (22)	Suggestion to run the proposed Route 22 via Mathis Ave/Old Centreville Rd/Ordway Rd/Centrewood Dr rather than the parallel Route 28, to better serve planned mixed used development along Mathis Rd.
Manassas Connector (23)	Suggestion to run the proposed Route 23 via Mathis Ave/Old Centreville Rd/Ordway Rd/Centrewood Dr rather than the parallel Route 28, to better serve planned mixed used development along Mathis Rd.
Prince William Parkway	Suggestion to extending the proposed Route 24 to Dumfries.
(24)	Several suggestions to extend the proposed Route 24 to Rippon VRE.
US 1 South (27)	Suggestion to extend the proposed Route 27 south to Dumfries.
Old Keene Mill Road (28)	Many suggestions (10+) to connect proposed Route 15 (Chain Bridge Road) with proposed Route 28 near Fairfax Station or Burke Centre VRE.
Fairfax County/	Several comments suggesting additional north-south/circumferential routes connecting south
Arlington County/ Alexandria	Arlington, Alexandria, and eastern Fairfax Co to outer stations on the Silver and Orange Lines, avoiding the Rosslyn transfer.



### **Demographic Profile**

Table 24 presents an overview of the demographics of the survey respondents by Rider Type.

Table 24 Demographic Profile of Survey Respondents

Dem	nographic Profile		
	T	Riders	Non-Riders
C4/C0 Invicalistics of Posidones	Total	(B)	(C)
S1/S2. Jurisdiction of Residence Arlington County	573	243	320
	8%	12%	6%
City of Alexandria, VA	6%	9%	5%
City of Falls Church, VA	1%	1%	<1%
Manassas, VA	1%	1%	2%
Manassas Park, VA	1%	1%	1%
Net: Fairfax County	41%	39%	43%
Fairfax City, VA	1%	<1%	1%
Herndon, VA	4%	2%	5%
Vienna, VA	5%	2%	7% <sup>B</sup>
Somewhere else in Fairfax County	32%	35%	31%
Net: Loudoun County	16%	5%	22% <sup>B</sup>
Leesburg, VA	3%	-	5%
Somewhere else in Loudoun County	13%	5%	17% <sup>B</sup>
Net: Prince William County	18%	21%	16%
Dumfries, VA	2%	2%	3%
Somewhere else in Prince William County	15%	19%	13%
Somewhere else	7%	11% <sup>c</sup>	5%
D3. Age	554	236	308
18-34	39%	41%	38%
35-54	43%	42%	44%
55+	18%	17%	18%
D4. Race/Ethnicity	501	219	274
White or Caucasian	50%	36%	59% <sup>B</sup>
Asian	19%	17%	21%
Hispanic or Latino	18%	27% <sup>c</sup>	12%
Black or African American	13%	18% <sup>c</sup>	9%
American Indian or Alaska Native	2%	1%	2%
Native Hawaiian or other Pacific Islander	1%	1%	1%
Middle Eastern/Arab	<1%	<1%	<1%
Mixed Race	<1%	<1%	-
Other	<1%	-	<1%

Note that those who answered "something else" as their primary mode of travel are not classified as Riders or Non-riders.



### 3.3 Pop-Up Events

Similar to Phase 1 community engagement, NVTA conducted a series of pop-events to raise project awareness and promote the online survey. The pop-ups helped spread the word about the Draft BRT Action Plan and encouraged people to participate in the survey. These events involved a series of 10 strategically placed pop-ups across Northern Virginia, with each location selected for its close proximity to multiple proposed BRT routes. This ensured events were easily accessible to a wide range of transit- and non-transit users. Figure 21 shows the location of all the 10 pop-up events. Six of the pop-ups specifically



targeted engaging drivers, setting up at high-traffic areas such as farmers' markets, retail centers, and food distribution centers. Meanwhile, four events targeted transit users, positioned at metro stations and commuter lots where public transit users are most likely to be seen. Over the course of these pop-up events, a total of 4,614 in-person interactions



occurred; 27% of these interactions were conducted in Spanish or other non-English language.

One of the key goals of these events was to gather feedback on the proposed BRT System and its constituent routes via the structured survey. During each event, multilingual staff were available to introduce the plan, answer questions, and assist in filling out the survey on tablet computers. These events were successful in gathering comments; as shown in Table 25 more than 40% of survey responses were gathered during these events.

Table 25 Survey Responses During Pop-Up Events

	Number of Responses
During Pop-Up Events	257
Outside of Pop-Up Event Hours	330
Total	587

Note that this reflects only those who participated in their assigned focus group



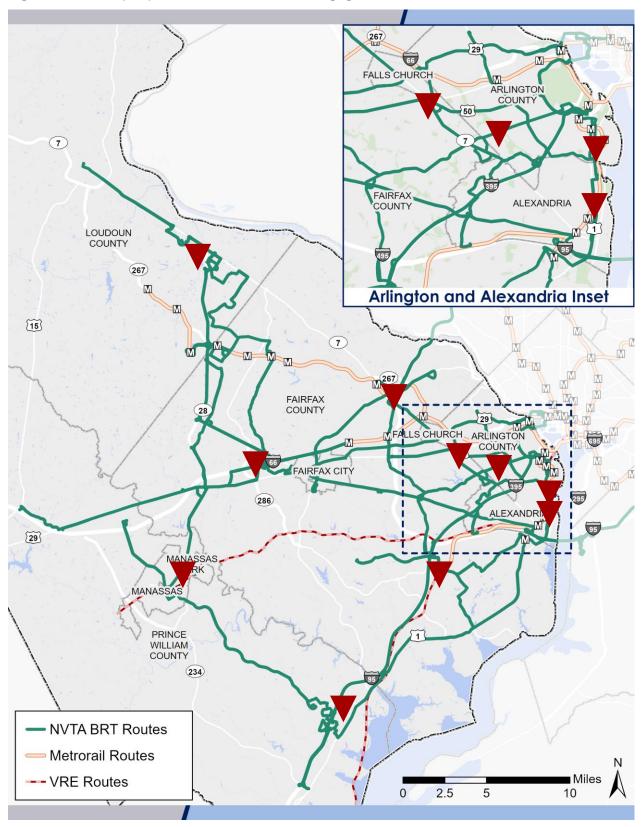


Figure 21 Pop-Up Locations for Phase 3 Engagement



### 3.4 Digital/Media Outreach

As part of the Phase 3 public outreach, NVTA's communications team strengthened the project's digital presence by amplifying educational information about BRT, in addition to information regarding the opportunity to provide input on the Draft Plan across multiple platforms. NVTA developed a full suite of content, including copy and graphics, along with the overall approach and strategy to garner the most attention from partners and the community. A social media campaign ran on NVTA's platforms (X, LinkedIn and Facebook) throughout the duration of the public comment opportunity, a press release was issued, specific news outlets were targeted, and partners were asked to help amplify the message to online audiences. Examples of graphics used on social media are shown in Figure 22. The media outreach resulted in 21 articles about the BRT Action Plan reaching an audience of 11.5 million.

Figure 22 Phase 3 Social Media Graphics









### 4.0 BRT PLANNING WORKING GROUP

Beginning in 2021, NVTA staff established a BRT Planning Working Group that meets approximately quarterly each year. Members of the Working Group included staff from Northern Virginia jurisdictions and transportation agencies, Washington Metropolitan Area Transit Authority (WMATA), Metropolitan Washington Council of Government/Transportation Planning Board (MWCOG/TPB), District Department of Transportation (DDOT), Montgomery County, and Prince George's County. A full list is shown in Figure 23. Members were encouraged to provide feedback throughout the project, and those comments were incorporated into the final products wherever possible.

After the project initiated in October 2023, in its November 2023 meeting, the BRT Planning Working Group was provided an overview of this project to develop the BRT Action Plan. At its February 2024 meeting, NVTA reviewed the preliminary results of the December 2023 perception survey and an overview of the plans for engagement in the spring of 2024. The BRT Planning Working Group was also engaged to discuss how the members informed, engaged, educated and sought input from the business community.

In June, the BRT Planning Working Group was provided a status update on BRT Action Plan planning activities, including the results of the four Focus Groups that were conducted in March 2024, technical approach for defining the BRT system, and the preliminary evaluation methodology for Phase 2 of the project.

In the December 2024 meeting, NVTA staff provided updates on Phase 2 of the project. This included reviewing the network definition and the proposed routes, sharing draft route level evaluation results, and discussing planned scenario tests. Working Group members had the opportunity to provide comments on the route design and scenarios.

Once Phase 3 was underway, the BRT Planning Working Group was able to review the individual route and system-level evaluation findings for the proposed BRT network at the March 2025 meeting. NVTA staff also shared results from the scenario tests, outlined operational and policy considerations, and gave an overview of the Phase 3 engagement schedule and goals.

In June 2025, the BRT Planning Working Group had its final meeting before adoption of the BRT Action Plan. NVTA staff provided a status update on the BRT Action Plan, including key results from the Phase 3 survey and responses to comments that had been received from the Working Group members. NVTA staff also discussed major findings and next steps for the BRT Action Plan, as well as future work.



### Figure 23 Agencies Represented on the BRT Planning Working Group

































































### **APPENDIX A. 2024 PERCEPTION SURVEY**







# Tracking Changes in Transportation Attitudes and Priorities 2024 Perception Survey

# Methodology

<b>Q</b>	PARTICIPANTS	n=606 Residents 18 years or older within jurisdiction of Northern Virginia Transportation Authority	
	FIELD DATES	November 28 – December 14, 2023	
<b>Q</b> :	MODE	Online Survey	Loudoun County City of Falls Church
$\mathbb{X}$	LENGTH	14 minutes	Fairfax County Arlington County
CÜ	GEOGRAPHY	Northern Virginia Arlington County, Fairfax County, Loudoun County, Prince William County and the Cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park	Manassas Prince William  Manassas Prince William
1	DATA WEIGHTING	2023 No weighting required 2021 data weighted by ethnicity 2019 data weighted by ethnicity 2016 data weighted by gender and ethnicity 2015 data weighted by ethnicity	County

# Methodology: Reporting Notes - 2023 Survey

### **Survey Respondent Selection**

- O Scientific study using an opt-in online panel.
- O Respondents must be age 18+ and residents of Northern Virginia, more specifically, residents of Arlington County, Fairfax County, Loudoun County, Prince William County, Alexandria, Fairfax City, City of Falls Church, Manassas, and Manassas Park.
- O We aim for an overall representation of regional demographics based on age, gender, and race according to the US Census. We also aim for a proportionate sample that represents each county/city by population size according to the US Census. For the most part we use sample quotas to hit these demographic targets. Weighting was not needed for the 2023 wave.

#### **Confidence Interval and Margin of Error**

All sample surveys and polls, whether or not they use probability sampling, are subject to multiple sources of error which are most often not possible to quantify or estimate. Online opt-in panels such as the one used for this study do not use probability sampling and accordingly the strict calculation of sampling error is not typically done. In the hypothetical case of a perfectly random sample and no response or measurement errors, a sample of this size (n=606) would produce a margin of error of ± 3.98% at a 95% confidence interval. Margins of error for subgroups would be higher.

#### **Ethnicity clarification**

O Black, White, Asian refer to Non-Hispanic Black/White/Asians.

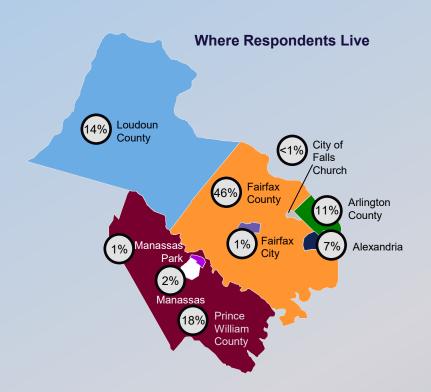
#### **Statistical Testing Notations**



Indicates statistically significant differences between 2021 and 2023 (p<.05). When appropriate, the report indicates these differences using green, red, and blue color coding wherein green = an increase or positive change; red = decrease or negative change; blue = may be construed as either positive or negative/or just a change that might be of interest.

- O () Numbers in parenthesis are of interest but are not statistically significant at p<.05 level. When shown these numbers are color coded in the same way as described in prior bullet.
- O Some totals may not add to 100% and aggregation of the data may vary slightly due to rounding error.
- O Abbreviations: T3B = Top 3 Box Score (rated 8-10 on a 10-point scale)

### Resident Profile



County/City of Employment	2015	2016	2019	2021	2023
Fairfax County	37%	36%	35%	38%	40%
District of Columbia	18%	12%	11%	6%	9%
Arlington County	11%	11%	12%	14%	9%
Loudoun County	8%	13%	12%	13%	13%
Alexandria	7%	9%	9%	8%	8%
Prince William County	6%	8%	12%	11%	11%
Manassas	4%	2%	2%	2%	2%
Fairfax City	2%	2%	2%	3%	2%
City of Falls Church	1%	1%	1%	1%	<1%
Manassas Park	<1%	<1%	1%	<1%	1%
Other county in Virginia	1%	1%	2%	1%	1%
Other county in Maryland	3%	2%	1%	1%	1%
Other	1%	3%	2%	2%	1%
Years of Residency					
Less than 1 year	3%	2%	3%	5%	2%
1 to 5 years	19%	16%	17%	22%	16%
6 to 10 years	14%	12%	14%	12%	12%
11 to 15 years	12%	14%	11%	9%	9%
More than 15 years	51%	56%	55%	52%	60%
Own/Rent Home					
Own	65%	70%	64%	63%	61%
Rent	32%	26%	31%	31%	33%
Neither	2%	3%	3%	3%	5%
Decline	1%	1%	2%	3%	1%

## **KEY FINDINGS**



**Investing in regional transportation remains a priority**. Traffic and congestion have the second highest impact on the quality of life in the region (trailing only affordability of housing).



**Commuting habits are still impacted** by the post-pandemic shift to work from home, but most residents are commuting to work at least a few days a week and are on the road even more for non-work purposes.



**Safety is always a priority** when it comes to transportation. Crime is on the rise and personal security is playing an increasingly important role in quality of life in the region. The increased attention on crime increases focus on safety (in general).



**Opportunity for BRT** - Despite limited familiarity with Bus Rapid Transit, residents have a favorable outlook, seeing many more benefits than drawbacks.



**Transportation issues are a bit less top of mind**. Recall of transportation issues in the news and awareness of NVTA have softened compared to the last wave. Perceptions of the region's performance in planning and implementing transportation solutions remains positive, but intensity has softened.

- Regional transportation remains a priority and is a leading factor in influencing quality of life.
  - Nine-out-of-ten agree that *Investing in the regional transportation* is a top priority in 2023. This is consistent with 2021 data and signals the continued importance of investing in our region's transportation system and infrastructure.
  - Improving affordability of housing and Reducing traffic congestion & Improving transportation
     options remain the top two factors that contribute to quality of life in the Northern Virginia region.
  - Traffic flow and congestion remains the biggest transportation factor impacting quality of life. Perceptions of how well the region addresses these concerns have improved, but there is still work to be done. The top priorities for future improvements include leveraging technology, expanding metro, improving roadways and offering Bus Rapid Transit (BRT) options.

- A recent Washington Post article<sup>1</sup> noted how remote work continues to thrive in the region. This continues to shape commuting habits.
  - The article does point out that the DC area may see more employees returning to office and shows evidence of decreases in work from home. Remote work is likely to remain part of the post-pandemic reality, but we can expect a continued shift to a hybrid that has a mix of work from home and work from the office.
- Despite changing work habits, most residents are on the road on a weekly basis. Most are commuting at least a couple days a week and driving even more frequently for non-work purposes.
  - Most residents use public transit, but daily usage has softened.

- Safety remains an important part of the story as it is playing an increasing role in affecting quality of life.
  - Reducing crime and making neighborhoods safer has increased 7 points to replace Increasing
    access to high quality, affordable healthcare as the third biggest factor impacting quality of life.
  - Safety improvements serve as an influential topic to engage and motivate regional residents.
     When looking at specific language, calling out benefits and how they connect to the individual hold the strongest equity (i.e., Get you quickly and safely where you need to be).
  - When looking specifically at transportation priorities, Making our transportation system safe remains the top priority and has increased in importance since 2021. It is the strongest performing attribute (80%) but continues to show a large gap when compared to importance (45%).

- Bus Rapid Transit (BRT) offers the region an opportunity to further improve transportation options. Initial reactions are positive, but familiarity is lacking. Leveraging key benefits will help further strengthen interest.
  - Most (69%) are Not too or not at all familiar with BRT, but views are Favorable (51%) or Neutral (41%).
  - More than half would consider using BRT (54% for commuting and 63% for recreational/personal travel).
  - The strong majority (84%) feel the positives associated with BRT outweigh any negatives and the most influential benefits are *Convenience* (15%); *Time savings compared to driving* (12%); *Faster and more reliable trips* (10%).

- Awareness of regional transportation news, NVTA and TransAction have softened since 2021.
  - Overall, respondents are less likely to recall hearing, reading or seeing news about transportation issues in the region and awareness of both NVTA and TransAction have both softened in 2023 (after seeing a steady growth trend from 2016-2021).
  - For those who do recall hearing, reading or seeing news about transportation issues in the region, it tends to be more of a balance of positives (39%) and negatives (40%) whereas 2021 data was more positive (57%) than negative (27%).
- The region and NVTA both continue to maintain positive perceptions of their performance in planning and implementing transportation solutions in the region.
  - Intensity of scores have softened increase in GOOD scores while the EXCELLENT scores show a decline.

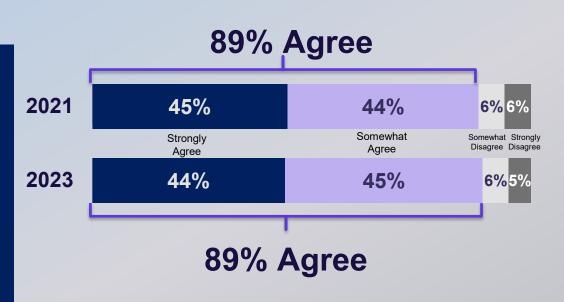
# **Transportation**

REGIONAL TRANSPORTATION
PERCEPTIONS AND EXPERIENCES

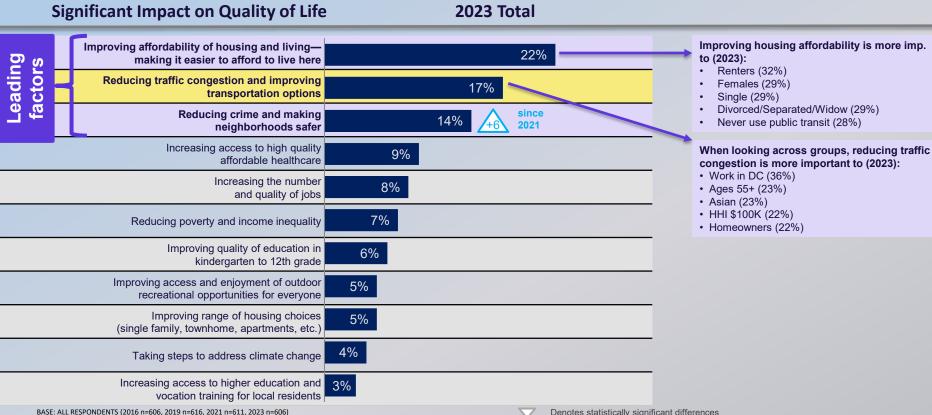
### Investing in regional transportation remains an important priority.

To what extent do you agree with the statement:

Investing in the regional transportation system is an important priority



### Transportation factors have a significant impact on quality of life.

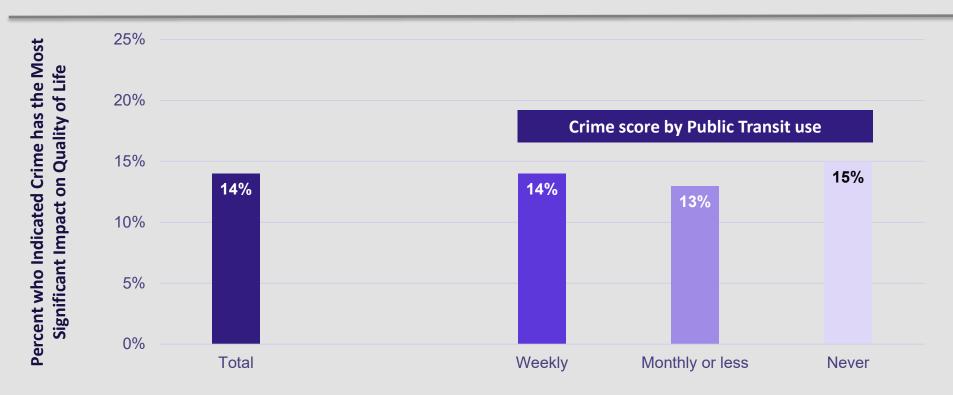


# After a steady decline, impact of transportation factors has stabilized. The impact of crime, however, has seen a notable increase.

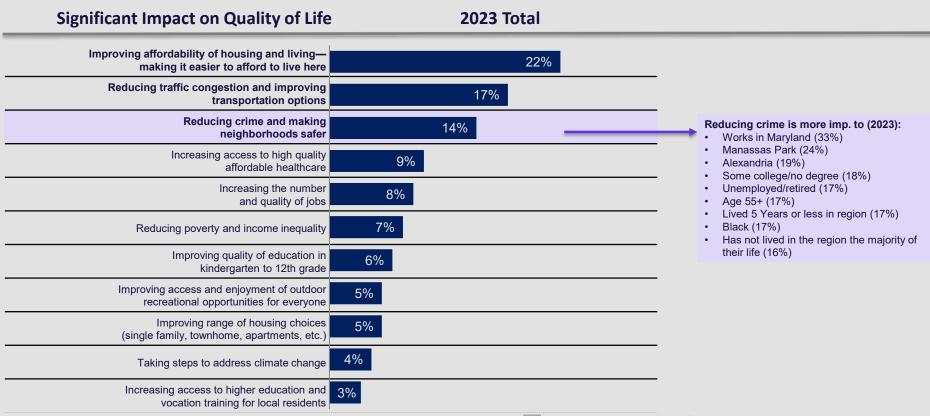
Significant Impact on Quality of Life	2016	2019	2021	2023	
Improving affordability of housing and living— making it easier to afford to live here	18%	24%	21%	22%	-
Reducing traffic congestion and improving transportation options	33%	26%	16%	17%	
Reducing crime and making neighborhoods safer	8%	7%	8%	14%	
Increasing access to high quality affordable healthcare	6%	8%	10%	9%	511
Increasing the number and quality of jobs	12%	10%	9%	8%	
Reducing poverty and income inequality	6%	7%	7%	7%	
Improving quality of education in kindergarten to 12th grade	6%	4%	6%	6%	
Improving access and enjoyment of outdoor recreational opportunities for everyone	4%	4%	7%	5%	
Improving range of housing choices (single family, townhome, apartments, etc.)	4%	7%	6%	5%	
Taking steps to address climate change			5%	4%	
Increasing access to higher education and vocation training for local residents	4%	3%	6%	3%	

Affordability and transportation have always been the top two factors impacting quality of life. They are inter-related. Affordability has become the leading factor impacting quality of life as traffic/congestion have improved and are less of a priority.

Public transit users are no more or less concerned with crime. This suggests crime is NOT linked to transportation but is a reflection of a broader regional issue.

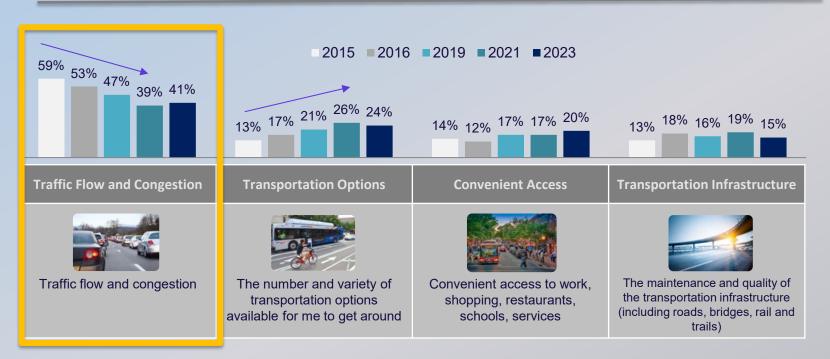


### Transportation factors have a significant impact on quality of life.



# Looking specifically at transportation factors, *Traffic flow and congestion* continues to have the biggest impact followed by *Transportation options*.

### Which Transportation Factor has the Biggest Impact on Quality of Life?



# When looking at which transportation factor has the biggest impact on quality of life, some unique demographic and behavioral profiles emerge.

### Biggest Impact on Your Quality of Life - Subgroup Analysis









#### **Traffic Flow and Congestion (41%)**

- 54% Ages 55+
- 52% Never uses public transit
- 48% Unemployed
- 47% White
- 47% Prince William County
- 47% Occasionally uses public transit
- 46% Have not lived in region majority of life

#### **Transportation Options (24%)**

- 39% Uses public transit daily/weekly
- 35% HHI <\$50K
- · 29% Arlington County
- 29% Ages 35-54

### **Convenient Access (20%)**

- 31% Black
- 28% Lived in region less than 5yrs
- 27% Ages 18-34
- 26% Asian
- 26% Single
- 26% Renter

### Transportation Infrastructure (15%)

- 26% Aware of TransAction
- 20% Aware of NVTA



Traffic plays a bigger role among older, white, non-public transportation users.



Transportation options have a bigger impact on middle aged commuters who use public transportation.



Convenient access is important for younger, single, minorities.



Infrastructure has a bigger impact among those who follow developments related to regional transportation.

Traffic impacts quality of life because most participants are driving on a regular basis. While driving to work is common, driving is more frequent for non-work purposes.

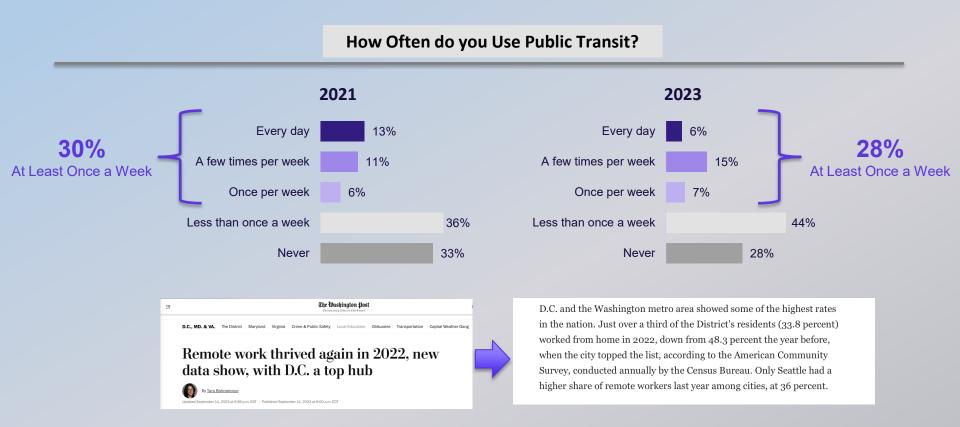




6%

Never

Most residents use public transportation, but daily usage has softened (which may be a function of a post pandemic shift to working from home/hybrid schedules).

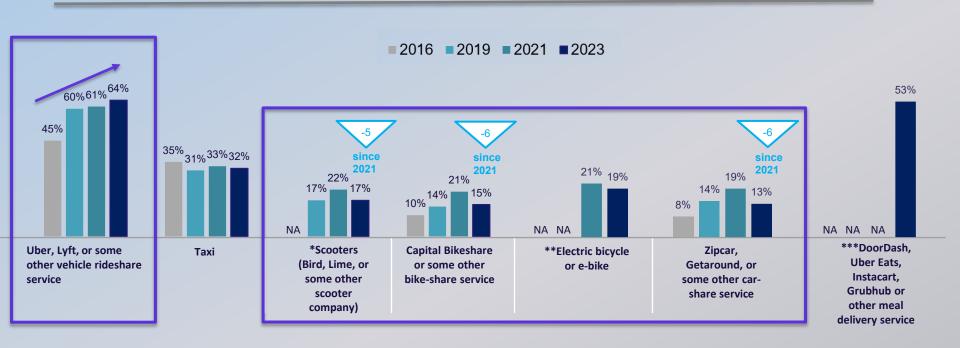


### **Transportation**

CAR OWNERSHIP ALTERNATIVES
AND PERCEPTIONS OF
SELF-DRIVING VEHICLES

Rideshare services remain the dominant alternative to car ownership and continue to show a growth trend. Declines are observed in scooters, bikes and car share services.

#### **Usage of Car Ownership Alternatives**



Denotes statistically significant differences between 2021 and 2023 (p<.05)

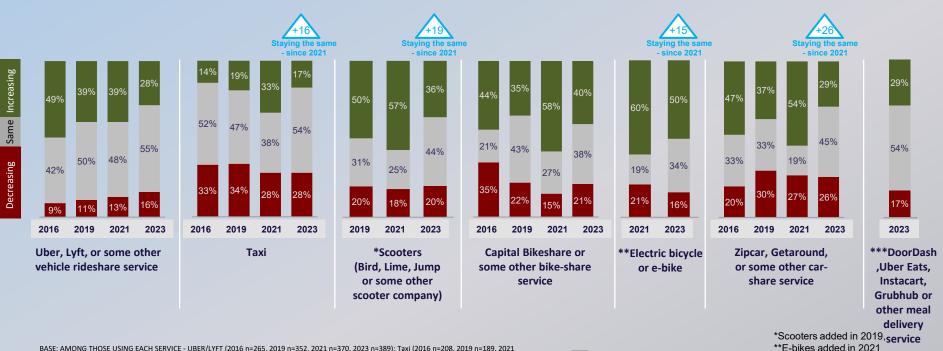
<sup>\*</sup>Scooters added in 2019,

<sup>\*\*</sup>E-bikes added in 2021

<sup>\*\*\*</sup>Meal delivery services added in 2023

Reported changes in usage show growth rates tapering off. The most commonly used alternatives (rideshare and taxi) are the most stable.

#### **Reported Change in Usage of Car Ownership Alternatives**

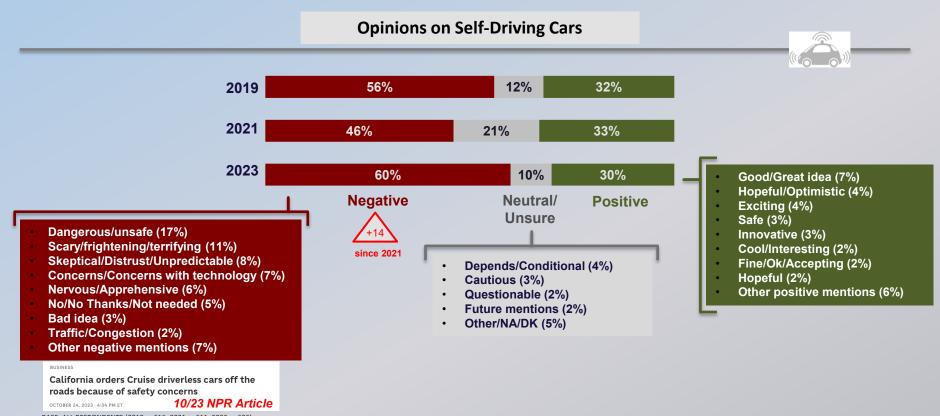


Denotes statistically significant differences between 2021 and 2023 (p<.05)

Q745. Do you anticipate your usage increasing, decreasing or staying the same over the next 12 months for each of the following?

<sup>\*\*\*</sup>Meal delivery services added in 2023

# Opinions on self-driving vehicles have grown increasingly more negative with concerns about safety and how well the technology can be trusted.

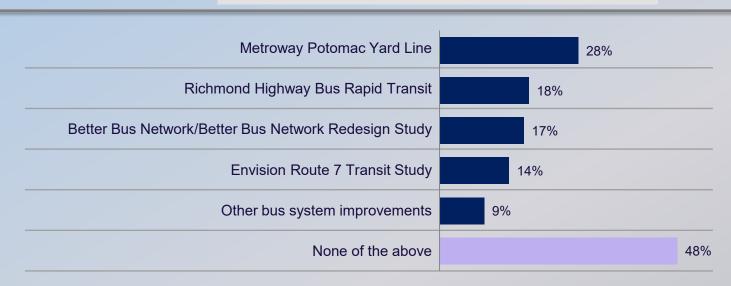


### **Transportation**

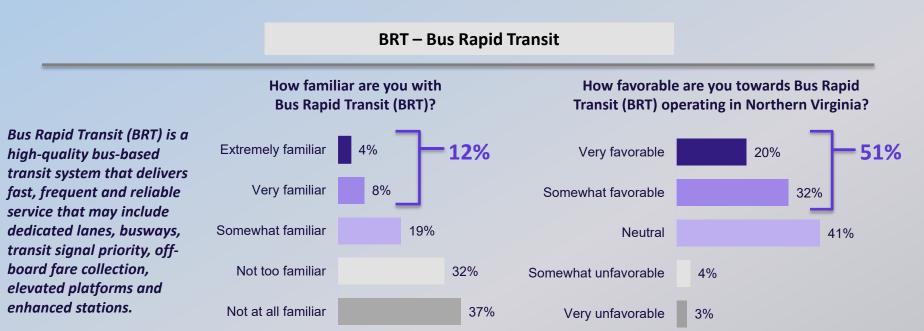
REGIONAL BUS SYSTEMS

### There is limited awareness of bus system initiatives.

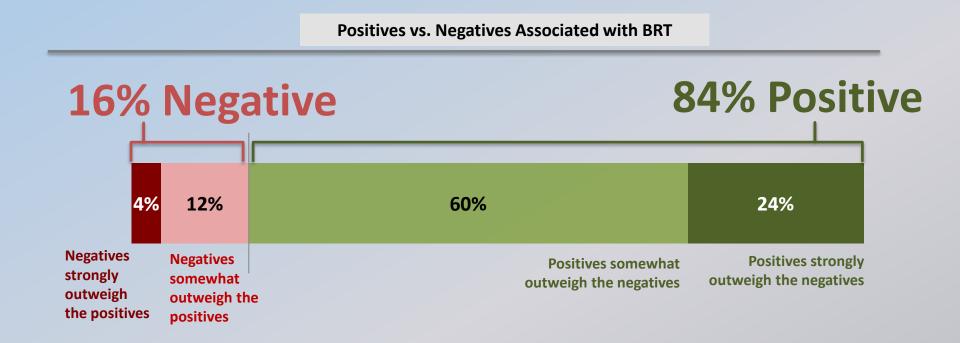
#### Which of the Following Initiatives are you Aware of...



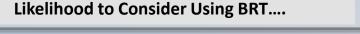
# Familiarity is limited and respondents tend to have either neutral or positive views toward BRT.

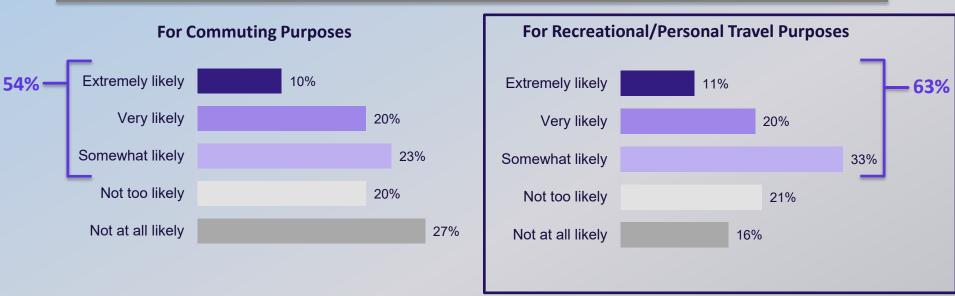


Residents are much more likely to see positive benefits of BRT than negatives.

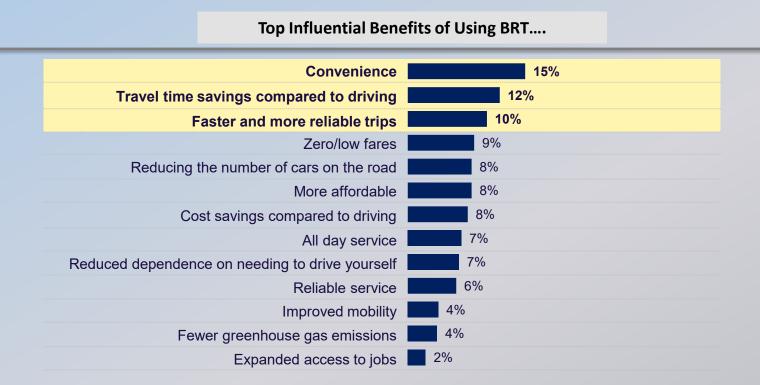


Residents are more likely to use BRT for personal purposes (about two thirds). Half are likely to use BRT for commuting purposes.





# Convenience, Saving time, and Reliability are the top influential benefits of using BRT.



### **Transportation**

REGIONAL PRIORITIES AND VALUES

The region continues to show increased perceptions of doing a good job on addressing top priorities.



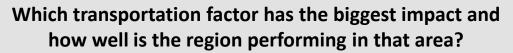


Q530. Currently, when it comes to the number and variety of transportation options, do you feel that the region is doing a good job or a bad job?

Q540. Currently, when it comes to the maintenance and quality of the transportation infrastructure do you feel that the region is doing a good job or a bad job?

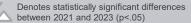
Q550. Currently, when it comes to convenient access to work, shopping, restaurants, schools and services, do you that like the region is doing a good job or a bad job?

# The region continues to improve in terms of addressing *Traffic and congestion* while maintaining strong scores for other transportation priorities.







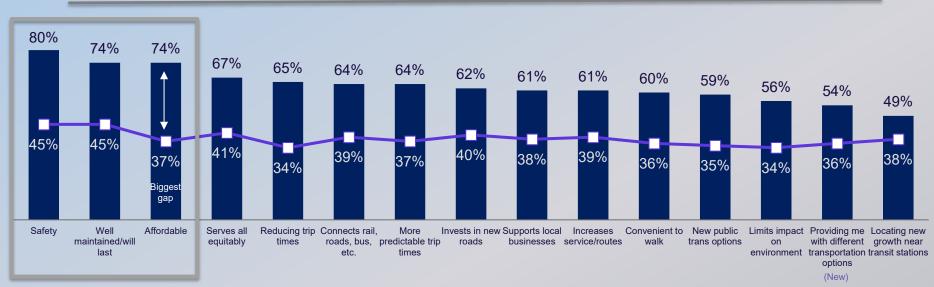


### What priorities are most important and how well does the region perform?

Short Label	Full Label				
Connects rail, roads, bus, etc.	Providing a transportation system that connects rail, roads, bus, biking and pedestrians				
Affordable	Making sure that our transportation system is affordable				
Supports local businesses	Building a transportation system that supports local businesses and the regional economy				
Reducing trip times	Reducing trip times				
More predictable trip times	More predictable trip times				
New public trans options	Providing new public transportation options				
Invests in new roads	Investing in new highways and road improvements				
Locating new growth near transit stations	Locating new growth in the region near transit stations				
Increases service/routes	Increasing existing service and routes of public transit systems				
Convenient to walk	Making it convenient to walk or bike to neighborhood stores, businesses, and schools				
Safety	<b>NEW WORDING for 2021: Making sure our transportation system is safe</b> OLD WORDING: Making sure our transportation system takes advantage of the latest technologies to make it more efficient and safer				
Well maintained/Will last	Building a transportation system that is well maintained and will be around for a long time (added in 2021)				
Limits impact on environment	Limiting the transportation system's impact on the environment (added in 2021)				
Serves all equitably	Building a transportation system that serves all members of the community equitably (added in 2021)				
Provides different transportation options	Providing me with different transportation options that reduce the need for me to drive alone (added in 2023)				

Safety, Maintenance, and Affordability are the three most important transportation priorities. Largest gap is with Affordability, but there is room for improved performance across the board.

2023: Importance & Performance of Regional Transportation Priorities – TOP 3 BOX SCORE\*



Note - Shortened labels shown for priorities

2023 - Importance

-D-2023-Performance

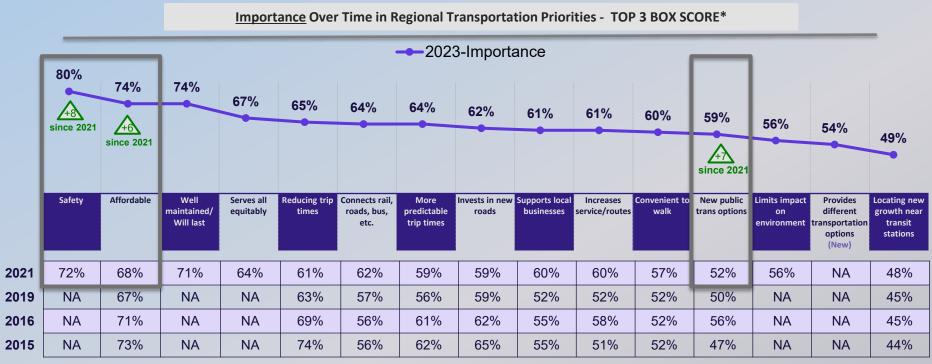
\* % rating each 8-10 on 10-pt scale

BASE: ALL RESPONDENTS (2021 n=611, 2023 n=606)

Q600. Thinking specifically about transportation issues and priorities, please rate each of the following where 1 means 'Not at all important to the future of the region" and 10 means "Extremely important priority for the future of the region."

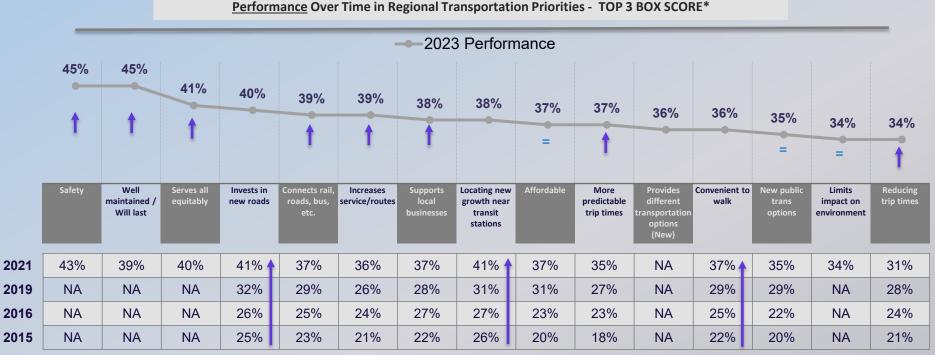
Q605. Please indicate how well you think Northern Virginia is performing on each of these priorities using the scale where 1 means the region is not performing well at all and 10 means the region is performing extremely well.

# Safety, Affordability, and New public transit options have significantly grown in their importance since 2021. Other priorities remain comparable to 2021.



<sup>\* %</sup> rating each 8-10 on 10-pt scale

### Performance ratings tend to be as good or better to 2021 for most priorities.

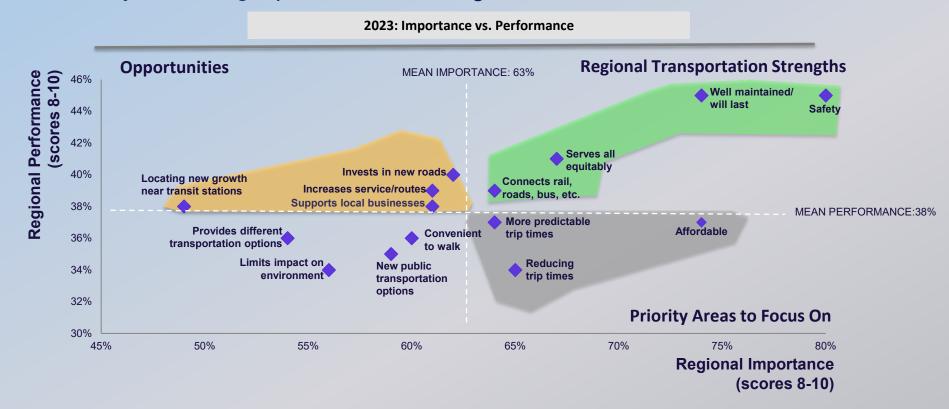


\*% rating each 8-10 on 10-pt scale

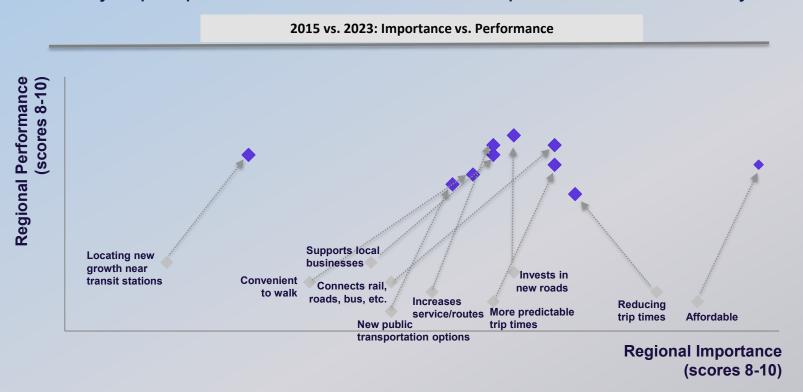


Denotes statistically significant differences between 2021 and 2023 (p<.05)

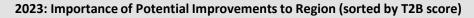
Safety, Equitable access, Connection, and Longevity remain current regional transportation strengths. The priority areas to strengthen performance relate to Affordability, Reducing trip times and making them more Predictable.

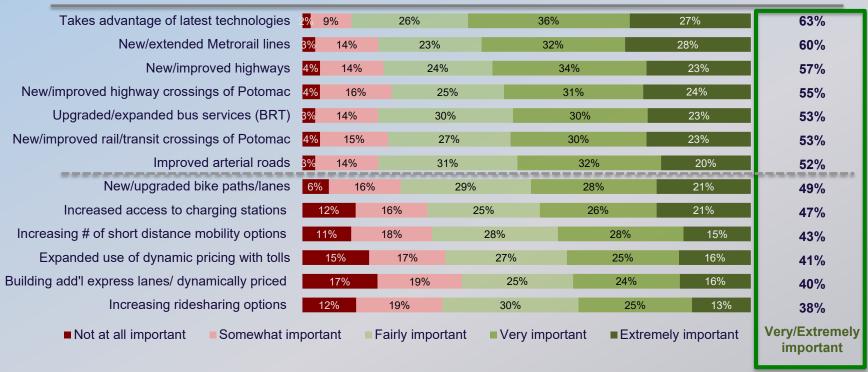


Most of the movement in priorities comes from shifts in improved performance (items are moving higher on chart) as compared to the 2015 benchmark. Affordability shows a noticeable jump in performance, while reduced trip times shows the only decline.



# The most important potential improvements include leveraging technology, while making improvements to Metro & highways as well as offering expanded BRT.





# The most important potential improvements since previous year include leveraging technology, and improved highway crossings of Potomac.

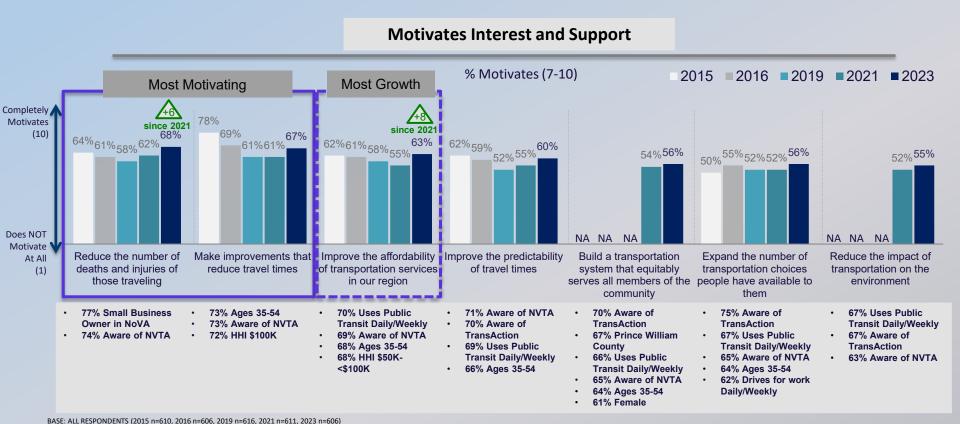
### Historical Comparison of Potential Improvements to Region Rated Very/Extremely Important

	2019	2021	2023
Takes advantage of latest technologies	NA	58%	63%
New/extended Metrorail lines	61%	59%	60%
New/improved highways	55%	55%	57%
New/improved highway crossings of Potomac	51%	50%	55%
Upgraded/expanded bus services (BRT)	53%	57%	<b>53</b> %
New/improved rail/transit crossings of Potomac	51%	53%	53%
Improved arterial roads	51%	53%	52%
New/upgraded bike paths/lanes	34%	50%	49%
Increased access to charging stations	NA	48%	47%
Increasing # of short distance mobility options	NA	41%	43%
Expanded use of dynamic pricing with tolls	32% —	39%	41%
Building add'l express lanes/ dynamically priced	NA	38%	40%
Increasing ridesharing options	NA	39%	38%

## **Transportation**

MESSAGING

# Messaging should center on benefits tied to safety and reduced travel times. Affordability concerns has grown in more than any other theme and should also be considered.

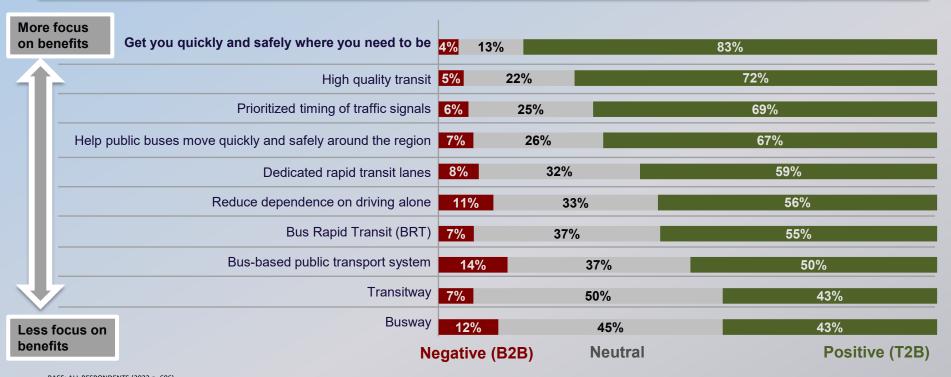


Q705. The following are strategies to help fulfill the regional values and priorities we have been talking about. There are different ways to talk about these priorities and goals. Please indicate the degree to which the goal captures and motivates your interest and support by rating the statements from 1 to 10 where 1 means "does not motivate your interest and support at all" and 10 means "completely motivates your interest and support".



Word choice matters when talking about transportation solutions. When transportation words/phrases are connected to personal benefits, they are much more positively received.

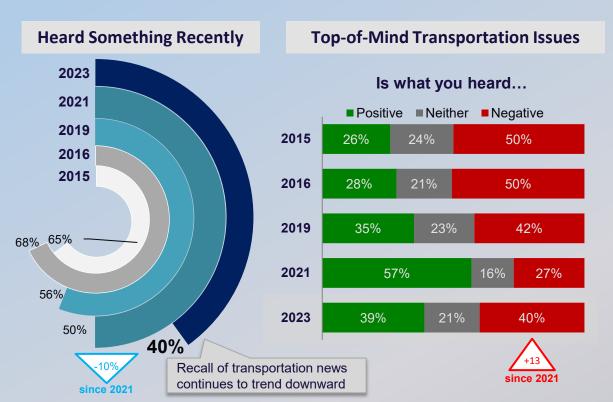
#### **Reaction to Words/Phrases**



### **Transportation**

NEWS RECALL

# Recall of transportation related news continues to decrease. The ratio of positive to negative news falls back to 2019 levels.

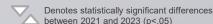


#### Most Likely to Hear Something *Positive in 2023*: 39% TOTAL

- 64% Aware of TransAction
- 56% High School degree or less
- 56% Loudoun County
- 48% Ages 35-54
- 48% Aware of NVTA
- 46% Male
- 46% Married/Living with partner

#### Most Likely to Hear Something *Negative in 2023*: 40% TOTAL

- 62% Work in DC
- 51% Ages 18-34
- 47% Not aware of NVTA
- 45% Prince William County



# Transportation news most commonly recalled relates to Metro/WMATA, but also includes news about congestion, roadways, tolls and buses.

#### 30% Metro/WMATA Expansion

- Expansion of the metro/stations (Ashburn, Potomac Yard, Tysons Corner, etc.)
- Opening of the Silver Line

#### 20% Improved roads

- The expansion of roads to reduce congestion
- Widening the roads that are heavily populated (Route 28, I-64, I-66, Route 15N)
- Reopening of roads (US 340)
- Reconstruction for increased accessibility for pedestrians/bike lanes
- Increased funding for road improvements (I-95 corridor, US Highway 1, Route 28, bridges, rotaries, etc.)

#### 14% Reduced congestion

- Reduced congestion by added express lanes/widened roads/tolls during rush hour (Centreville Road, I-95, DC Metroplex, and DMV area in general)
- Saturday service of VRE to ease traffic
- People working remote results in reduced traffic

#### 10% Bus Expansion

- · Expansion of bus lines
- Fairfax Connector adding electric busses

#### 8% I-66 Improvements

- Extension of express lanes
- Completion of I-66 projects

# Negative

#### 55% Metro/WMATA Issues

- Funding for the metro system
- Reduced metro service (service hours, scheduling, reduced routes, delays, etc.)
- Increased crime at stations/stops
- Metro repairs/broken trains (derailment)
- Increased fee/fare
- Decreased ridership
- Metro rail expansion delays
- Transit worker strikes

#### 31% Traffic Congestion

- Heavy traffic/Rush hour/Traffic jams
- Accidents
- Congestion due to drivers trying to avoid toll lanes
- Number one worst traffic in the country

#### 15% Road closures/Construction delays

- Construction causing accidents and delays/congestion
- Road closures (roads not finished in Arlington)

#### 10% Increased tolls

- Toll fees/EZ pass increasing
- Overpriced express lanes

# The decline in recall is further reflected in specific channels. TV/News remains the dominant source followed by social media and print sources.

#### **Most Recent Information Sources for Transportation Issues**

		2015	2016	2019	2021	2023			Source	2021	2023	
		(n=400)	(n=411)	(n=363)	(n=311)	(n=245)			Facebook	32%	22%	
	Television/News story	54%	57%	49%	58%	46%	-12	X	X (Twitter)	24%	14%	
					0070	since 2021		Instagram	24%	NA		
16	Social Media	24%	31%	38%	49%	36%	-13	in	LinkedIn	NA	4%	
	Print article or ad In newspaper, magazine, flyer or information packet	46%	45%	36%	34%	28%	since 2021	?	Other social media	8% ned in 202	11% 23	
	Radio ad/news/discussion	41%	38%	32%	36%	27%	-9 since 2021	<ul> <li>Personal experience 5%</li> <li>Word of mouth 3%</li> </ul>				
<u>(4)</u>	Community Meeting	7%	9%	10%	21%	11%	-10 since 2021	Websites Mentioned in 2023				
	Website	5%	2%	4%	7%	9%	ArlNow.com     WashingtonPost.com					

Social media is an effective channel to reach younger residents along with people who are more engaged with public transportation.

#### More Likely to Use Social Media



#### **36% TOTAL**

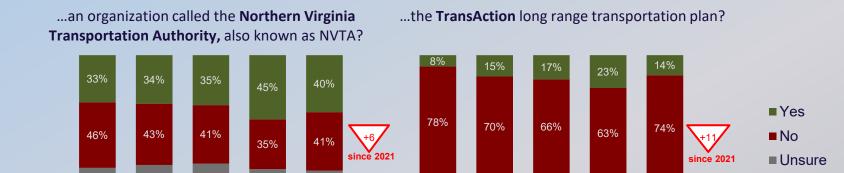
- 59% Lived in region 5 years or less
- 58% Ages 18-34
- 57% Aware of TransAction
- 54% Uses public transport weekly/daily
- 51% HHI \$50-\$100K
- 48% Hispanic
- 48% Lived in region 6-10 years
- 46% HHI <\$50K</li>
- 46% Renter
- 45% Single
- 45% Children at home
- 44% Drives for work weekly/daily
- 44% Live and work in same region
- 41% Employed/Student

### **Transportation**

AWARENESS LEVELS AND PERFORMANCE RATINGS FOR THE REGION AND REGIONAL AGENCIES

### Awareness of NVTA and TransAction has softened after seeing a steady increase from 2016-2021.

#### Have you Ever Heard of...



14%

2015

% Most Likely to Have Heard of NVTA (2023)

24%

2019

2023

57% Loudoun County

21%

2015

75% Aware of TransAction

47% Drives for work weekly/daily

- 46% Uses public transit weekly/daily
- 46% HHI \$100K+
- 46% Homeowner
- 45% NoVA performance excellent/good

2021

#### % Most Likely to Have Heard of TransAction (2023)

17%

2019

35% NVTA performance excellent/good

2016

- 29% Uses public transit weekly/daily
- 26% Aware of NVTA
- 24% Top Transport Factor -Quality of Infrastructure

20% Children at home

12%

2023

- 20% Drives for work weekly/daily
- 20% NoVA performance excellent/good
- 19% Asian

14%

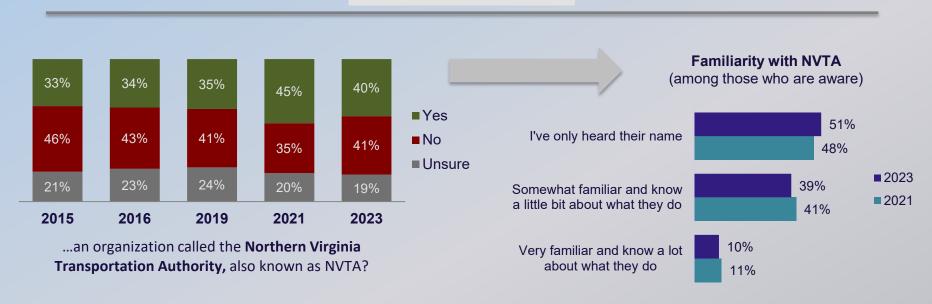
2021



2016

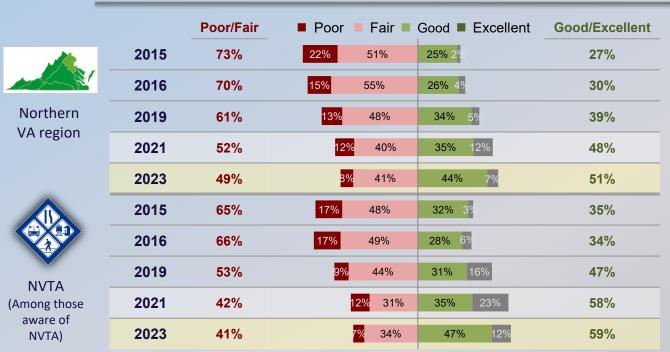
Levels of familiarity with NVTA (among those who are aware) are fairly stable and tend to be limited to name recognition.





While *Excellent* scores declined, the region and NVTA are both historically highest for Good/Excellent for performance in planning and implementing transportation solutions. Scores are highest among residents using public transit frequently (81%).

#### Performance on Planning and Implementing Transportation Solutions



<sup>\*</sup> Small base sizes less than 30/50. Data are directional only.

NOVA Region Performance, those rating it higher (as good/excellent) (2023):

#### 51% - Total

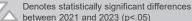
- 74% Aware of TransAction
- 72% Uses Public Transit weekly/daily
- 69% Never drives for work
- 64% Loudoun County
- 58% Ages 35-54
- 58% Aware of NVTA
- 57% Alexandria
- 57% Live and work in same region
- 57% Uses public transit (NET Yes)

#### NVTA Performance, those rating it higher (as good/excellent) (2023):

#### 59% - Total

- 81% Uses public transit weekly/daily
- 80% Asian
- 80% Alexandria
- 79% Aware of TransAction
- 72% Ages 35-54
- 70% High School degree or less
- 69% Arlington County
- 65% Married/Living with partner
- 65% Live and work in same region
- 64% Loudoun County

solutions in the region?



BASE: ALL RESPONDENTS (2015 n=610, 2016 n=606, 2019 n=616, 2021 n=611, 2023 n=606) Q630. How would you rate the performance of Northern Virginia region when it comes to planning and implementing transportation solutions in the region? BASE: HAVE HEARD OF NVTA (2015 n=207, 2016 n=212, 2019 n=222, 2021 n=276, 2023 n=243) Q645. How would you rate the performance of Northern Virginia Transportation Authority (NVTA) when it comes to planning and implementing transportation

### **Conclusions + Opportunities**

### Conclusions + Opportunities

Transportation is an important factor shaping quality of life and most believe investing in regional transportation is a priority. Recall of transportation content in the news has declined and awareness of NVTA and TransAction have softened (after seeing a sustained growth trend over several years).

Consider additional opportunities to partner with other agencies to help promote progress on on-going transportation initiatives (and the role NVTA plays). One potential strategy is to enhance communications to embrace how transportation is linked to other regional priorities - affordability, safety, access to healthcare.

### Conclusions + Opportunities

Safety and well being are foundational to having a thriving region. Crime is featured prominently in the media and is a growing concern in the region and impacts quality of life. This increased attention on personal security elevates focus on safety more broadly. Safety has always been and continues to be a top priority for transportation.

Reinforce existing commitment to safety when creating new transportation solutions. When updating the public on transportation projects, highlight the specific ways new offerings will make our region a safer place to travel.

# Conclusions + Opportunities

Work and commuting habits remain impacted by the postpandemic shift to working from home. Most residents are back in the office and traveling for work at least a few times a week. Travel for non-work purposes is even more common.

Residents are still driving frequently. Decreases in work related driving may be offset to some extent by increased driving for non-work-related purposes. This means traffic is still a concern and the region needs to continue to find ways to ease congestion.

# Conclusions + Opportunities

Despite low levels of familiarity with BRT –residents have more favorable than negative views. There is evidence of interest in having access to expanded BRT transportation options. Highlighting specific benefits will be helpful to influence usage.

Promote the benefits of BRT as a transportation option in the region. The most influential benefits found in the survey are convenience (it is accessible and easy to use); efficient (fast – speed comparable to driving, more frequent service), and reliable (this can be helpful in offsetting the variable of time in traffic). Also consider including any relevant safety benefits.

# **Appendix**

DEMOGRPAHICS AND ADDITIONAL SLIDES

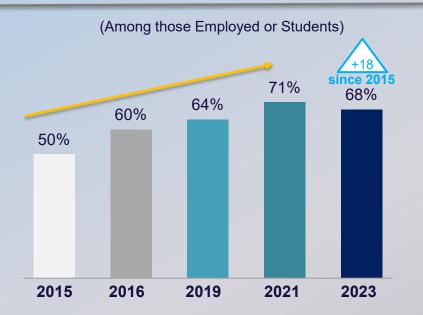
# **Demographics**

		2015	2016	2019	2021	2023
Gender	Male	48%	48%	47%	48%	49%
	Female	52%	52%	53%	52%	51%
Age	18-24	7%	11%	15%	13%	12%
	25-34	22%	22%	22%	21%	22%
	35-44	24%	21%	21%	25%	21%
	45-54	20%	21%	15%	12%	18%
	55-64	15%	14%	15%	15%	14%
	65+	12%	11%	13%	14%	13%
Ethnicity	White	58%	58%	52%	52%	53%
	Hispanic	15%	15%	17%	17%	17%
	Black	11%	11%	12%	12%	12%
	Asian	14%	14%	15%	15%	15%
	Hawaiian/Pacific Islander	<1%	<1%	<1%	<1%	<1%
	Native American/ Alaskan native	<1%	<1%	<1%	<1%	<1%
	Multi-race	2%	2%	4%	4%	3%
	Other	<1%	<1%	<1%	<1%	<1%
Marital	Married/Civil Union	60%	56%	51%	52%	48%
	Single, never married	24%	32%	31%	29%	32%
	Divorced/Separated/Widowed	11%	14%	12%	10%	11%
	Living with Partner	5%	3%	6%	5%	7%
	Decline to answer	<1%	<1%	<1%	<1%	1%

		2015	2016	2019	2021	2023
Education	HS or less	5%	7%	13%	15%	11%
	Some college	15%	14%	16%	14%	14%
	Associates Degree	6%	6%	7%	7%	9%
	Bachelor's Degree	35%	37%	31%	30%	35%
	Master's Degree	28%	27%	25%	24%	23%
	Professional Degree	7%	5%	4%	6%	5%
	Doctorate Degree	4%	4%	4%	4%	3%
	Decline to answer	<1%	<1%	<1%	1%	<1%
Employment	Employed (NET)	73%	72%	71%	71%	70%
	Full-time	64%	58%	55%	59%	55%
	Part-time	5%	9%	11%	8%	8%
	Self-employed	4%	5%	6%	4%	6%
	Not employed (NET)	15%	16%	20%	18%	21%
	Not employed, looking	2%	1%	3%	3%	5%
	Not employed, not looking	<1%	1%	1%	1%	1%
	Not employed, unable	<1%	1%	2%	2%	2%
	Retired	13%	13%	14%	12%	14%
	Student	3%	7%	4%	5%	4%
	Stay home spouse/ partner	8%	5%	4%	5%	4%
	Decline to answer	<u>-</u>	1%	<1%	<u>1</u> %	<u>-</u>
Household	<\$50,000	13%	16%	24%	21%	19%
Income	\$35,000-\$74,999	22%	22%	20%	23%	21%
	\$75,000-\$99,999	17%	18%	14%	14%	16%
	\$100,000-\$149,999	25%	21%	19%	18%	21%
	\$150,000-\$199,999	11%	11%	13%	11%	12%
	\$200,000+	11%	10%	13%	19%	13%
	Decline	9%	8%	6%	4%	5%

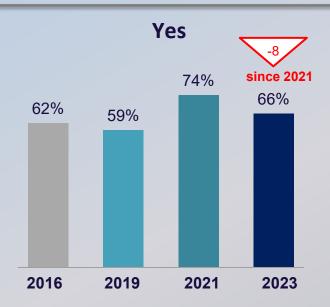
Slight decrease in the percentage of residents who live/work in the same area post-pandemic.

### Live and Work in Same City/County

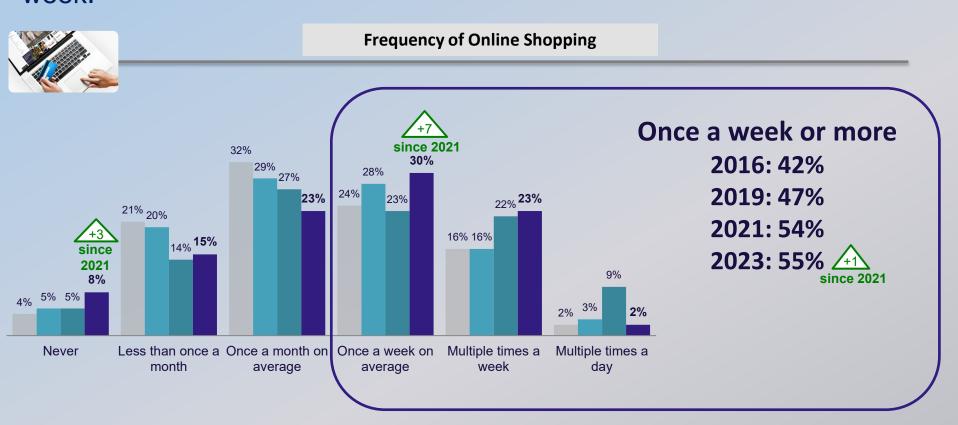


Most respondents drive to work (when going to a non-home worksite), but the proportion has softened after peaking in 2021.

When you go to a Non-Home Worksite, do you Drive to Work?



# Over half (55%) of residents continue to shop online at least once a week.



# APPENDIX B. ADDITIONAL PHASE 1 FOCUS GROUP FINDINGS

# **B.1** Elevator Pitch and "Slogans"

The moderator presented the below elevator pitch to participants and asked them how well it described BRT and its potential impact on the region.

"Bus Rapid Transit (BRT) is a bus-based transit system that delivers fast, reliable, and frequent service. This type of service may include unique features that makes it easier and more comfortable to ride and that makes it possible to provide this fast service: dedicated lanes, busways, traffic signal priority, off-board fare collection, elevated platforms, and enhanced stations. It can also include all day service, and no need to transfer.

The Northern Virginia Transportation Authority (NVTA) is already investing in roads, transit, transit stations, bike paths and sidewalks. It is already investing in 5 BRT lines and is looking to develop a system of additional rapid transit bus lines that connect people to Metro, to places within the region that they want to go, and to parts of DC and Maryland. Investing in BRT means getting more out of existing investments, for example by having BRT travel in existing roadways. "

#### Reactions to Elevator Pitch

Overall, both Riders and Non-Riders agreed that the elevator pitch should be clear, concise, and focused on conveying essential information about the system's benefits and features. They appreciated certain aspects of BRT but felt that the pitch needed improvement in terms of clarity, messaging, and format to be more impactful and understandable.

Riders and Non-Riders expressed confusion about the messaging in the elevator pitch. They questioned whether BRT is providing a no-need-to transfer service or if the pitch is emphasizing interconnectivity between different modes of transit. They perceived a contradiction in promoting no-need to transfer while also highlighting connectivity.

"What are they after? Are they after 'no need to transfer' services? Or are they looking for interconnectivity? Because a big chunk of that second paragraph is it's kind of networking itself from one thing to another to justify itself through interconnectivity. If they want, if the public wants, no need to transfer service."

-Non-Rider

"Transit system is like does all that service and you don't need to transfer and then you don't explain to me what that means. You know, if I hear no need to transfer, that means I can get on one place and then it will take me exactly where I need to go."

-Rider



Some participants sought clarification on specific BRT features such as elevated platforms and direct routes, indicating that these explanations would enhance their understanding and acceptance of the system.

"I would go when you have the elevated platform. I would put a dash there and say level so that people really understand what the significance of it is, which is that you don't have to walk up steps."

-Non-Rider

It should also be noted that participants **reacted more positively toward the images of BRT than they did to text descriptions**. This indicates that promotion of the system should rely heavily on imagery rather than demanding that people read lengthy text, which they are unlikely to do.

## Reactions to "Slogans"

Next, the participants were shown three slogans that NVTA could use to communicate this ongoing bus rapid transit planning to the public. They were asked to express their thoughts and initial reactions to these slogans.

#### Slogan #1:

#### **NVTA** is Connecting Rapid Transit

Creating an Action Plan for a Regional Bus Rapid Transit System

#### Slogan #2:

#### **NVTA** is Connecting Rapid Transit

Creating a Blueprint for a Regional Bus Rapid Transit System

#### Slogan #3:

#### **NVTA is Connecting Rapid Transit**

Creating a Blueprint for faster and more frequent transit throughout Northern Virginia

For the purpose of this research report, we will refer to these as "slogans," however it is important to note that participants did not feel that "slogan" was the correct word to refer to these. Care should be taken when deciding how to brand these statements.



Overall, both Riders and Non-Riders agreed that slogans should be clear, concise, and attention-grabbing to effectively communicate the purpose, scope, and benefits of the transit system improvements. **They favored slogan #3 for its clarity but preferred the term "Action Plan" over "Blueprint,"** and also provided feedback on areas for improvement in the language and messaging.

Both Riders and Non-Riders agreed that the first two slogans were somewhat vague and did not provide new or clear information. They believed that the third slogan offered more explanation and clarity about BRT improvements. The majority appreciated the straightforwardness of slogan #3 in conveying the goal of faster and more frequent transit without specifying only buses. Some participants expressed that slogan #3 clarifies what the system delivers and is self-explanatory, making it more appealing to a wider audience.

"So, like that first line is consistent across the three, it's those second lines that vary, #3 makes no mention of using a bus to do it, all the others do. The first two both mentioned that you're going by bus. So, everyone I would say I would pick #3 because it gives the illusion I won't be doing it on a bus."

-Non-Rider

"I think the third one's best because the first two are just double speak. They're not really saying anything new. The third one's actually explaining a little bit, what rapid transit is."

-Rider

Participants from both groups questioned the effectiveness of the term "Blueprint" in the slogans, feeling that they were somewhat vague and lacked attention-grabbing qualities. Some participants suggested replacing "Blueprint" with "Action Plan" in slogan #3, as they felt "Action Plan" sounded more effective and practical.

"Yeah, I would say creating an action plan for faster and more and more frequent transit... just replace blueprint with action plan on the third one."

-Non-Rider

"Blueprint makes this sound like its super-duper far in the future. Like they're only just drafting this up now, but the alternative of Action Plan just sounds very buzzworthy and vague, so I don't really like the phrase Action Plan or Blueprint. I don't have a good alternative, but I feel like both of them are just kind of wishy washy."

-Rider

They preferred concise, clear language that avoids sounding too conceptual, ensuring that the message is easily understood and relatable. Participants raised concerns about the term "Bus Rapid Transit System" in the slogans, suggesting that it might confuse people or raise questions about the need for such a system.

"In the first two sentences for a regional bus rapid transit system is meaningless. Most people won't know what that means, whereas this kind of I feel like the third one like you said it, it clarifies."

-Non-Rider



Participants suggested considering how the slogans would translate into other languages and ensuring that they are simplified and understandable to a diverse audience.

"I would also like to say that if they were all about equity like, they should also consider how this translates in other languages because who is using this? And do people even know what a blueprint for regional buses looks like? I feel like in some ways it should be a little simplified for what it is. It could get lost in translation for sure."

-Rider

## **B.2** Core Values

NVTA has defined three core values that serve as the guiding principles to their planning and investment in BRT for Northern Virginia. Participants in this research were presented these three core values, and asked to think about how BRT in Northern Virginia can address and fulfill these goals. These three core values are:

- Safety;
- Equity; and
- Sustainability.

# Safety

The most direct connection that participants saw between BRT and improving safety was related to an earlier point – that **BRT can help take cars off of the road**, and therefore can improve safety for other drivers and pedestrians.

That said, safety was a big point of concern from the start of the groups. **Participants are very concerned about crime and harassment onboard public transportation in general.** A few cited specific incidents encountered by either themselves, or by friends and family. Notably however, Riders often indicated that they feel safer on the bus than they do on a Metrorail train. On a bus, it is brightly lit, there is an operator right at the front, and the bus can be stopped in the case of an incident. On a train, they said, there is no operator around (only at the very front of the train) and you are far underground, preventing the train from being stopped or exited in case of an emergency.

"I feel safer on the bus. If something happens, they can stop the bus. You can't stop a train if something happens – [friend had experience where they were assaulted on the train]."

-Rider

"(Buses are) more brightly lit, have cell service, and other people in the world can see you and what happens on a bus."

-Rider

Participants did concede that this is not something that BRT would specifically address, since these are characteristics of buses more generally.



Other comments around safety tended to center around training of bus operators, with participants expecting them to be versed in dealing with emergencies (e.g., CPR training or other first aid) or trained to step in and de-escalate crime or harassment on the bus.

"Officers on there all the time could be a deterrent for other people from riding it too but there has, I mean there has, I don't think that we can give the kind of safety people have been talking about.

...Oh yeah, even a bus driver like they want to feel safe too.

So, I agree with what (another participant) said earlier about having the bus drivers even going through some training, not just the CPR but even self-defense, some basic self-defense. It doesn't have to be intense, but something where they can at least, you know, do something."

-Non-Rider

## Equity

Participants' comments related to equity, for both Riders and Non-Riders, centered around where the BRT lines would be built and prioritized. Participants felt that often transit projects get built in areas that are wealthier and where residents do not rely on it as heavily because there is money to support it in those areas. They pointed out that projects like BRT are most needed in lower income areas where people rely on transit the most, and if placed incorrectly would actually make equity worse.

"Serving those areas... that they actually provide service to... They don't just go to rich, wealthy areas, they go to areas that (need it)."

-Non-Rider

"I doubt anyone would be racing to put a rapid transit in like, let's say Southeast DC. It would probably be in the wealthier ends of Tysons or Loudoun. People have the money to pay for it. And because of that, I think you actually might make equity worse."

-Rider

Even when those lower income areas are prioritized, participants think that there is the possibility that with BRT and more reliable transit service, the cost of living in those areas that used to be low-income will increase and price out the original residents that the BRT line was meant to serve, pushing them farther from transit.

"Prices in the area will soar up. So even if they go to a low-income area it will get gentrified because there's a strong demand for that. And so that's kind of the catch-22. It brings it to those areas, but then it makes those areas less needy of it, and more attractive to young people who can then maybe afford housing where they can't buy it in other parts."

-Non-Rider



## Sustainability

Sustainability naturally progresses from concepts of equity that emphasize providing service to lower-income areas without pushing current residents out. **Most participants discussed sustainability within the realm of BRT as centered around supporting growth for all Northern Virginians** regardless of income.

A few cited specifically that sustainability to them means that a BRT system needs to be built not just to support the region now, but to also accommodate the growth of the region in the years and decades to come. With Northern Virginia experiencing fast growth, planning needs to account for how that growth will look in the near (and far) future.

On top of accommodating future growth, the BRT system should pay for itself, according to participants. They have seen recent news about WMATA's budget shortfall and seeing how transit systems need to receive funding from the jurisdictions they serve. They see that while everyone's tax dollars contribute to the transit systems, not everyone actually uses the transit system. For these reasons, it seems more sustainable to them to create a funding mechanism that can be permanent and not subject to the ups and downs of securing temporary or limited time funding from jurisdictions in its service area.

"But the transportation systems are standing in line with all the other people that are looking for money from the locals and the states and the feds. I mean, you've got a situation now where in in this area, in the Washington metropolitan area, Metro has already come out and said that they've got a \$750 million shortfall for this year and they're looking for more money from Maryland, Virginia, and Washington, DC.

And in all those cases, it becomes a political issue. You know, yeah, I'm willing to give you more money, but the people in the other part of the state are not. It's only going to go to certain areas. What's in it for me to put more money in if I don't really use it that much?

So, sustainability is a great word but it's an ongoing not just a financial concern but a political fight in in most jurisdictions to keep these things going."

-Rider

Of course, environmental sustainability also was salient for a few participants – noting that if NVTA will be investing in a BRT system, it should be standard that they will not use "gas guzzling vehicles."

"That's one of the key ways that can be sustainable is kind of attracting growth that consumes less resources, particularly land.

Well, my question would be about the environment. I mean you know what kind of exhaust systems are on these? Is there going to be a plan to go electric and how quickly will they get there? If it's just a gas guzzling vehicle with huge amounts of exhaust, we're not talking environmentally sound."

-Non-Rider



# APPENDIX C. PHASE 1 ONLINE SURVEY QUESTIONNAIRE



WBA Research Job #23-151 April 2024

# NORTHERN VIRGINIA TRANSPORTATION AUTHORITY BUS RAPID TRANSIT PUBLIC ENGAGEMENT SURVEY

Thank you for taking the time to complete this survey. This survey will help identify ways to improve the transportation network in the Northern Virginia region.

Please share your thoughts!

This survey is for research purposes only. All individual responses will remain confidential and will not be shared or sold.

ASK I	EVERYON	IE:				
S1.	What i	s your home ZIP code?				
	98	Prefer not to answer				



#### THOSE WHO DO NOT PROVIDE HOME ZIP CODE [S1(98)], ASK:

- S2. In which of the following areas is your current, primary residence?
  - 01 Arlington County
  - 02 Fairfax City, VA
  - 03 City of Alexandria, VA
  - 04 City of Falls Church, VA
  - 05 Manassas, VA
  - 06 Manassas Park, VA
  - 07 Herndon, VA
  - 08 Vienna, VA
  - 09 Somewhere else in Fairfax County
  - 10 Leesburg, VA
  - 11 Purcellville, VA
  - 12 Somewhere else in Loudoun County
  - 13 Dumfries, VA
  - 14 Somewhere else in Prince William County
  - 95 Or somewhere else (specify)
  - 98 Prefer not to answer



<b>ASK</b>	- \	/	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	$\sim$

S3. Thinking transportation in Northern Virginia, what three words best describe what you think transportation in Northern Virginia should look like **in the future?**WORD 1.

WORD 1:\_\_\_\_\_ WORD 2:\_\_\_\_ WORD 3:\_\_\_\_

99 Don't know/Prefer not to answer

#### **ASK EVERYONE:**

- Q1. What is your **primary** mode of transportation? (ACCEPT ONE RESPONSE ONLY.)
  - 01 Walk
  - Walk or travel using a mobility aid (cane, walker, wheelchair, etc.)
  - 03 Personal bicycle
  - 11 Use a shared service for bikes, e-bikes, or scooters such as Lime or Bird
  - 12 Ride a personal e-bike or scooter
  - 04 Drive a car, truck, SUV, or motorcycle
  - Ride in a car, truck, SUV, or motorcycle driven by a friend or family
  - Take a taxi or app-based transportation service such as Uber or Lyft
  - Take a local or commuter bus (e.g. DASH, ART, Metrobus, etc.)
  - 08 Metrorail
  - 09 Commuter rail (i.e., VRE or MARC)
  - 10 Use a carpool or vanpool
  - 13 Metroway
  - 95 Use another form of transportation (specify)

#### THOSE WHOSE PRIMARY MODE OF TRANSPORTATION IS NOT PUBLIC TRANSPORTATION Q1(01-06,10-12), ASK:

- Q2. How likely would you be to consider taking public transportation if it served your home or places you go to most frequently?
  - 05 Extremely likely
  - 04 Very likely
  - 03 Somewhat likely
  - 02 Not very likely
  - 01 Not at all likely



#### **ASK EVERYONE:**

Imagine there was a new public transportation system in the area that serves both the area where you live and the areas to which you frequently travel. Please answer the following questions whether or not you currently use public transportation.

- Q3. Which of the following would be the **three most important features** you would like **a new public transportation system to have** for you to consider using it? *Please select up to three responses*. (RANDOMIZE. ACCEPT UP TO 3 RESPONSES.)
  - O1 Features that improve my comfort at stations and stops
  - O2 Features that improve my safety and security
  - 03 Features that make it a fast travel option
  - 04 Features that make the bus show up on time every time
  - 05 Features that improve my experience on the bus (e.g. WiFi, charging outlets, etc.)
  - 06 Features that make paying for the bus easier
  - 07 Service that ran all day/all week and late into the night
  - O8 Features that make it a low cost travel option
  - 95 Something else (specify)
  - Nothing would make me consider using public transportation
- Q4A. How familiar are you with "BRT (Bus Rapid Transit)"?
  - 04 Very familiar
  - 03 Somewhat familiar
  - 02 Have heard of, but don't know much about it
  - 01 Have never heard of it

#### THOSE WHO SAY THEY ARE FAMILIAR WITH BRT Q4A(03-04), ASK:

- Q4B. Which of the following do you think best describes BRT (Bus Rapid Transit)? **(RANDOMIZE. ACCEPT ONE RESPONSE ONLY.)** 
  - O1 A local bus service that operates within mixed traffic and stops along its routes.
  - O2 A transit system that utilizes electrically powered trains running on tracks, typically in urban areas.
  - A system of public transportation that uses dedicated lanes, priority signaling, and other features to provide fast, efficient service.
  - 04 A limited stop commuter bus service.



#### **ASK EVERYONE:**

Q5A. Now imagine there was a new public transportation system that would connect you from your home to your most common destinations.

Here are some features that this new public transportation system would have: **SHOW BRT II** 

SHOW LIST OF FEATURES AS BULLETED LIST ALONG WITH ISOMETRIC. SEE LIST AT END OF DOCUMENT FOR IMAGES AND FEATURES BY BRT TYPE.

Based on these images and features, how would you be most likely to make this type of trip? **(RANDOMIZE RESPONSES 01-02.)** 

- O1 You would strongly consider this new public transportation system
- O2 You would likely (use a¹/use²) [INSERT Q1 RESPONSE. ¹INSERT FOR RESPONSES 02-03/²INSERT FOR RESPONSES 08-09,13.]
- You would use some other means of transportation (specify)
- 99 Not sure

Q5B. Now, imagine the same public transportation system that would connect you from your home to your most common destinations.

Here are some features that this new public transportation system would have:

IF Q5A(01), SHOW BRT I.

IF Q5A(02-99), SHOW BRT III

SHOW LIST OF FEATURES AS BULLETED LIST ALONG WITH ISOMETRIC. SEE LIST AT END OF DOCUMENT FOR IMAGES AND FEATURES BY BRT TYPE.

Based on these images and features, how would you be most likely to make this type of trip? (SHOW RESPONSES 01-02 IN SAME ORDER AS Q5A.)

- O1 You would strongly consider using this new public transportation system
- O2 You would likely (use a¹/use²) [INSERT Q1 RESPONSE. ¹INSERT FOR RESPONSES 02-03/²INSERT FOR RESPONSES 08-09,13.]
- You would use some other means of transportation (specify)
- 99 Not sure



ТҮРЕ	IMAGE	DESCRIPTION
BRTI		The bus travels at the speed of traffic.  Stations and stops would include good shelters, lighting, trash bins/trash collection, and passenger information.
BRT II		The bus goes faster than traffic.  Stations and stops would include shelters, lighting, trash bins/trash collection, passenger information and amenities that make it faster to board such as level boarding and off-board fare payment.
BRT III		The bus does not get stuck in traffic, it has its own lane.  Stations and stops that include high quality and large shelters, lighting, trash bins/trash collection, passenger information and amenities that make it faster to board such as level boarding and off-board fare payment.  Stations will also have additional security features.



#### THOSE WHO ARE NOT FAMILIAR WITH BRT [Q4A(01-02) OR Q4B(01-02,04)], SHOW:

Bus Rapid Transit (BRT) is a bus-based transit system that uses new or existing roadways to deliver fast, frequent, and reliable service that may include dedicated lanes, busways, transit signal priority, off-board fare collection, elevated platforms, and enhanced stations. (INCLUDE IMAGES.)







#### **ASK EVERYONE:**

Q6A. Whether or not you would use a BRT system, which of the following are the three most important ways for local governments to prioritize routes when planning the development of BRT systems in this area? *Please select up to three responses*.

#### (RANDOMIZE 01-09. ALLOW UP TO THREE RESPONSES.)

A BRT system that...

- 01 Has a lot of riders
- O2 Provides improved mobility and access to work, residential areas, entertainment, etc. for people that don't have other travel options
- 03 Relieves congestion the most
- 04 Is the most cost effective for taxpayers
- 05 Helps reduce greenhouse gases/Fights climate change
- Makes it easier for people to get to more places by transit
- 07 Saves time for transit riders
- 08 Is a safe and secure mode of travel
- 09 Provides an alternative to driving
- 95 Something else is important (specify)
- 97 None of these, you do not support further development of BRT in this area

#### THOSE WHO CHOSE PRIORITIES [Q6A(01-95)], ASK:

Q6B. Of those three ways that local governments should prioritize planning BRT systems, which of these in your opinion is the most important? *Please select just one response*.

#### (ONLY SHOW THREE SELECTIONS FROM Q6A. RANDOMIZE ORDER SHOWN.)

A BRT system that...

- 01 [IF Q6A(01)]: Has a lot of riders
- 02 **[IF Q6A(02)]:** Provides better mobility and access to opportunity for people that don't have other travel options
- 03 **[IF Q6A(03)]:** Relieves congestion the most
- 04 [IF Q6A(04)]: Is the cheapest to implement
- 05 [IF Q6A(05)]: Helps reduce greenhouse gases/Fights climate change
- 06 [IF Q6A(06)]: Makes it easier for people to get to more places by transit
- 07 [IF Q6A(07)]: Saves time for transit riders
- 08 [IF Q6A(08)]: Is a safe and secure mode of travel
- 09 [IF Q6A(09)]: Provides an alternative to driving
- 95 [IF Q6A(95)]: Something else is important (specify)

#### **ASK EVERYONE:**

- Q7. If BRT (Bus Rapid Transit) was available in your area, how likely would you be to consider using it?
  - 05 Extremely likely



- 04 Very likely
- 03 Somewhat likely
- 02 Not very likely
- 01 Not at all likely

#### THOSE WITH AT LEAST LIMITED LIKELIHOOD TO CONSIDER RIDING BRT [Q7(02-05)], ASK:

- Q8A. If you could get quickly from near your home to your most common destinations on BRT (Bus Rapid Transit), what type of places would you primarily want it to take you to? (RANDOMIZE.)
  - 01 Metrorail or other public transportation stations
  - 02 Commercial centers (i.e. dining, entertainment, or shopping)
  - 03 Job centers and offices
  - 04 Residential communities
  - 95 Some other type of place (specify)
- Q8B. What time would you want to use BRT to travel to [INSERT Q8A]?
  - 01 During peak periods (e.g. rush hour in the morning or evening)
  - 02 Throughout the entire day on weekdays
  - 03 On weekends
  - 95 Some other time (specify)
- Q9. If you could get quickly from near your home to your most common destinations on BRT (Bus Rapid Transit), what would be the primary purposes of the trips you take on BRT? (RANDOMIZE. ACCEPT MULTIPLE RESPONSES.)
  - O1 Travel to or from work/job-related business
  - 02 Travel to or from school (student)/education related
  - 04 Shopping, entertainment, restaurants/bars
  - 05 Medical, bank, post office, government services
  - 07 Concert or sporting event
  - 08 Visiting friends or family
  - 10 Gym/Fitness center
  - 11 Church, synagogue, mosque, other religious venue
  - 13 Visiting parks, natural areas, fishing, hiking, etc.
  - 14 Parent/Guardian picking up child from school
  - 95 For some other reason (specify)



#### **ASK EVERYONE:**

- Q10. How likely would you be to support areas in Northern Virginia removing traffic lanes or reducing on-street parking to support BRT in some cases?
  - 05 Extremely likely
  - 04 Very likely
  - 03 Somewhat likely
  - 02 Not very likely
  - 01 Not at all likely

#### **DEMOGRAPHICS**

- D1. Do you have a driver's license?
  - 01 Yes
  - 02 No
- D2. How many vehicles do you have in your household?
  - 00 None
  - 01 1
  - 02 2
  - 03 3 or more
- D3. Which of the following best describes your age?
  - 01 18-24
  - 02 25-34
  - 03 35-44
  - 04 45-54
  - 05 55-64 06 65-74
  - 07 75 or older
  - 98 Prefer not to answer
- D4. What is your racial or ethnic identity? Select all that apply. (MULTIPLE RESPONSES ACCEPTED.)
  - 01 American Indian or Alaska native
  - 02 Asian
  - 03 Black or African American
  - 04 Hispanic or Latino
  - 05 Native Hawaiian or other Pacific Islander
  - 06 White or Caucasian
  - 95 Other (specify)
  - 98 Prefer not to answer
- D5. Which of the following ranges contains your annual household income before taxes?
  - 01 Less than \$30,000
  - 02 \$30,000 to less than \$49,999
  - 03 \$50,000 to less than \$74,999
  - 04 \$75,000 to less than \$149,999



- 05 \$150,000 or higher
- 99 Don't know/Prefer not to answer
- D6. What is your gender identity?
  - 01 Female
  - 02 Male
  - 03 Non-binary, or
  - 95 I use a different term (specify)
  - 98 Prefer not to answer
- D7. Is English your primary language?
  - 01 Yes
  - 02 No
  - 98 Prefer not to answer

### THOSE WHOSE PRIMARY LANGUAGE IS NOT ENGLISH [D7(02)], ASK:

- D8. How well do you speak English? (IF D7(01), FORCE IN 03.)
  - 03 Very well
  - 02 Well
  - 01 Not well
  - 98 Prefer not to answer

#### **ASK EVERYONE:**

- D9. Do you identify as having a disability?
  - 01 Yes
  - 02 No
  - 98 Prefer not to answer



#### THOSE WHO HAVE A DISABILITY [D9(01)], ASK:

- D10. Do you use any of the following mobility aids when riding transit? If so, please select them from the following list. (MULTIPLE RESPONSES ACCEPTED.)
  - 01 Manual wheelchair
  - 02 Motorized wheelchair
  - 03 Scooter
  - 04 Leg braces
  - 05 Prosthesis
  - 06 Service/Guide animal
  - 07 Support cane
  - 08 Long cane (for the blind)
  - 09 Crutches
  - 10 Walker
  - 11 Respirator/Oxygen tank
  - 12 Travel with a companion
  - 13 Rollator
  - 95 Other (specify)
  - 97 I do not use mobility devices
  - 98 Prefer not to answer

#### **ASK EVERYONE**

- D11. What is your current employment status? Are you...? (ACCEPT MULTIPLE RESPONSES. DON'T ALLOW 97 WITH 01 OR 02.)
  - 01 A full-time worker
  - 02 A part-time worker
  - 03 A homemaker
  - 04 A student
  - 05 Active military
  - 06 Retired
  - 97 Not currently employed
  - 98 Prefer not to answer
- D12. Including yourself, how many people live in your household? (RANGE=1-50.)

number of people in household

- 98 Prefer not to answer
- Q16. Do you have any additional comments you would like to make regarding public transportation in Northern Virginia? (**OPEN-ENDED.**)



D13.	To be	entered into the drawing for a chance to win a \$50 gift card, please provide either your email address and/or
	phone	e number.
	A.	EMAIL:
	B.	TELEPHONE NUMBER:
	$\bigcirc$	97 Do not wish to enter into drawing



# APPENDIX D. DETAILED PHASE 3 FOCUS GROUP FINDINGS

## **D.1** Non-Riders

## Current State of Bus Service in Northern Virginia

Participants were asked about bus services in Northern Virginia. Among non-riders, there was a consensus that current bus services were underused and often seen as inefficient. Some non-riders specifically highlighted the sparsity of bus services outside the Beltway, with limited schedules and coverage, particularly during off-peak hours or weekends.

"I almost never take the bus. I mean, occasionally if I'm going to Kennedy Center and I get off the metro and I don't want to walk, I might take the bus. I just feel like it's so slow. It's great inside the Beltway. Outside of the Beltway, you don't have many options as far as buses. I think it's the reason because it's not really high demand yet for the bus transportation. That's why maybe there is not available more often schedules for the buses."

#### -Non-Rider

A significant concern among non-riders was the lack of reliable bus service; they pointed out that the current bus system often lacks real-time updates, such as notifications about delays or schedule changes, making it difficult for riders to plan effectively. Additionally, some expressed frustration with the infrequency of buses, chiefly outside of peak hours and on weekends, leading to long wait times. One participant compared the local bus system to the 24/7 subway system in New York City, pointing out the disparity in service availability. This perceived lack of reliability further discourages the use of public buses, particularly in suburban areas where public transportation options are minimal.

# Understanding of Bus Rapid Transit (BRT)

Before the focus group discussion, most participants were unfamiliar with the term "Bus Rapid Transit." Only a few had vague associations with the concept, such as the idea of faster bus routes or dedicated bus lanes. Upon introducing the BRT system, non-riders expressed a strong interest in its potential to address the main issues of traffic congestion and the reliability of existing transit options.

After learning about the key features of BRT, including dedicated bus lanes, faster travel times, and frequent service, participants from both non-rider groups were often intrigued by its potential. Some initially struggled to differentiate BRT from traditional buses but soon recognized it as a more *efficient* and *reliable* system with *dedicated lanes* that would *bypass traffic congestion*. Some other non-rider participants expressed enthusiasm for an "express" system that could *shorten their daily commutes* and *enhance the predictability of their travel times*.



"It's faster and like different that the bus has their own lane rather than sitting in traffic with like the rest of the cars. Like they have their own section. So, it's faster. So, I think they're different than a regular bus because the bus sits with the other cars."

-Non-Rider

"It's going to be its own dedicated lane. So, they serve different. They have different routes so it would make sense that then it would be fast. When I think of a bus as not being fast, I think of that for two reasons. You know, how long do I have to wait for it to show up? And then, you know, if it's just going through the regular traffic like everybody else. And it's making all the stops that it's got to make. It's really slow."

-Non-Rider

# Understanding of Benefits of BRT

Participants were shown a list of benefits that BRT could bring to Northern Virginia. The most important benefits identified by non-rider groups include *reduced traffic congestion*, *more direct and frequent transit routes*, *cost-effectiveness*, *and more frequent and more reliable service*. While some benefits, such as the reduced need to build more roads and free time for people to do other things while they commute were viewed as less significant, the potential for *improving the overall efficiency and accessibility of public transportation* in Northern Virginia generated strong support for BRT. Nonetheless, concerns about the practicalities of implementing these changes, particularly the required construction, does lead to trepidation for some.

Table 26 Important BRT Benefits Among Non-riders

	Total	G1 Non-Rider	G4 Non-Rider
Reduces traffic congestion on roadways	6	2	4
Provides direct routes to destinations without needing to transfer between BRT lines, regular buses, or rail (Metrorail/VRE)	6	5	1
Is cost-effective	6	3	3
Provides better transit service to destinations – more frequent and more reliable	5	5	-
Improves travel times for all, that is transit passengers and motorists due to less single occupancy vehicles on the road	3	2	1
Makes it easier for people to get around without a car	3	2	1
Reduces vehicle emissions	2	-	2
Provides more travel options	3	2	1
Frees people up to do other things while they commute (e.g., read, work, etc.) – instead of driving	-	-	-
Reduces need to build more road or rail lines	-	-	-

Note that totals may not add up to the total in each group, as some participants did not answer or had multiple responses.



There was a consensus among non-riders that the opportunity to **reduce traffic congestion** and **improve travel times** for all - both transit passengers and motorists - is a significant benefit. Many participants believe that less single-occupancy vehicle use would alleviate road congestion, benefiting everyone.

Providing direct routes without the need for transfers was also frequently highlighted as crucial, with several participants expressing frustration with the current (perceived) complexity of public transportation systems. This preference for direct routes, along with more frequent and reliable transit services, reflects a desire for efficiency and simplicity, particularly for those who currently would have to rely on multiple transfers to reach their destinations.

"Well, one of them would be for sure to well, hopefully it would reduce the vehicles. I mean the, the congestion in the traffic, because even now with its many lanes, is there. You still have certain points that you're driving and you're bottlenecked for possibly up to 30 minutes, maybe close to an hour. So, if it would reduce some of that, that certainly would be helpful."

-Non-Rider

**Cost-effectiveness** is yet another significant factor leading to support, with several individuals noting that financial considerations play a large role in their positive reactions to BRT. This includes both the affordability of using public transportation and the cost of maintaining personal vehicles, which can be burdensome, especially given rising gas prices. For some, the idea of a more affordable alternative to driving is appealing, particularly when coupled with the potential for reduced traffic congestion.

"For me as well, it's cost effective and it reduces traffic congestion on roadways, especially right now everybody going back to work from the office and we see more traffic congestion and it takes longer to get places. And it depends on your vehicle size. For instance, I have a big SUV so I spend a lot a week, maybe \$80.00 for the gas so I would prefer maybe to take a bus."

-Non-Rider

**Safety** and **access to job opportunities** were additional benefits mentioned by some participants. The prospect of fewer accidents and an increase in local job opportunities, particularly for bus drivers, were seen as potential positives, though these points were raised less frequently compared to others. A few participants also suggested that the presence of BRT routes could lead to increased property values in areas with convenient access to transit, further influencing neighborhood dynamics.

However, not all participants were equally convinced of the benefits. A few expressed skepticism regarding the effectiveness of BRT in reducing vehicle emissions, particularly in Northern Virginia, where emissions are already tightly regulated. Some participants viewed the reduction of vehicle emissions as less pressing in this context. Similarly, while a few participants mentioned that BRT could help make it easier for people to get around without a car, there was less enthusiasm for this benefit. For some, this seemed less relevant as they could not see themselves using anything but their car - either because they weren't sure BRT would accommodate trips before or after work, or due to a general perception that public transit does not go everywhere they need it to. This perception was shared before participants saw the proposed BRT maps and reflects broader concerns about the reach of transit overall, rather than BRT specifically.

The construction phase of BRT also raised concerns for some participants. There were worries about the duration and impact of construction on the community, with many referencing the disruptions caused by past transportation



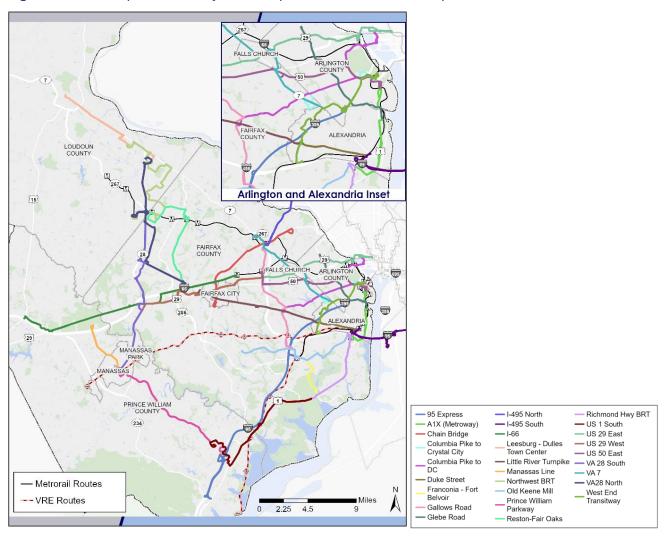
projects. This concern was particularly relevant for those who anticipated lengthy construction periods without immediate benefits.

# Response to the Draft BRT Action Plan

#### **BRT System Map**

The moderator presented an overall map of where the BRT lines could go.

Figure 24 Proposed BRT System Map used with Focus Groups



Non-riders expressed a mixed reaction to whether the proposed BRT routes align with the places they typically visit. Some individuals found that the routes shown on the map did connect to key destinations such as the City of Fairfax, the City of Alexandria, and the City of Manassas Park, which are where many commonly travel to for events or leisure activities like festivals and shopping. Others, however, were unsure about the practicality of certain routes, citing the map's lack of clarity or difficulty visualizing how specific routes would integrate with other public transportation options such as Metrorail or VRE. Some participants suggested that **clearer labels** or **integration with the Metrorail system map** could improve understanding.



While some individuals saw the potential of BRT routes to complement existing transportation systems, particularly for leisure activities and avoiding the challenges of driving and parking, others expressed skepticism. The key issue seemed to be whether the routes would truly save time compared to existing alternatives like driving or taking Metrorail. A number of participants noted that, for them, time was the most critical factor when considering whether to use public transportation, and many emphasized the importance of faster, more frequent service. The current bus schedules, they felt, were insufficiently frequent and involved too many stops, which made driving a more appealing option.

"Even though it's already buses there, if it does increase, there's a lot more frequency of the buses and it's a lot quicker than I would. It's an easier choice between that and driving versus now there's pretty much no choice between buses and driving, right. I'll just drive. But if this is and time is the biggest measurement for you. If I saw that it takes 30 minutes on the bus, 20 minutes driving, I can consider that."

-Non-Rider

There was also a shared concern about the need for more explicit information regarding how transfers would work, particularly when BRT lines intersect with other public transportation networks. The possibility of additional transfers made some participants hesitant, especially among non-riders and when BRT routes did not provide a direct or streamlined connection to their destinations. Some participants were looking for BRT to offer a faster, more direct route to areas like DC, Tysons, or Arlington, places they felt could benefit from better public transit options.

"I'll be willing to use it if it reduces my travel time and my cost remains similar, and if it's not going to add an extra leg to my commute, meaning sometimes it's a pain to find parking and get to just that if I have to drive to go there then. If it's not, I wouldn't take an extra drive just to get there. Real simple for me to get from my home so. Sometimes that makes it difficult in this area, just going to a parking lot in the morning."

-Non-Rider

#### **Route Prioritization**

When participants were asked how to prioritize which BRT routes should be implemented first, non-riders highlighted two key criteria: *routes that are the most cost-effective to build and operate* and routes that are evenly distributed across Northern Virginia. Both factors received significant attention, with participants emphasizing the need to balance affordability and equitable access across the region. Participants suggested that the initial BRT routes should focus on these two priorities to ensure a successful and sustainable system.



Table 27 Route Prioritization Among Non-riders

	Total	G1 Non-Rider	G4 Non-Rider
Routes that will be the most cost-effective to build and operate	4	1	3
Routes that are evenly distributed across Northern Virginia	3	1	2
BRT lines in corridors that have walkable commercial and residential centers that don't require the use of a car	2	-	2
Routes that will reduce congestion the most, assuming some drivers switch to BRT	1	-	1
Routes that make it easier for people to access other destinations in the region by transit (e.g. shopping, recreation, etc.)	1	1	-
Routes that will improve safety and security for passengers, both at stations and on the vehicles themselves	1	-	1
Routes that will improve the travel experience for transit passengers by improving travel times and reliability	-	-	-
Routes that connect to Metrorail/VRE	-	-	-
Routes that will have the most ridership	-	-	-
Routes that make it easier for people to get to work by transit	-	-	-
Routes that are easy to build (let's get this moving quickly!)	-	-	-
Routes that will build equity by improving mobility for low-income residents and/or people of color	-	-	-
Routes that reduce emissions the most	-	-	=

Note that totals may not add up to the total in each group, as some participants did not answer or had multiple responses.

Additionally, participants expressed support for prioritizing BRT *routes that connect to walkable commercial and residential centers*, enabling people to access essential destinations without relying on cars. This priority supports the broader goal of creating accessible, sustainable transit options that reduce car dependency. As one participant noted, addressing one priority often helps achieve others. For instance, reducing congestion by definition leads to fewer cars on the road, which in turn lowers emissions. This *interconnectedness* underscores the broader impact of the BRT system—by addressing one issue, multiple goals can be advanced simultaneously, contributing to a more efficient and sustainable transportation network across Northern Virginia.

"There should definitely be, you know, some consideration of where housing is being developed, affordable housing is being developed and connecting that to the places where the jobs are. If you can't afford to build another metro line, I think BRT is a very good alternative. I think it's useful for the community as a whole."

-Non-Rider



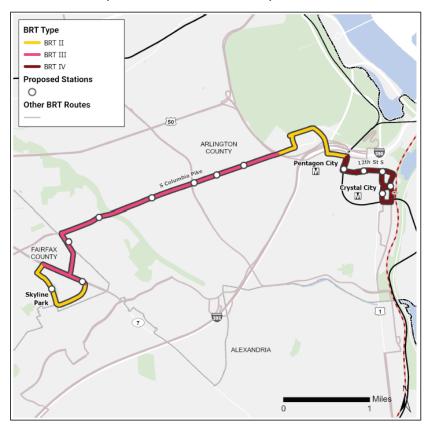
"I think for me it will be a cost effectiveness. Well, and I think some of these. Like if you if you really alleviate a lot of the congestion, then you're automatically reducing emission rates. So, if you're getting cars off the road, you're reducing emission rates. So, you know, it's just one is just an outcome of the other."

-Non-Rider

#### **Proposed Route Map**

When the proposed BRT route map and an example profile were presented, non-riders had mixed reactions. Many participants were uncertain about how the route would serve them, having trouble understanding specific stations and locations. For example, one participant questioned whether the bubbles on the map represented actual stops or just markers. This confusion was compounded by the *absence of station names or landmarks*, which would have made the map more intuitive. Participants also expressed a need to understand *how the BRT would connect with existing transit systems*, such as bus routes or Metrorail stations, and *how it would integrate with other transportation options*. They suggested that *comparing the proposed route to existing ones* would help them better understand which areas would be served or bypassed.

Figure 25 Proposed Route Map used with Focus Groups



Additionally, the *lack of clear stop names and station locations* made it difficult for participants to visualize the system's potential impact on their specific travel needs. They were also interested in *knowing how BRT stations* would be designed – whether they would be simple bus stops or full transit stations - and *how many stops would* 



**coexist** with existing bus routes. This information would help them assess whether the new system would better meet their needs.

Moreover, some participants also **struggled to understand the color coding** on the map, particularly the red and yellow lines, and whether these corresponded to traffic congestion, route importance, or other key metrics. It seemed that participants either did not pay attention to or did not understand the colors as they were denoted in the legend. In general, participants suggested that adding more landmarks or station names on the map would help make it more comprehensible.

"I'm not sure if the bubbles were stops or if that was just markers, but if that's its own lane, it just looked like a smooth transit time."

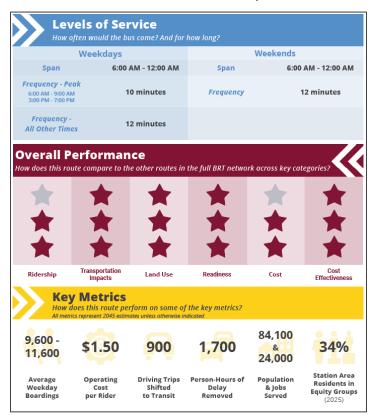
-Non-Rider

"Just to see how many bus stops are there now and then how many stops there will be with BRT to see how to shows it will reduce travel time."

-Non-Rider

#### **Proposed Route Profile**

Figure 26 Proposed Route Profile used with Focus Groups



**Level of Service** 



The Levels of Service section of the route profile, which provides information about the frequency and span of BRT buses during weekdays and weekends, garnered both positive and critical feedback among non-riders.

Notably, the Levels of Service section of the route profile was the most well received portion of the route profile compared to Overall Performance and Key Metrics. They viewed this section as **the most relevant to them as potential riders**. Several participants appreciated the inclusion of frequency information, noting that the 10-12 minute bus frequency during non-peak times seemed reasonable compared to their experiences with other public transit systems.

However, there was some skepticism regarding the comparison of service frequency to current bus services. One participant commented that, without a frame of reference for typical bus schedules, it was difficult to judge how the BRT's frequency would compare to regular buses. In addition, concerns were raised about whether the level of service would be sufficient in the context of actual demand. They also suggested that the profile should include more details about how many stops exist on the current route versus how many would exist on the BRT route to demonstrate how the system could reduce travel time.

"I don't know what a difference that is. So that doesn't mean anything really. That's not too far away from the normal bus service. 10-minute and 12-minute frequency."

-Non-Rider

#### **Overall Performance**

The Overall Performance section, which includes ratings for ridership, cost, land use, transportation impacts, and cost-effectiveness, confused many non-riders. Some participants were uncertain about how the rating levels were defined and measured. A few puzzled over the basis of the performance comparisons, despite the explanation provided regarding how the route was being assessed in relation to other routes within the broader BRT network. They were unsure whether the performance metrics were being compared to other BRT routes or to different forms of transportation.

This uncertainty led to further confusion regarding how the overall performance metrics translated into tangible benefits for users. There was a sense that these metrics, while useful for the project planning process or for decision makers, did not speak to customers and how it would impact them. Participants felt that the performance levels lacked clear explanation or justification. For instance, some questioned the star ratings, finding it unclear how the ratings were derived and whether they reflected actual demand or planning assumptions. Additionally, participants were uncertain about how these ratings compared to existing transit systems.

"I don't know if cost is really well explained. Cost and cost effectiveness. What cost? Also, how do you make a comparison? Like how do we know how this compares to just the regular bus lines in terms of all that?"

-Non-Rider

#### **Key Metrics**

The key metrics section, which included figures such as average weekday boardings, operating cost per rider, and estimated shifts in driving trips to transit, was also met with mixed reactions among non-riders. Only a small handful of



non-riders found the metrics to be helpful for understanding the operational potential of the BRT route. However, others found certain metrics either overly abstract or difficult to interpret. For example, the figure of "900 driving trips shifted to transit" seemed like a large number but lacked context - participants wanted to know whether this was out of 1,000 trips, 10,000 trips, or more. Additionally, the "Operating Cost per Rider" metric caused confusion, with some participants mistakenly interpreting it as the actual fare. This was partly due to the cost figure of \$1.50, which is close to the price of a typical transit fare, leading to further misunderstanding.

"I actually read the operating cost as the cost to like BRT and not to the individual using it. I don't know if I misinterpreted that, but so I didn't interpret that as I didn't really get anything out of like whether this is cost effective to the rider or not."

-Non-Rider

"So, it says 900 driving trips shifted to transit. Kind of sounds like a high number, but I don't really know that it is. You know, so I mean, 900 out of what? Out of a million?"

-Non-Rider

Participants also noted that certain key metrics, such as "person-hours of delay removed," were difficult to relate to their own experiences. They suggested that these numbers could be made more digestible by breaking them down into more relatable, daily figures, such as how much time an average user might save per trip. Additionally, there was a sense that some of the metrics, such as the projected number of jobs or population served, felt too abstract to influence an individual's decision-making process about using the BRT system.

While the overall numbers in the key metrics section did provide some insight, many felt that they did not connect well to what would actually influence a commuter's choice to use the system. A few participants mentioned that while the cost-effectiveness metric was useful, it would be more helpful to see a clearer breakdown of how the BRT compares to other modes of transportation - like Metrorail or driving - in terms of cost savings and convenience.

"These are just statistics basically. And not everybody would pay attention to statistics. The most important things people want to see is what's the cost, how often the bus goes and how long do I need to wait, how many people the bus can take per one ride."

-Non-Rider

# Messaging

Non-riders generally agreed that the proposed name, "Bus Rapid Transit (BRT) Action Plan – Connecting fast, frequent and reliable transit across Northern Virginia and beyond," should emphasize qualities like **speed** and **reliability** while remaining **straightforward**, **easily understood**, and **localized**, with some suggesting the inclusion of "NoVa." Many also wanted the name to reflect broader regional connections to Washington, D.C., and Maryland, positioning BRT as part of an integrated network rather than a local-only service. While terms like "fast," "frequent," and "reliable" were appreciated, some felt the name was generic and did not clearly differentiate BRT from existing bus services, raising concerns about whether it conveyed unique features, such as dedicated lanes. Reactions to "connecting" were mixed; some saw it as appropriate for linking destinations, while others felt it was misleading or emphasized transfers,



suggesting alternatives like "building." Overall, while the name sparked curiosity for some, others felt it lacked impact and did little to overcome skepticism about public transit, underscoring the challenge of making BRT stand out and appealing to non-riders.

"I guess my first thought is, you know, how does it differ from Metro and Metrobus? Or support? Is that important to you? How does IT support them? When I look at this, I think, isn't that what the bus system already advertises itself as? As fast, frequent, and reliable?"

-Non-Rider

#### D.2 Riders

#### Current State of Bus Service in Northern Virginia

Riders expressed a general sense of frustration with the current bus service, mainly due to issues surrounding speed and reliability. Many said that buses tend to be slower than other forms of public transportation, such as trains and Metrorail, which makes them less appealing for customers who need to get to their destinations quickly and reliably. Additionally, participants frequently mentioned that the buses often get stuck in traffic, contributing to delays and longer commute times. The buses' lack of efficiency compared to other available options was a significant barrier to greater use.

A common sentiment among riders was that they would be more likely to use public transportation if it were *faster* and *more reliable*. While some participants noted that buses are a convenient option for short trips, the overall perception is that current public transportation options do not meet the needs of commuters who are looking for quicker travel times, particularly for longer trips or during rush hour.

"What I notice is sometimes they have limited hours, especially on weekends. I don't know how much has changed since COVID, but I know when I used to live in Crystal City, that special bus was only during the week. Limited hours really. I think so, yeah, limited hours. And it was kind of difficult to figure out it was coming or not."

-Rider

#### Understanding of Bus Rapid Transit (BRT)

Awareness of Bus Rapid Transit (BRT) was relatively low among riders prior to the focus group discussions, though a small number of riders in the group were already familiar with the term "BRT." Once the concept of BRT was explained, they grasped the idea of a dedicated, faster, and more efficient bus service.

Participants speculated that BRT could involve limited stops, dedicated bus lanes, and a more streamlined, express route. They also mentioned that it would likely be targeted toward commuters rather than everyday bus users, with more routes that connect key locations, such as business districts. BRT could be seen as a premium service, potentially requiring extra payment, much like toll roads, for faster and more direct routes. They also discussed the idea of BRT being more frequent and not requiring as much wait time compared to traditional buses.



"I took one in Cartagena, and it was very cool because you like, tapped on and you get on the platform and it had like glass doors and it was completely separate from the road. So it wasn't just like it had its own lane. Because I know in DC there's some like dedicated bus lanes and you still got all these Uber drivers and people just parking in the middle of it. So it doesn't really do anything. So it's like a fully blocked off dedicated lane, which is really nice. And it moved quickly."

-Rider

When BRT was introduced, riders had largely positive initial impressions, particularly regarding its potential to improve the speed and efficiency of bus travel. Riders were particularly excited by the prospect of BRT buses having dedicated lanes, which they believed would help avoid traffic and reduce travel time significantly. They emphasized that the ability to avoid congestion would be a key feature that could make BRT more attractive compared to conventional buses.

Participants expressed some curiosity about the potential differences between BRT and regular buses, with some participants wondering whether BRT would operate during off-peak hours or whether it would be primarily a commuter service. This thought likely stemmed from their initial association of BRT with an express bus, where limited stops and faster service during business hours are typical. They also pointed out the need for more clarity on the specifics of BRT's operational details, such as scheduling and the frequency of service. Some participants speculated that BRT buses might be nicer and more comfortable than regular buses, which added to their positive perception of the system.

Participants raised questions about how the service would be integrated into the existing transportation network. They inquired about whether BRT would use regular highways or have completely dedicated lanes, and how the service would address issues related to congestion in certain areas. They also expressed interest in the frequency of buses and whether BRT would run consistently or only during peak commuting hours.

"It brings up a little question. How does it work? I mean, are we using smaller buses, so we run them more frequently? Are we skipping stops? Is it during like rush hour? Or is it in certain neighborhoods because of the neighborhood design, you know? I don't know. What I feel about that statement is like they move like a train, meaning they are so fast."

-Rider

#### **Understanding of BRT Benefits**

When participants were asked about the benefits of BRT in Northern Virginia, riders emphasized the importance of *time savings*, *reduced congestion*, and the *frequency and reliability of transit services*. They ranked "more frequent and reliable transit service" as the most important benefit, highlighting that reliable transit options could save valuable time and provide convenience. They also found *reducing traffic congestion* to be important, noting that less congestion would lead to faster travel times, benefiting both drivers and public transit users.



Table 28 Important BRT Benefits Among Riders

	Total	G2 Rider	G3 Rider
Provides better transit service to destinations – more frequent and more reliable	7	4	3
Reduces traffic congestion on roadways	5	3	2
Improves travel times for all, that is transit passengers and motorists due to less single occupancy vehicles on the road	4	4	-
Provides direct routes to destinations without needing to transfer between BRT lines, regular buses, or rail (Metrorail/VRE)	2	1	1
Frees people up to do other things while they commute (e.g., read, work, etc.) – instead of driving	2	2	-
Makes it easier for people to get around without a car	1	-	1
Reduces vehicle emissions	1	-	1
Provides more travel options	-	-	-
Is cost-effective	-	-	-
Reduces need to build more road or rail lines	-	-	-

Note that totals may not add up to the total in each group, as some participants did not answer or had multiple responses.

Both groups of riders deemed certain benefits less important. They felt that reducing the need for more roads or rail lines was not particularly relevant to commuters, as the focus should be on improving the existing infrastructure.

Regarding the impact on neighborhoods, riders expressed concerns about potential disruptions caused by construction, particularly in areas where dedicated bus lanes would need to be built. Some highlighted the potential congestion from additional traffic or parking issues, while others noted that the introduction of BRT could improve access to neighborhoods by making travel easier and more efficient.

"Hearing rapid transit, bus rapid transit, it implies it's like an express thing. So it doesn't make me think it goes to all sorts of destinations. I feel like I would have to transfer to get to my final destination."

-Rider

"I think in a larger sense, I agree that reducing the traffic congestion is number one for me. But if you think more globally, I have to think reducing vehicle emissions would be something that's important to me as well."

-Rider

## Response to the Draft BRT Action Plan

#### **BRT System Map**

Riders had a mix of positive reactions and concerns regarding the proposed BRT system map. They appreciated the broad coverage of the routes, particularly to areas like Manassas, Arlington, and Alexandria. However, riders expressed



concerns about the clarity of the map, with participants finding it difficult to understand the routes and connections, especially in areas like McLean, Tyson's Corner, and Springfield. Clearer labeling, more recognizable landmarks, and better differentiation of routes were suggested to make the map more user-friendly.

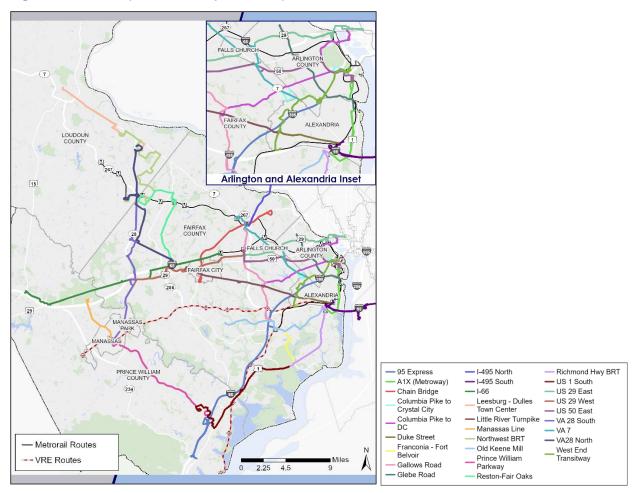


Figure 27 Proposed BRT System Map

A significant concern was the ease of transfers between the BRT and other public transit systems like Metrorail and local buses. Both groups emphasized the need for seamless connections and clear transfer points. Additionally, parking at key stations was highlighted as crucial for users who would drive to BRT stops, especially for those commuting from suburban areas. Some participants also questioned the practicality of dedicated lanes on congested roads and whether the system could operate during off-hours, particularly late evenings or weekends. The concern about off-hours operation seemed to stem from a belief that the system might struggle with demand during less busy times, meeting the needs of those who work very late or on weekends. Participants referenced experiences with other transit systems, like VRE, which operate on limited schedules during late nights or weekends, if at all, making it inconvenient for users who rely on these systems outside of regular commuting hours. This limitation could discourage riders who need flexibility.

When it came to using the system, riders showed general interest, particularly for its potential to save time, bypass traffic, and reduce the hassle of parking during peak times. However, concerns about competitive pricing compared to other transit options, like Metrorail or commuter buses, remained. If the system offered reliable service, time savings,



easy access to key destinations, affordable fares, and clear operational details, participants indicated they would be more likely to use it.

"Was a little confused. Can't speak for everyone, but I think a lot of trying to figure out like the different routes, but just being a little bit maybe more details in it could be a little bit more helpful. Just knowing if it's going directly to your destination or close to where you need to go would be helpful."

-Rider

"I think also you were asking about like what would help. I mean, this is the planners, but for the customers, I mean, we want to know that we're still being able to view this on our regular app and the cost is similar to what we have, unless there is more cost, I don't know. And you're utilizing your current routes. It's just you're making it may be faster and more frequent because people also don't want to freak out and say, Oh my God, my bus route changed completely. I can't take my regular bus. Like, no, you can. There's this additional service."

-Rider

"For these special buses, do they connect to these same special buses in different places? Are there connections within the system, which I'm assuming they are, but it doesn't really point it out? Also like there's a huge military community around the area in Alexandria and I see only one line going there. I feel like if there are transfer points, like having it much clearer like a symbol or something like that, like Metro does a good job with that."

-Rider

#### **Route Prioritization**

Both rider groups emphasized the importance of addressing *high-ridership routes*, *reducing congestion* and *faster, more reliable service*. They agreed that routes should serve regions far from existing public transit, such as Metro stations, and *connect to popular destinations*.



Table 29 Important BRT Benefits Among Riders

	Total	G2 Rider	G3 Rider
Routes that will have the most ridership	6	4	2
Routes that will reduce congestion the most, assuming some drivers switch to BRT	5	-	5
Routes that will improve the travel experience for transit passengers by improving travel times and reliability	3	2	1
Routes that are evenly distributed across Northern Virginia	2	1	1
Routes that connect to Metrorail/VRE	2	-	2
Routes that make it easier for people to access other destinations in the region by transit (e.g. shopping, recreation, etc.)	1	1	-
Routes that will improve safety and security for passengers, both at stations and on the vehicles themselves	1	1	-
Routes that make it easier for people to get to work by transit	1	-	1
BRT lines in corridors that have walkable commercial and residential centers that don't require the use of a car	-	-	-
Routes that will be the most cost-effective to build and operate	-	-	-
Routes that are easy to build (let's get this moving quickly!)	-	-	-
Routes that will build equity by improving mobility for low-income residents and/or people of color	-	-	-
Routes that reduce emissions the most	-	-	-

Note that totals may not add up to the total in each group, as some participants did not answer or had multiple responses.

They highlighted the need for routes that would attract high ridership, especially in areas with existing bus service that could be upgraded to BRT. Both groups agreed that safety features would encourage more people to use the BRT system. Another shared priority was connecting BRT routes to existing transit systems, such as Metrorail and VRE, for **smoother transfers** and **easier access to key destinations**. Additionally, they raised **equity** concerns, advocating for routes that improve mobility for low-income communities and people with disabilities.

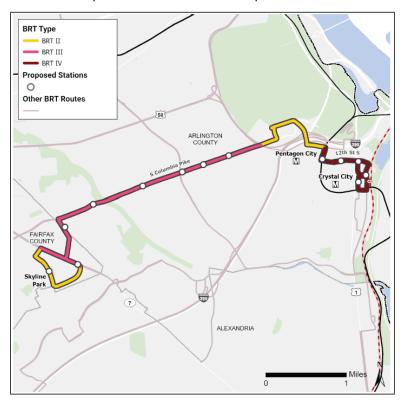
"I'd say where is the most traffic congestion, the farthest from existing public transit options like Metro rail, Metro bus, and like the most potential commuters, where is not served at all by any kind of reaching underserved populations."
-Rider

"Sometimes at night if you're the only person standing there at the bus stop, it may be more isolated area. It would make me more nervous. So to see if they would improve safety and security for passengers because I've seen things happen on the bus."
-Rider



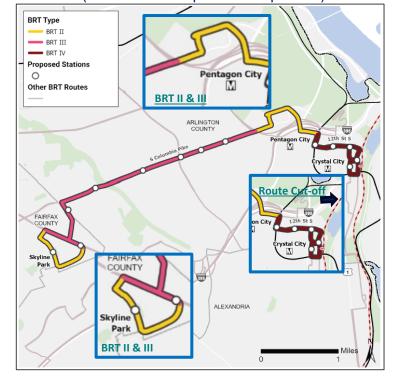
#### **Proposed Route Map**

Figure 28 Proposed Route Map used with Focus Groups



Both groups of riders found the route map and its depiction of the BRT lanes somewhat unclear. They expressed confusion about the lane types, noting that the color coding for different lane types (e.g., Type III and Type IV lanes) felt unnecessary and potentially confusing for the general public. They suggested removing this color coding, as most riders likely would not focus on the specific lane types. Riders had difficulty understanding some of the map elements, especially the overlap between BRT II (yellow) and BRT III (pink) near Pentagon City and Skyline Park. They were unsure whether there were overlapping routes or connector services. Confusion was also noted in the areas near the map edges, where routes like BRT IV appear to be cut off (see figure below for a closer look). Some participants were also unsure about the specific locations of certain proposed stations. Despite this, they acknowledged that the route itself was clearly marked, and both groups appreciated the visibility of the stops and the simplicity of the map.

Figure 29 Confusion with Proposed Route Map (from the Participants' Perspective)





"I'm not sure what color this is. Is dark reddish color as the route IV? I'm not sure what yellow is. Is there a BRT II route? what's cut off the top of that image? I'm not sure if the pink root BRT 3 and BRT 2 overlap each other or it's a connector route, it goes further."

-Rider

"We see the different colors that we think that means different buses and I don't know that the average ride is going to care about whether it's a type 3 lane versus the type 4 lane. So I guess I would remove that color coding."

-Rider

#### **Proposed Route Profile**

Figure 30 Proposed Route Profile used with Focus Groups



#### **Level of Service**

The Level of Service section, which highlighted the frequency and span of BRT buses, was generally well-received, especially in terms of understanding the basic operational details like weekday and weekend schedules. Riders appreciated the inclusion of frequency information, as it made the service seem more predictable. However, they pointed out a lack of additional details, such as average travel time from end to end, which they felt would help



prospective riders better understand the convenience of the service. They required more context regarding the potential impact of the proposed route on existing services, as some were *unclear whether this service would replace or supplement the current bus services* in the region. They also questioned whether the schedule, particularly on weekends, could be adjusted to accommodate late-night and early-morning travelers.

"I like the frequency and stuff, that's nice, that has frequency in minutes, but like putting the route time like end to end on average or something and showing how its faster..."

-Rider

#### **Overall Performance**

Riders had mixed feelings about the Overall Performance section. They expressed dissatisfaction with the star ratings, finding them unclear and not very meaningful to a general audience. They struggled with interpreting what each rating level actually meant, particularly in relation to cost-effectiveness, and felt that more straightforward explanations were needed. Some participants felt that certain categories, such as "land use" and "readiness," were not clearly explained and might not be relevant to the average person.

#### **Key Metrics**

The Key Metrics section was met with varying levels of understanding among riders. They found the metrics, particularly the operating cost per rider, somewhat confusing. They were unsure of the fare structure and **thought the operating cost shown was the actual fare**. They questioned how these figures would translate to the actual cost for passengers and suggested including more relevant information, such as reliability statistics or the number of cars expected to be taken off the road. They felt that more context was needed to make these figures more relatable and understandable. Additionally, both groups agreed that including metrics like the environmental impact or the potential for increased property values around stations could add usefulness to the profile.

"The way it's configured was weird. It goes up, they go vertical. I think most people need left or right. I don't, I don't know, it just looked odd to me. It's just kind of hard to look at but I like the levels of service."

-Rider

"I didn't really like the overall performance and key metrics part. I feel like that's good for transportation planners, but not for me. And like the stars are kind of meaningless. Like what does 2 stars mean for cost? How much is that? And the ridership numbers like I don't really care about any of that."

-Rider

### Messaging

Riders generally reacted positively to the proposed name for the BRT plan, "**Bus Rapid Transit (BRT) Action Plan** – Connecting fast, frequent and reliable transit across Northern Virginia and beyond," appreciating the inclusion of terms



like "fast" and "reliable," which align with expectations for speed and punctuality. However, concerns were raised about the name's length, memorability, and the mixed perception of "Action Plan," which some felt sounded temporary or abstract. Riders emphasized that the name should convey qualities such as efficiency, reliability, affordability, and convenience, while also reflecting values like equity and connectivity for underserved areas. Although "connecting" was seen as logical, some felt it added little and suggested alternatives like "expanding" or "linking." Opinions were divided on whether the name sufficiently differentiated BRT from regular bus services. Finally, while some participants supported highlighting regional connections beyond Northern Virginia, others preferred focusing on local improvements, reflecting differing priorities for the system's scope.

"Because it's an action plan, it doesn't seem like finalized or anything. It kind of makes it seem like more experimental maybe? I think that that's good and bad. It's good because it seems like, I think it's good to try like new options and stuff, but I think maybe bad because you don't know if it's going to be like permanent or if it's like here to stay."

-Rider



Table 30 Demographic Profile

	Riders	Non-Riders		Riders	Non-Riders
Gender			Primary Residence		
Male	9	6	Arlington County	7	2
Female	8	11	Fairfax County	4	11
Other	-	-	Loudoun County	1	-
			Prince William's County	1	2
Age			City of Alexandria	2	-
18-24	2	-	Fairfax City	-	-
25-34	6	3	City of Falls Church	1	-
35-44	4	3	Manassas	_	1
45-54	3	2	Manassas Park	1	1
55-64	2	5			
65 or older	_	4	Access to a Vehicle		
			Yes	16	16
Income			No	1	1
Less than \$15,000	2	_			
\$15,000 to less than \$20,000	_	_	Modes Used in Last 6 Months		
\$20,000 to less than \$25,000	_	_	Metrorail	17	n/a
\$25,000 to less than \$30,000	_	2	Metrobus	11	n/a
\$30,000 to less than \$35,000	_	_	Loudoun County Transit	3	n/a
\$35,000 to less than \$40,000	_	_	Fairfax Connector	8	n/a
\$40,000 to less than \$45,000	1	1	Arlington Regional Transit (ART)	7	n/a
\$45,000 to less than \$50,000			VRE	5	n/a
\$50,000 to less than \$75,000	6	4	Alexandria DASH	5	n/a
\$75,000 to less than \$100,000	1	1 1	OmniRide	4	n/a
\$100,000 to less than \$150,000	5	4	CUE	1 1	n/a
\$150,000 to less than \$200,000	_	2	MARC	1 1	n/a
\$200,000 or more	2	1	Carpool/Vanpool	2	n/a
Don't know/Refused	_	2		_	1174
Bon Cknow/Nordood		_	Slugging	_	n/a
Race/Ethnicity			Some other system	_	n/a
African American/Black	4	3	Como otnor dyotom		1174
Asian-American/Pacific Islander	2	1	<u>Employment</u>		
White (Caucasian)	9	12	Employed full-time	12	11
American Indian	_	-	Employed ratifilme Employed part-time	3	3
Hispanic or Latino	3	1	Retired		2
Other		<u> </u>	Not employed	2	1
Othor	-	_	Full-time student	_	'_
Disability Status			Part-time student		
Yes		_	Homemaker	_	_
No	17	- 17	Tiomemaker	_	_
INU	17	1/		1	



# APPENDIX E. PHASE 3 FOCUS GROUP RECRUITMENT SCREENER



#### **NVTA BRT**

-Focus Group Recruitment Screener-

ASK F	OR NAMI	ON SAMPLE. IF NO NAME A	/AILABLE, AS	SK FOR MALE/FEMALE HEAD OF HOUSEHOLD.
Hello,	my name	e is from	. We'ı	re conducting a short survey regarding transportation in
North	ern Virgir	nia and we'd like to include you	r opinions.	This is not a sales call. This call may be monitored or
record	ded for qu	uality control purposes.	•	•
	•			
S1A.	In whic	h of the following areas is your	current, pri	mary residence? Would you say (READ LIST. SEE
	"FOCU	S GROUP BREAKDOWN" FOR F	ARTICIPAN	ΓMIX.)
	NOTE:	IF RESPONDENT INDICATES TH	EY LIVE IN A	TOWN SUCH AS DUMFRIES, HERNDON, LEESBURG,
				NTY THAT TOWN IS WITHIN. ONLY TERMINATE IF NOT
	WITHIN	ONE OF COUNTIES OR INDEP	ENDENT CIT	TIES LISTED BELOW.
	01	Arlington County	→ CONT	INUE TO S2
	02	Fairfax County	→ CONT	INUE TO S2
	03	Loudoun County		INUE TO S2
	04	Prince William County	→ CONT	INUE TO S2
	05	City of Alexandria		INUE TO S2
	06	Fairfax City		INUE TO S2
	07	City of Falls Church		INUE TO S2
	08	Manassas		INUE TO S2
	09	Manassas Park		INUE TO S2
	96	Or somewhere else		K & TERMINATE
	98	DO NOT READ: Refused	e IHANK	& TERMINATE
S1B.	What is	s the ZIP code of your current,	orimary resi	dence?
	99998	Refused è <b>THANK &amp; T</b>	ERMINATE	
60	_			
S2.	Do you	currently own or lease a car, t	ruck, van or	motorcycle?
	01	Yes	-	SKIP TO S4
	02	No		CONTINUE TO S3
	99	DO NOT READ: Don't know/F		CONTINUE TO S3
		- · · · · · · · · · · · · · · · · · · ·		



#### THOSE WHO DO NOT OWN OR LEASE A CAR, TRUCK, VAN OR MOTORCYCLE [S2(02-99)], ASK:

- S3. Do you **regularly** have access to a car, truck, van or motorcycle?
  - 01 Yes
  - 02 No
  - 99 **DO NOT READ:** Don't know/Refused

#### **ASK EVERYONE:**

- S4. Please stop me when I reach the category that includes your age. (READ LIST. GET A MIX.)
  - 01 Under 18 è THANK & TERMINATE
  - 02 18 24
  - 03 25 34
  - 04 35 44
  - 05 45 54
  - 06 55 64
  - 07 65 or older
  - 98 **DO NOT READ:** Refused è **THANK & TERMINATE**
- S5. Have you ever used public transportation in Northern Virginia?
  - 01 Yes
  - 02 No
  - 99 **DO NOT READ:** Don't know/Refused

#### THOSE WHO HAVE USED PUBLIC TRANSPORTATION AT ANY POINT [S5(01)], ASK:

- S6. Have you used public transportation in Northern Virginia in the last 6 months? This can include local buses, express buses, Metrorail, and VRE.
  - 01 Yes
  - 02 No
  - 99 **DO NOT READ:** Don't know/Refused

#### THOSE WHO HAVE USED PUBLIC TRANSPORTATION IN THE LAST 6 MONTHS [S6(01)], ASK:

- S7. How often do you typically use public transportation in Northern Virginia?
  - 01 Less than once a week
  - 02 1-3 days per week
  - 03 4 days per week
  - 04 5 days per week
  - 05 More than 5 days per week
  - 98 **DO NOT READ:** Refused
  - 99 **DO NOT READ:** Don't know/Not sure



S8.	Which of the following systems in Northern Virginia have you used in the last 6 months?	(READ LIST.
	ACCEPT MULTIPLE RESPONSES.)	

- 01 Metrorail
- 02 Metrobus
- 03 **Loudoun County Transit**
- 04 Fairfax Connector
- 05 Arlington Regional Transit (ART)
- 06 VRE
- 07 Alexandria DASH
- 80 **OMNIRide**
- 11 **CUE**
- MARC 12
- 09 Carpool/Vanpool
- 10 Slugging
- 95 Some other system (specify:\_\_\_\_\_)
- 98 **DO NOT READ:** Refused

#### THOSE WHO HAVE NOT USED PUBLIC TRANSPORTATION IN THE LAST 6 MONTHS [S5(02-99) OR S6(02-99)], ASK:

How likely would you be to at least consider using public transportation in Northern Virginia in the future? S9. Would you be ...? (READ LIST.)

è THANK & TERMINATE

- 05 Extremely likely
- 04 Very likely
- 03 Somewhat likely
- 02 Not very likely, or
- è THANK & TERMINATE 01 Not at all likely è THANK & TERMINATE
- 98 **DO NOT READ:** Refused
- 99 **DO NOT READ:** Don't know/Not sure

#### **ASK EVERYONE:**

- S10. Are you currently...? (READ LIST. ACCEPT ONE RESPONSE ONLY.)
  - 01 Employed full-time,
  - 02 Employed part-time,
  - 03 A full-time student,
  - 04 A part-time student,
  - 05 Retired,
  - 06 A homemaker, or
  - 07 Not employed
  - 99 **DO NOT READ: Refused**



#### THOSE WHO ARE EMPLOYED OR IN SCHOOL [S10(01-04)], ASK:

03	_ *****	ANE EIN LOTED ON IN SCHOOL (S10(01 04)), ASK.
S11.	Whic	h of following best describes the industry you work in? (READ LIST. ACCEPT ONE RESPONSE ONLY.)
	01	Education
	02	Food service (including restaurants, bars, and caterers)
	03	Healthcare
	04	Industrial, such as agriculture, mining, utilities, construction, manufacturing, transportation, warehousing, or wholesale trade
	05	Office, such as information, finance and insurance, real estate or rental and leasing, management or public administration
	06	Retail
	95	Other Services (except Public Administration) (specify:)
	98	DO NOT READ: Refused
	99	DO NOT READ: Don't know/Not sure
S12.	Do yo	ou commute to work or school?
	01	Yes
	02	No
	98	DO NOT READ: Refused

#### THOSE WHO ARE EMPLOYED OR IN SCHOOL AND COMMUTE [S10(01-04) AND S12(01)], ASK:

- S13. How many days per week do you commute to work or school? Your best guess is fine. (READ LIST.)
  - 01 Less than once a week
  - 02 1-3 days per week
  - 03 4 days per week
  - 04 5 days per week
  - 05 More than 5 days per week
  - 98 **DO NOT READ:** Refused

**Arlington County** 

- 99 **DO NOT READ:** Don't know/Not sure
- S14. In which of the following areas do you primarily work or go to school? (READ LIST. ACCEPT ONE RESPONSE ONLY.)

02	Fairfax County	
03	Loudoun County	
04	Prince William County	
05	City of Alexandria	
06	Fairfax City	
07	City of Falls Church	
80	Manassas	
09	Manassas Park	
10	Washington, DC	
95	Or somewhere else (specify:	)

DO NOT READ: Don't know/Refused



99

01

S15.	How do you typically travel to work or school? (READ LIST. ACCEPT MULTIPLE RESPONSES.)					
	01	Drive				
	02	Metrorail				
	03	Bus (specify provider:		_)		
	04	VRE				
	05	Walk for all or more than	half the	trip		
	06	Bicycle				
	07					
	08 95	E-scooter Other (specify:	1			
	98	DO NOT READ: Refused				
	99	<b>DO NOT READ:</b> Non't kr		t sure		
		DO NOT READ. DOIT ( KI	10 W/ 140	t suite		
	ERYONE					
S16.	Do you	speak a language other	than En	glish at home?		
	01	Yes				
	02	No				
	98	DO NOT READ: Refused	I			
THOSE	WHO SI	PEAK ANOTHER LANGUA	GE AT H	HOME [S16(01)], ASK:		
S17.	Which	language? (DO NOT REAI	D LIST. A	ACCEPT ALL THAT APPLY.)		
	01	Amharic				
	02	Arabic				
	03	Korean				
	04	Spanish				
	05	Vietnamese				
	95	Other (specify)				
	98	DO NOT READ: Refused				
S18.	Цомум	ell do you speak English?	)			
310.	HOW W	eli do you speak Eligiisii:				
	01	Very well	è	CONTINUE		
	02	Well	è	CONTINUE		
	03	Less than very well	è	THANK & TERMINATE		
	98	DO NOT READ: Refused	lè	CONTINUE		
	ERYONE					
S19.	Are you	u of Spanish, Hispanic or	Latino o	origin?		
	01	Yes				
	02	No				
	98	DO NOT READ: Refused	l			



S20.	What is your race? Would you say (READ LIST. ACCEPT MULTIPLE RESPONSES. GET A MIX)					
	01	African American or Black				
	02	American Indian or Alaska Native				
	03	Asian, Hawaiian, or Pacific Islander				
	05	White				
	95	Or another ethnic origin (specify)				
	98	DO NOT READ: Refused				
S21.		e stop me when I reach the category which includes your total annual household income. <b>(READ GET A MIX.)</b>				
	01	Less than \$15,000				
	02	\$15,000 to less than \$20,000				
	03	\$20,000 to less than \$25,000				
	04	\$25,000 to less than \$30,000				
	05	\$30,000 to less than \$35,000				
	06	\$35,000 to less than \$40,000				
	07	\$40,000 to less than \$45,000				
	80	\$45,000 to less than \$50,000				
	09	\$50,000 to less than \$75,000				
	10	\$75,000 to less than \$100,000				
	11	\$100,000 to less than \$150,000				
	12	\$150,000 to less than \$200,000				
	13	\$200,000 or more				
	98	DO NOT READ: Refused				
	99	DO NOT READ: Don't know/Not sure				
S22.	Includ	ding yourself, how many people live in your household? (RANGE=1-7.) number of people in household				
	08	8 or more people				
	98	DO NOT READ: Refused				
S23.		gender do you identify as? (READ LIST IF NECESSARY. ACCEPT MULTIPLE RESPONSES. GET A MIX OF AST MALE/FEMALE.)  Male Female Non-binary Or do you use a different term  DO NOT READ: Refused				



- S24. If you have a disability, please indicate what kind. (READ ENTIRE LIST. ACCEPT ALL THAT APPLY. RANDOMIZE 01-05.)
  - A condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying
  - 02 Blindness or have serious difficulty seeing when wearing glasses
  - 03 Deafness or have a serious hearing difficulty
  - 04 Limited ability to care for yourself
  - O5 Physical, mental, or emotional condition that limits learning, remembering, or concentrating
  - 97 Or none of these
  - 98 **DO NOT READ:** Refused
- S25. When was the last time you participated in a market research group discussion or focus group? **(READ LIST.)**

01 Within the past 6 months,
 02 More than 6 months ago, or
 03 Never
 → THANK & TERMINATE
 È CONTINUE
 È CONTINUE

99 DO NOT READ: Don't know/Refused è THANK & TERMINATE

S28. Have you or has any member of your immediate family <u>ever</u> worked for any of the following types of companies or in the following fields?

		Yes	No	Don't know
Α	An advertising, public relations, or market research company	01	02	99
В	A public transportation or transportation planning	01	02	99
	company	01	02	

#### **IF [S28A(01) OR S28B(01)], THANK AND TERMINATE.**

**READ:** Thank you for your responses! You meet the criteria for our online discussion group.

	GROUP AS	SIGNMENT
	March 11 <sup>th</sup> 2025	March 12 <sup>th</sup> 2025
Non-Riders/Lapsed Riders [(\$5(02,99)) OR (\$5(01) AND \$6(02,99))]	5:30 PM	8:00 PM
Riders [S6(01)]*	8:00 PM	5:30 PM

\*IN RIDER GROUP, LIMIT THOSE WHO USE METRORAIL ONLY AND RIDE LESS THAN ONCE A WEEK [S7(01) AND S8(01)] TO 4 OR LESS



**Here's the invitation:** Please join our small online research community to participate in a discussion group about some possible transportation options in Northern Virginia.

Here's more: If selected, you will be sent an email with instructions on [INSERT DATE TWO DAYS BEFORE GROUP]. You will be asked to complete a few activities at your convenience [INSERT DATE ONE DAY BEFORE GROUP] (these should only take about 20 minutes of your time) and will participate in a two-hour group discussion on [INSERT DATE AND TIME OF GROUP]. After you have participated, you will earn a [check] for \$100.

Please note: you will need access to a computer, smartphone, or tablet with internet and a webcam for this discussion group. You will be able to complete the activities at your convenience the day before the online discussion.

- S26. Can we count on you to participate on [INSERT DATE AND TIME] if selected?
  - 01 Yes
  - 02 No 

    THANK AND TERMINATE
  - 99 **DO NOT READ:** Don't know/Refused  $\rightarrow$  **THANK AND TERMINATE**

#### THOSE WHO ARE ABLE TO PARTICIPATE IN THE ONLINE DISCUSSION [\$26(01)], ASK:

- S27. Do you own or have access to a computer or smartphone with a webcam? (READ LIST IF NECESSARY. ACCEPT ONE RESPONSE ONLY.)
  - O1 Yes; a computer with a webcam
  - O2 Yes; smartphone with a webcam
  - 03 Yes; both
  - 04 No
  - 99 **DO NOT READ:** Don't know/Refused

#### **READ TO EVERYONE:**

So that we may call you to confirm your participation, please tell us your full name and the best telephone number at which to reach you.

Name:	
99	<b>DO NOT READ:</b> Don't know/Refused
Γeleph	one number:
99	<b>DO NOT READ:</b> Don't know/Refused

Also, so that we may send you an e-mail with instructions, please tell us your email address.

Email address: \_\_\_\_\_\_\_99 **DO NOT READ:** Don't know/Refused

Since we are only inviting a limited number of study participants, if for some reason you cannot participate, please call our office at XXX-XXXX so that we can schedule another participant. Thank you for your time and we look forward to speaking with you on [ASSIGNED DATE AND TIME].



#### **GROUP DETAILS**

Rider Groups [S6(01)]:

- Have ridden public transportation in Northern Virginia in the last 6 months
- Mix of Race/Ethnicity, Age, Language Spoken at Home, Vehicle Ownership, Area of Residence (mix of ZIP codes)
- In rider group, limit those who use Metrorail only and ride less than once a week [s7(01) and s8(01)] to 4 or less.

Lapsed and Non-Rider Groups [(S5(02,99)) OR (S5(01) AND S6(02,99))]:

- Have not ridden public transportation in Northern Virginia in the last 6 months Mix of Race/Ethnicity, Age, Language Spoken at Home, Vehicle Ownership, Area of Residence



# APPENDIX F. PHASE 3 FOCUS GROUP DISCUSSION GUIDE & ACTIVITY GUIDE

#### I. INTRODUCTION (15 minutes)

- a) Purpose of meeting: This discussion will focus specifically on a new transportation idea called Bus Rapid Transit (or BRT) for Northern Virginia. Even if you are someone who does not typically ride public transportation, we still want to hear from you. Let me assure you once again that this is not a sales meeting of any kind. I don't have anything to sell you. This is a form of research conducted with area residents, and we're interested in your thoughts and opinions.
- b) About this focus group session
  - i) Form of market research, not selling anything
  - ii) Discussion will last about 2 hours
  - iii) Recording
  - iv) Colleagues viewing
  - v) All comments will be kept anonymous and confidential
  - vi) Have courage of convictions; don't let group sway you
  - vii) No right or wrong answers, only your opinion
  - viii) Please try to speak one at a time; as online meetings don't handle people talking over each other well.

    Raising hands to stop someone from ranting works well if you have something you'd like to interject with.
  - ix) Work for independent market research company, not NVTA
  - x) Turn off/silent cell phones
- c) Respondent introduction
  - i) Name
  - ii) Where do you live? (Note: don't need your full address City, and/or zip code work)
  - iii) How long have you lived in the area?
  - iv) Where do you work?
    - (a) How do you typically get to work (if work in person or on a hybrid schedule)?
  - v) How do you usually get around the area? Where are the most common places you go?
  - vi) Something about self



#### II. Overview/Understanding of BRT Benefits (20 minutes)

- a) Let's talk about bus service in Northern Virginia today. What do you think about it? Is there anything you like or dislike about the buses currently running in the region?
- b) Have you ever heard the term "Bus Rapid Transit"? What do you think it means?
  - i) What do you think is the difference between this type of bus and conventional buses? Do you think they are the same? Please explain.
  - ii) MODERATOR NOTE: LIMIT TIME SPENT ON UNDERSTANDING OF THE TERM "BUS RAPID TRANSIT" ITSELF. WE KNOW FROM PREVIOUS GROUPS THAT UNDERSTANDING AND AWARENESS IS VERY LIMITED.
- c) Now let's discuss how we can explain BRT to the public. I'm going to read you a simple description of BRT.
  - i) **BRT Description:** "Bus Rapid Transit (BRT) is a type of bus service that works like a train system. It uses special lanes for buses, which helps them move faster and more reliably. BRT may also have things like faster ticket payment, improved stations, and buses that run more frequently."
- d) How well does this description help you understand BRT? Why do you say that?
  - i) **PROBE:** What don't you understand in this explanation of BRT? Do you understand how this is different from a regular bus? Are there any elements that should be further explained or simplified?
  - ii) PROBE: What elements sound particularly interesting/exciting? What elements sound negative?
- e) Have you ever seen BRT in person, on tv, or the internet or used a BRT system? (MODERATOR NOTE: Some may have used a BRT system in the past but did not realize it was called "BRT".)
  - i) PROBE IF HAVE USED BRT: In what city did you ride it?
  - ii) PROBE IF HAVE SEEN IN PERSON, ON TV, OR INTERNET: Where did you see or hear about BRT?
  - ii) **PROBE IF HAVE SEEN OR USED BRT:** What is your overall impression of BRT? What did you like or dislike about it?
- f) Now, let's talk about the benefits of Bus Rapid Transit (BRT).
  - i) **REMINDER IF NEEDED:** BRT is a system of buses that operates like a train, offering faster and more reliable service. It's a way to get people around efficiently, reduce traffic, and help the environment.
- g) We will go through a list of benefits that BRT could bring to Northern Virginia. After hearing these, I want you to tell us which benefits are the most important to you and why.
  - i) Here are some of the main benefits of BRT. Which of these would be the most important reasons for you to support BRT in Northern Virginia? Why?
    - a. Improves travel times for all, that is transit passengers and motorists due to less single occupancy vehicles on the road
    - b. Reduces traffic congestion on roadways
    - c. Reduces vehicle emissions
    - d. Provides better transit service to destinations more frequent and more reliable
    - e. Is cost-effective
    - f. Makes it easier for people to get around without a car
    - g. Provides more travel options
    - h. Reduces need to build more road or rail lines
    - i. Frees people up to do other things while they commute (e.g. read, work, etc.) instead of driving
    - j. Provides direct routes to destinations without needing to transfer between BRT lines, regular buses, or rail (Metrorail/VRE).



- ii) Which of these do you think is **least important**, and why?
  - a. Why do you feel that one benefit is less important than others? Does it have to do with your personal experience or how you see public transportation affecting your life?
- iii) Are there any of these benefits that don't seem credible to you?
- iv) Do you think there are other benefits of BRT that could or should be highlighted? Anything we missed?
  - a. **PROBE IF MENTIONED OTHER BENEFITS:** Can you explain why that's important to you? What would make this more relevant to the people in your community?
- v) How do you think BRT could impact the neighborhood where you live?

#### III. Response to the Draft PDP-BRT Plan (55 minutes)

- a) Next, we'll talk about the proposed BRT routes for Northern Virginia. I will show you a map of where the BRT lines could go. It's important to note that no final decisions have been made about the routes, stops, frequency, or any other details at this stage. Our goal is to understand whether these proposed routes connect to the places you typically go to and whether they make sense based on your needs and priorities. [SHOW OVERALL MAP].
  - i) Does the system shown on this map connect you to the places you typically go? What places are those?
  - ii) What places or types of places does this system not cover for you? Can those places be accessed using other transit in the area? Could you use this BRT system and easily transfer to transit that will get you the rest of the way to your destination?
  - iii) What stands out to you on this map? Is there anything about the map that you find unclear or that you'd want more information on?
  - iv) Are there any key details you feel are missing from the map that would help you decide whether to support or use BRT?
  - v) Does this make you want to learn more about BRT? Where would you go to learn more?
- b) If this system serves the areas where you live or places you regularly go, would you be willing to use it? Why or why not?
  - i) **PROBE IF NOT INTERESTED:** what would make you change your mind? Are there specific features or improvements that could influence your decision?
- c) NVTA and other agencies in the area will need to prioritize which BRT routes to implement first.
  - i) **PROBE:** What are the most important ways to identify which BRT routes should be implemented first? For example: "I support NVTA using my tax dollars to build BRT routes that achieve **[blank]**."
  - ii) IF NECESSARY: You say many of these things are important, but what is most important?
  - iii) Possible Considerations:
    - a. Routes that are easy to build (let's get this moving quickly!)
    - b. Routes that will have the most ridership
    - c. Routes that will be the most cost-effective to build and operate
    - d. Routes that will reduce congestion the most, assuming some drivers switch to BRT.
    - e. Routes that will build equity by improving mobility for low-income residents and/or people of color
    - f. Routes that make it easier for people to get to work by transit
    - g. Routes that make it easier for people to access other destinations in the region by transit (e.g. shopping, recreation, etc.)



- h. Routes that will improve the travel experience for transit passengers by improving travel times and reliability
- i. Routes that reduce emissions the most
- j. Routes that will improve safety and security for passengers, both at stations and on the vehicles themselves.
- k. Routes that are evenly distributed across Northern Virginia
- I. Routes that connect to Metrorail/VRE
- m. BRT lines in corridors that have walkable commercial and residential centers that don't require the use of a car
- iv) **PROBE IF EQUITY:** Why is it important that BRT benefits people in low-income communities or communities of color?
- v) PROBE IF REDUCE CONGESTION: What do you think would encourage drivers to switch to BRT?
- vi) **PROBE IF SAFETY AND SECURITY:** What's important to you in terms of safety and security on BRT? Are you more concerned with personal safety at the stations (like lighting or cameras), when you're on the buses themselves (like security or emergency buttons), or safety from injury or accidents?
  - a. **PROBE:** Which specific safety features do you think would make a difference in how safe you feel using BRT? What would make you feel more comfortable using it regularly?
  - b. **PROBE:** Is there anything that would make you feel safer using the BRT system? What could be done to improve safety?
- d) What additional features would influence your decision on which BRT routes should be prioritized?
- e) We're now going to take a closer look at some information about one of the proposed BRT routes. [SHOW ROUTE PROFILE (IMAGE #2)]. Along with the map you've already seen, this profile provides additional information about the route's metrics. I will show you this profile, which includes the Level of Service, Overall Performance, and other Key Metrics. This will give you an idea of how the route could potentially perform and how it aligns with the overall goals of the BRT Plan. [SHOW ROUTE PROFILE (IMAGE #3)].
  - i) What are your first impressions of this route profile?
  - ii) **PROBE:** Is there anything in this profile that stood out to you (positive or negative)?
  - iii) How do you feel about the ratings for this route in each of the performance categories?
  - iv) **PROBE:** Do the performance levels for categories like Ridership, Cost, Transportation Impacts, etc. help you understand the potential of the route?
  - v) **PROBE:** Are there any performance levels that you find surprising or confusing?
  - vi) How do you feel about the key metrics included in this profile (e.g., Average Weekday Boardings, Operating Cost Per Rider, etc.)?
  - vii) PROBE: Do these metrics make sense to you? Why or why not?
  - viii) **PROBE:** Are there any metrics that you feel are particularly important or helpful in understanding how well this BRT route will work?
  - ix) **PROBE:** Do you think there are any metrics missing that would help you assess the success of the BRT route?
  - x) Is there any other information you would want to see included in this route profile?



#### IV. Branding/Messaging (25 minutes)

- a) NVTA would like to hear your thoughts on the name for this BRT plan. Before I show you the proposed name, let's think about what kinds of qualities you would want a name to convey. What do you think are important qualities to highlight in the name of this plan?
- b) Here is the name suggested for BRT plan:
  - i) **Bus Rapid Transit (BRT) Action Plan -** Connecting fast, frequent and reliable transit across Northern Virginia and beyond.
    - (1) What comes to mind when you hear it? Is it positive? Does it sound credible?

FOR EACH OF THE FOLLOWING PROBES, FOLLOW UP ON WHY NAME AND TAGLINE DO OR DON'T ACCOPLISH EACH GOAL.

- a. **PROBE:** Does it make BRT sound different/better from regular buses?
- b. **PROBE:** Does it make you want to learn more about BRT?
- c. **PROBE:** Do you think this name conveys the key qualities that are important to you?
- d. **PROBE:** What do you think of the word "Connecting"? Does it reflect what you would want from a transit system? Does it make sense for a system that serves both local and regional connections?
- e. **PROBE:** Does the name resonate with your experience or expectations of public transportation?
- f. **PROBE:** How do you feel about the idea of providing new travel options to reduce dependency on driving alone? Do you think that should be emphasized more in the tagline?
- g. **PROBE:** How important is it to you that the BRT system connects people to places outside of Northern Virginia, rather than just Northern Virginia?
- (2) What would make a name more appealing to you? Should it focus more on speed, reliability, or something else?

#### V. CLOSING COMMENTS (5 minutes)

a) Closing comments



Question	Activities	Question or Instructions	Question Type	Image Files	Programming Notes
1	Introduction	The Northern Virginia Transportation Authority (NVTA) has a vision for the future of transportation in Northern Virginia and sets objectives, goals, and strategies for getting there. NVTA is a regional organization that develops the long-range transportation plan for Northern Virginia. With a priority to reduce congestion, NVTA uses performance-based criteria to evaluate and fund regionally significant multimodal transportation projects. In the past decade, NVTA has invested \$3.8 billion toward advancing 139 regional transportation projects located throughout the Northern Virginia region. NVTA focuses on the long-term improvements and markers for success within Northern Virginia's transportation landscape and keeping the region moving. As NVTA engages in the planning process, they want to hear from you as a resident of Northern Virginia and find out how to best encourage growth and success in the region. Your input is a critical part of the planning process.  The primary objective of this focus group is to learn about your thoughts regarding transportation in Northern Virginia. We want to hear from you, so this means just be yourself and tell it like it is for you. Please know that we are not looking for a <i>right</i> answer but responses that explain what is <i>right for you</i> .  We will be checking with you over the course of these next two days, but please feel free to send a message to me for help if you need it.  We are available to answer your questions and help you troubleshoot any issues that might arise. Just click on your notifications at the top right of your screen. Thanks again for joining!  Joanne (your friendly moderator)	Group	Moderator photo	Segmented by tags so the focus group time is correct for each recruit segment.  No masking.
2	Welcome	Today's exercises are ready for you to complete but for now, let's just start with the basics. We would love to learn a little bit about you first!	Individual	Start image	Merged with next question



Question	Activities	Question or Instructions	Question Type	Image Files	Programming Notes
3	Welcome	I'd love for you all to introduce yourselves here and have a little show and tell with your fellow participants.  A question I'd like to pose:	Group	Intro image	No masking, these responses are viewable to
		Getting outside of the house for leisure activities or just some quiet time is so important to all of us.			all participants once
		As an icebreaker, please tell us a little bit about these places you like to go outside of your home, and how you typically travel to get there. Take a moment, and either share photos or upload a short video to tell us about the some of the places you like to go to outside your home where you can take some time to unwind or get active.			complete for warm-up discussions.
4	Public Transportation	How do you typically get around Northern Virginia? Select all that apply.	Individual	None	Partially
		a) Metrorail			Masked.
		b) VRE			
		c) Bus d) Drive yourself			
		e) Walk			
		f) Bicycle or scooter			
		g) Taxi, Uber, or Lyft			
		h) Some other means (specify:)			
5	Public Transportation	FOR THOSE WHO DO NOT TYPICALLY USE PUBLIC TRANSPORTATION [Q4 NOT (a-c)], ASK:	Individual	None	Partially Masked.
		Why don't you use public transportation or use it more often? What might make you consider using public transportation more often?			



Question	Activities	Question or Instructions	Question Type	Image Files	Programming Notes
6	Introducing BRT	Imagine that there was a new public transportation system in Northern Virginia designed to make your travel faster, closer, and more reliable. We'd like to hear your thoughts on such an idea.  What would make you more likely to use a new form of public transportation in your area? Select all that apply a) Faster travel times b) More frequent service c) Special lanes or routes that avoid traffic	Individual	None	Masked.
		d) Stops or stations that are closer (e.g., near home or work) e) Lower cost than current options f) Reliable (on-time or predictable) service g) Other (specify:)			
7	Introducing BRT	Have you heard of a type of system called Bus Rapid Transit (BRT) that operates with special lanes to avoid traffic and run more quickly?  a) Yes, I've heard of it b) No, but it sounds interesting c) No, I haven't heard of it	Individual	None	Masked.
8	Introducing BRT	If yes, where have you seen or heard about this type of bus system?	Individual	None	Masked.
9	Introducing BRT	What do you think about this type of bus system (BRT) that uses special lanes to improve speed and avoid traffic?  a) Sounds like a great idea! b) I'm not sure how it would work, but I'm open to learning more. c) I don't think this would work in Northern Virginia. d) Other (please specify:)  FOLLOW UP: Please explain why you made this selection	Individual	None	Masked.



#### FINAL ENGAGEMENT REPORT

Question	Activities	Question or Instructions	Question Type	Image Files	Programming notes	
10	Reaction to the Route Profile	Now, you'll see a map showing just one proposed BRT route in Northern Virginia, along with key stations and network information. In addition, you'll also view the Route Profile which includes the Level of Service, Overall Performance, and Key Metrics.	Group	Map and Route Profile Images (Image #1, Image #2, and Image #3)	Masked.	
11	Reaction to the Route Profile			Map Image (Image #2)	Heatmap, allowing participants to mark up the page	
12	Reaction to the Route Profile	Which aspects of this page stand out to you as most important or beneficial for your understanding? You can select anywhere on the page to tag and show what is (or is not) important to you.	Individual	Route Profile Image (Image #3)	Heatmap, allowing participants to mark up the page	
13	Reaction to the Route Profile	Is there anything in the route profile that you find confusing or unclear? If so, please mark up the areas that you have difficulty understanding.	Individual	Route Profile Image (Image #3)	Heatmap, allowing participants to mark up the page	
14	Reaction to the Route Profile	Do you feel the Level of Service information is clear and helpful for understanding how the BRT service would function?  a) Yes, it provides the information I need. b) Somewhat, but I need more details to fully understand. c) No, I'm unclear about the frequency and duration of the service.  FOLLOW UP: Please explain why you made this selection.	Individual	None	Masked.	



Question	Activities	Question or Instructions	Question Type	Image Files	Programming notes
15	Reaction to the Route Profile	Which Key Metrics do you find most useful for your understanding of the route shown? Select all that apply.  1. Average weekday boardings 2. Operating cost per rider 3. Driving trips shifted to transit 4. Hours of traffic delay reduced for individuals 5. Walking infrastructure available 6. Station area residents in equity groups	Individual	None	Masked.
		9. None of the above  IF MORE THAN ONE RESPONSE SELECTED (1-6), ASK:  Of the options you selected, please prioritize which ones are most important to you.  Why did you prioritize them in this way?			
16	Reaction to the Route Profile	Do you find these metrics useful for assessing the value of the BRT service?  a) Yes, they provide a comprehensive view of the route's impact. b) Somewhat, but I would like to see more details or other types of metrics. c) No, I think the metrics are unclear or irrelevant to me.  FOLLOW UP: Please explain why you made this selection.	Individual	None	Masked.
17	Reaction to the Route Profile	Would you like to see additional metrics or a more detailed explanation for any of the current ones? If so, which ones?	Individual	None	Masked.
18	Reaction to the Route Profile	Which of the current metrics, if any, do you find unnecessary, unclear, or think should be removed? Please explain why you feel this way.	Individual	None	Masked.

	POST AFTER CONCLUSION OF DISCUSSION GROUPS					
19	Final Feedback	Thanks again for the great answers and participation in our community - we'd love to hear any feedback from your experience!  These questions aren't mandatory but will help us to design better communities in the future. Also make sure to answer any follow-up questions we might have asked on previous responses before leaving us!	Individual	None	No masking.	
20	Final Feedback	Is there anything we should have asked but forgot? If so, let us know below!	Individual	None	No masking.	



#### **IMAGE #1**

#### Introduction

28 potential BRT routes were developed for detailed analysis as part of development of the BRT Plan. This Route Profile packet summarizes the results of the evaluation and performance of each route. Each Route Profile presents a map of the route for orientation, information on its span and frequency, overall performance in relation to the other routes in the system, and key performance metrics.

#### Overall Performance

These profiles include performance metrics across six1 categories, each of which includes multiple variables:

- » Ridership: Boardings, Service Efficiency, Mode Shift, and Mode Shift in Equity Emphasis Areas.
- » Transportation Impacts: Congestion Reduction, Vehicle Miles Traveled Reduction, Vehicle Emissions Reduction, Transit Accessibility Improvement, Connections to other High Capacity Transit, Safety, and Run Time Improvement.
- » Land Use: Future Land Use Density and Socioeconomic Characteristics.
- » ReadIness: Existing Land Use Density, Walking Infrastructure Available, Bikeshare Stations, and Transit Supportive Policies.
- » Cost: Capital Cost Estimate and Annual Operating Cost Estimate.
- » Cost Effectiveness: Capital Cost per Rider, Congestion Reduction Relative to Cost, and Greenhouse Gas Reduction Cost.

#### Kev Metrics

In addition to the overall performance metrics, these profiles highlight six key individual metrics for each route. All of these metrics are estimated for 2045 unless otherwise noted:

- age Weekday Boardings: Presented as a range based on if the route was implemented independently or part of a full
- » Operating Cost per Rider: The cost to operate the service divided by the anticipated number of riders - this is not the fare.
- » Driving Trips Shifted to Transit: The estimated number of trips that would shift from driving to the region's transit network.
- » Person-Hours of Delay Removed: The total number of hours Northern Virginia residents spend in delay removed due to reductions in congestion.
- » Population & Jobs Served: The total number of people and jobs within a half-mile of the BRT stations.
- » Station Area Residents in Equity Groups: An average of the percentage of equity-focused groups of the overall population. The groups include residents of color, residents with disabilities, lowincome households, zero-car households, and one-car households.



<sup>1</sup> Two additional categories, Feasibility and Revenue, were also analyzed but omitted from the route profiles for brevity.

#### **BRT Types**

Five potential BRT types that would be suitable for operations in Northern Virginia have been identified: BRT I, BRT II, BRT III, BRT IV, and BRT Express. These BRT types were developed to provide a framework for conceptual planning as part of this process. They are not meant as a new definition of BRT for this project or the region. The passenger amenities and bus priority treatments expand from BRT I (least amenities) to BRT IV (most amenities), but with all routes having all-day, frequent service. The key differences between these BRT Types include:





Enhanced facilities and buses Super stops and additional operating in mixed traffic

amenities, as well as queue jumps at traffic bottlenecks

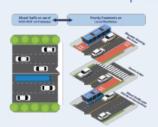
# BRT III2



Full transit stations and dedicated bus lanes

Full transit stations and fully dedicated/separated bus lanes

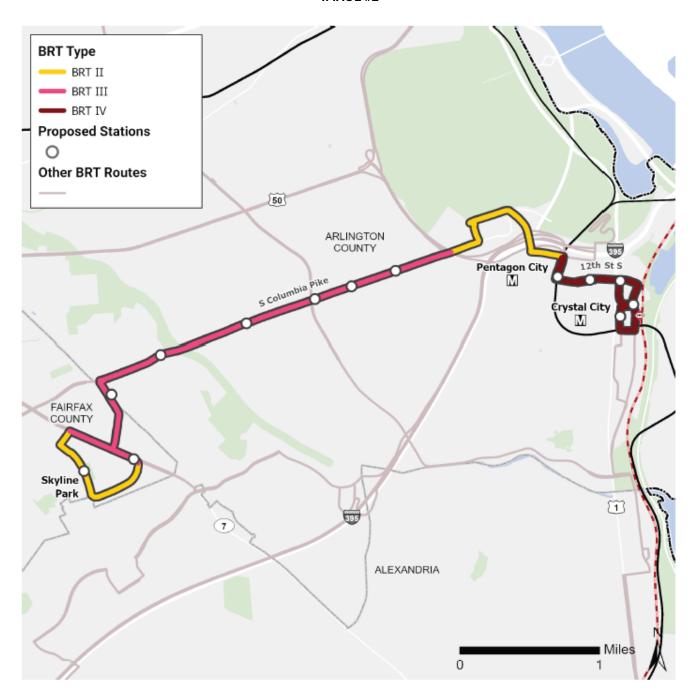
#### Express BRT



Includes close-door express service that utilizes limitedaccess roadways



#### **IMAGE #2**





#### **IMAGE#3**

# **Levels of Service**

How often would the bus come? And for how long?

Wee	ekdays	Weekends			
Span	6:00 AM - 12:00 AM	Span	6:00 AM - 12:00 AM		
Frequency - Peak 6:00 AM - 9:00 AM 3:00 PM - 7:00 PM	10 minutes	Frequency	12 minutes		
Frequency - All Other Times	12 minutes				

## **Overall Performance**

How does this route compare to the other routes in the full BRT network across key categories?



Ridership



Transportation Impacts



Land Use





Readiness



Cost



Cost Effectiveness



How does this route perform on some of the key metrics? All metrics represent 2045 estimates unless otherwise indicated

9,600 -11,600

Average Weekday Boardings \$1.50

Operating Cost per Rider

**Driving Trips** Shifted to Transit

1.700

Person-Hours of Delay Removed

84,100 & 24,000

Population & Jobs Served

Station Area Residents in **Equity Groups** (2025)



## **APPENDIX G. PHASE 3 SURVEY INSTRUMENT**



# NORTHERN VIRGINIA TRANSPORTATION AUTHORITY BRT-PDP PHASE 3 PUBLIC ENGAGEMENT COMMENT FORM

Main Link: https://selfserve.decipherinc.com/survey/selfserve/225e/250305

Engagement Link: https://selfserve.decipherinc.com/survey/selfserve/225e/250305?list=1

Shortlink (Main): gowba.info/BRTActionPlan



#### **QR Code:**

Northern Virginia is a rapidly growing region, attracting new residents and businesses. As population and employment continue to rise, so does the demand for efficient, flexible transportation options. To keep pace with this growth, innovative mobility solutions are necessary to enhance access to jobs, entertainment hubs and other key destinations across the region.

The Northern Virginia Transportation Authority (NVTA) is committed to improving daily travel by advancing transportation solutions.

As part of this effort, NVTA is developing an Action Plan for a regionally connected Bus Rapid Transit (BRT) system—designed to provide fast, frequent and reliable transit service.

The proposed BRT network includes up to 28 potential routes that will expand connectivity across the Washington-Metropolitan Area. This network will complement and extend existing transit options, including Metro, VRE and local commuter bus systems to create connections to the places where people live, work and shop. It will serve multiple areas in Northern Virginia while also providing connections to Maryland and Washington, D.C.

We want to hear from you! Your input is valuable as it will help shape the future of transit plans across our region. Thank you for sharing your feedback!

This survey is for research purposes only. All individual responses will remain confidential and will not be shared or sold. This survey will take around 10 minutes to complete, based on your answers.



#### **ASK EVERYONE:**

- Q1. What is your **primary** way of traveling? (ACCEPT ONE RESPONSE ONLY.)
  - 04 Walk
  - 05 Walk or travel using a mobility aid (cane, walker, wheelchair, etc.)
  - 06 Personal bicycle
  - 11 Use a shared service for bikes, e-bikes, or scooters such as Lime or Bird
  - 12 Ride a personal e-bike or scooter
  - O4 Drive a car, truck, SUV, or motorcycle
  - Ride in a car, truck, SUV, or motorcycle driven by a friend or family
  - Take a taxi or app-based transportation service such as Uber or Lyft
  - Take a local or commuter bus (e.g. DASH, ART, Metrobus, etc.)
  - 13 Metroway
  - 08 Metrorail
  - 09 Commuter rail (i.e., VRE or MARC)
  - 10 Use a carpool or vanpool
  - 95 Use another form of transportation (specify)

#### **ASK EVERYONE:**

- Q11A. Which of the following would be the **three most important characteristics of a BRT system** for you to consider using it? *Please select up to three responses.* (RANDOMIZE 01-07. ACCEPT UP TO 3 RESPONSES.)
  - O1 Ability to get to my destination without transferring
  - O2 Simple connections between other BRT lines or other transit systems
  - 03 Service that reliably shows up on time
  - 04 Service that is cheap to use
  - 05 Dedicated lanes and other features that allow for BRT to travel quickly and reliably
  - Features that make stops/stations nicer (e.g. Shelter, bathrooms, trash/recycling cans, real-time information about when the next bus arrives)
  - O7 Features that improve your experience while onboard the bus (e.g. real-time information about the next stop, Wi-Fi, USB/power outlets, level boarding, accessibility for differently abled riders)
  - 95 Something else (specify)
  - 97 Nothing would make me consider using BRT

#### THOSE WHO CHOSE AT LEAST TWO FEATURES [Q11A(01-95)], ASK:

Q11B. Of those features that you selected, which of these, in your opinion, is the most important? *Please select just one response.* 

#### (ONLY SHOW SELECTIONS FROM Q11A. RANDOMIZE ORDER SHOWN.)

- 01 **[IF Q11A(01)]:** Ability to get to my destination without transferring
- 02 [IF Q11A(02)]: Simple connections between other BRT lines or other transit systems
- 03 **[IF Q11A(03)]:** Service that reliably showed up on time
- 04 [IF Q11A(04)]: Service that is cheap to use
- 05 [IF Q11A(05)]: Dedicated lanes and other features that allow for BRT to travel quickly and reliably
- [IF Q11A(06)]: Features that improve your experience while onboard the bus (e.g. real-time information about the next stop, Wi-Fi, USB/power outlets, level boarding, accessibility for differently abled riders)
- 07 **[IF Q11A(07)]:** Features that improve your experience while onboard the bus (e.g. real-time information about the next stop, Wi-Fi, USB/power outlets, level boarding, accessibility for differently abled riders)
- 95 **[IF Q11A(95)]: [Q11A(95)]**
- 97 Nothing would make me consider using BRT



Q4A. How well would you say this **proposed BRT system** meets your needs?

[SHOW PICTURE OF SYSTEM MAP]

To view the system map in a new tab, click here: [LINK TO SYSTEM MAP]

- The BRT system goes to all the places I would want/need it to go
- The BRT system goes to **most** of the places I would want/need it to go
- The BRT system goes to **some** of the places I would want/need it to go
- The BRT system goes to **a few** of the places I would want/need it to go
- The BRT system **doesn't go to any** of the places I would want/need it to go
- Q4B. Why do you say that? Are there places you would like the BRT to go that aren't in the plan? **(OPEN END. DO NOT REQUIRE RESPONSE.)**
- Q8A. There are currently 28 potential BRT lines under consideration. Based on the proposed map, which three BRT lines would you be most likely to use? *Please select up to three.* (SHOW SYSTEMWIDE MAP. ACCEPT UP TO 3 RESPONSES. SHOW DROPDOWN MENU.)

[SHOW PICTURE OF SYSTEM MAP]

To view the system map in a new tab, click here: [LINK TO SYSTEM MAP]

- 01 LINE 1
- 02 LINE 2
- 03 LINE 3
- 04 ...
- 28 LINE 28
- 97 Would not be likely to use any of these

#### IF CHOSE AT LEAST ONE ROUTE AT Q8A [Q8A(01-28)], ASK Q8B-D ABOUT EACH ROUTE SELECTED IN Q8A:

- Q8B. For what purposes would you use [INSERT LINE FROM Q8A]? Please select all that apply. (RANDOMIZE. ACCEPT MULTIPLE RESPONSES.)
  - O1 Travel to or from work/job-related business
  - O2 Travel to or from school (student)/education related
  - O4 Shopping, entertainment, restaurants/bars
  - 05 Medical, bank, post office, government services
  - 07 Concert or sporting event
  - 08 Visiting friends or family
  - 10 Gym/Fitness center
  - 11 Church, synagogue, mosque, other religious venue
  - 13 Visiting parks, natural areas, fishing, hiking, etc.
  - 14 Parent/Guardian picking up child from school
  - 95 For some other reason (specify)



- Q8C. How often would you use this BRT route?
  - 01 More than 5 days a week
  - 02 5 days a week
  - 03 3 to 4 days a week
  - 04 1 to 2 days a week
  - 05 1 to 3 days a month
  - 06 A few days a year
  - 07 Less than once a year
  - 99 Don't know/Not sure
- Q8D. On what days of the week and at what times of day are you likely to use this BRT route? Please select all that apply.

  (MULTIPLE RESPONSES ACCEPTED.)
  - On weekdays in the morning peak times (before 9AM)
  - On weekdays during the midday (from 9AM up to 3PM)
  - On weekdays in the afternoon peak times (3PM up to 7PM)
  - On weekdays in the evening (after 7PM)
  - 05 On Saturdays
  - 06 On Sundays
  - 99 Don't know/Not sure

#### IF WOULD NOT USE ANY BRT ROUTES Q8A(97)], ASK:

- Q9A. Why wouldn't you use any of the BRT routes? Please select all that apply. (RANDOMIZE. ACCEPT ALL THAT APPLY.)
  - 01 None of them take me where I need to go
  - 02 It's faster to use another mode for my trips (e.g. drive, walk, bike)
  - 03 It's cheaper to use another mode for my trips (e.g. drive, walk, bike)
  - O4 The BRT service doesn't operate when I need to travel
  - 05 I don't feel safe on transit
  - 06 I don't feel comfortable using transit
  - 07 I prefer another mode
  - 95 Other (specify)

#### IF [Q9A(02-03,05-95)], ASK:

- Q9B. What could convince you to use BRT? Please select all that apply. (ACCEPT ALL THAT APPLY.)
  - 01 If it was free to use the BRT
  - 02 If it was free to park at BRT stations
  - 03 If stops and vehicles were more comfortable
  - 04 If gas was much more expensive
  - 05 If parking was much more expensive
  - 06 If parking was not available at my destination
  - 07 If the BRT was faster than driving
  - O8 If I didn't have to transfer to get to my final destination
  - 95 Other (specify)
  - 97 Nothing could convince me to use BRT.



#### IF CHOSE TWO OR MORE ROUTES AT Q8A [Q8A(01-28)], RANDOMLY SELECT ONE ROUTE TO ASK Q5A-Q6B:

Q5A. How well would you say the [PROPOSED ROUTE] meets your needs?

[PROPOSED ROUTE] will operate from [INSERT SPAN] on weekdays. [PROPOSED ROUTE] will operate from [INSERT SPAN] on weekends. [SHOW PICTURE OF ROUTE PROFILE]

Additionally, the proposed hours of operation can also be found here: [LINK TO ROUTE PROFILE FOR ROUTE SELECTED AT Q8A]

- The BRT system operates at **all** the times of day when I would want/need it to
- The BRT system operates at **most** of the times of day when I would want/need it to
- The BRT system operates at **some** of the times of day when I would want/need it to
- O2 The BRT system operates at **a few** of the times of day when I would want/need it to
- O1 The BRT system does not operate when I would want/need it to
- Q5B. Why do you say that? What times of day would you want [PROPOSED ROUTE] BRT service that isn't in the plan? (OPEN END. DO NOT REQUIRE RESPONSE.)
- Q6A. How well would you say the [PROPOSED ROUTE] meets your needs?

[PROPOSED ROUTE] will operate every: [INSERT FREQUENCIES]. [SHOW PICTURE OF ROUTE PROFILE]

Additionally, the proposed frequencies can also be found here: [LINK TO ROUTE PROFILE FOR ROUTE SELECTED AT Q8A]

- The BRT vehicles will come as frequently as I would want/need them to
- The BRT vehicles will come **nearly** as frequently as I would want/need them to
- The BRT vehicles will come **somewhat** as frequently as I would want/need them to
- The BRT vehicles will come **barely** as frequently as I would want/need them to
- The BRT vehicles will not come frequently enough for me to use them
- Q6B. Why do you say that? How frequently would you like [PROPOSED ROUTE] to operate? **(OPEN END. DO NOT REQUIRE RESPONSE.)**

#### **ASK EVERYONE:**

- Q16. Please share any additional comments you have on what is most important to you in a new BRT system. **(OPEN END. DO NOT REQUIRE A RESPONSE.)**
- Q17. If BRT was available in your area, overall how likely would you be to consider using it?
  - 05 Extremely likely
  - 04 Very likely
  - 03 Somewhat likely
  - 02 Not very likely
  - 01 Not at all likely
- Q7A. Do you have any comments on anything you would like to see in the BRT Action Plan that was not included? If so, tell us below. **(OPEN END. DO NOT REQUIRE RESPONSE.)**



Q19. Do you have any additional comments regarding the proposed BRT Action Plan document? [LINK TO PLAN DOCUMENT] If so, please tell us below. **(OPEN END. DO NOT REQUIRE RESPONSE.)** 

		DEMOGRAPHICS
-		
ASK EV	ERYONE:	
S1.	What is	your home ZIP code?
		<del></del> <del></del> <del></del>
	98	Prefer not to answer
THOSE	WHO DO	NOT PROVIDE HOME ZIP CODE [S1(98)], ASK:
S2.		h of the following areas is your current, primary residence?
0		and the following an east of four carry primary restrictions
	01	Arlington County
	02	Fairfax City, VA
	03	City of Alexandria, VA
	04	City of Falls Church, VA
	05	Manassas, VA
	06	Manassas Park, VA
	07	Herndon, VA
	08	Vienna, VA
	09	Somewhere else in Fairfax County
	05	Somewhere else in runnux country
	10	Leesburg, VA
	11	Purcellville, VA
	12	Somewhere else in Loudoun County
	13	Dumfries, VA

97 Or somewhere else (specify)

Somewhere else in Prince William County

98 Prefer not to answer

#### **ASK EVERYONE:**

14

D3. Which of the following best describes your age?

01	18-24
02	25-34
03	35-44
04	45-54
05	55-64

06 65-74 07 75 or older

07 75 or older

98 Prefer not to answer



- D4. What is your racial or ethnic identity? Please select all that apply. (MULTIPLE RESPONSES ACCEPTED.)
  - 01 American Indian or Alaska native
  - 02 Asian
  - 03 Black or African American
  - 04 Hispanic or Latino
  - 05 Native Hawaiian or other Pacific Islander
  - 06 White or Caucasian
  - 95 Other (specify)
  - 98 Prefer not to answer
- D5. Which of the following ranges contains your annual household income before taxes?
  - 01 Less than \$30,000
  - 02 \$30,000 to \$49,999
  - 03 \$50,000 to \$74,999
  - 04 \$75,000 to \$149,999
  - 05 \$150,000 or higher
  - 99 Don't know/Prefer not to answer
- D6. What is your gender identity?
  - 01 Female
  - 02 Male
  - 03 Non-binary, or
  - 95 I use a different term (specify)
  - 98 Prefer not to answer
- D7. Is English your primary language?
  - 01 Yes
  - 02 No
  - 98 Prefer not to answer

#### THOSE WHOSE PRIMARY LANGUAGE IS NOT ENGLISH [D7(02)], ASK:

- D8. How well do you speak English? (IF D7(01), FORCE IN 03.)
  - 03 Very well
  - 02 Well
  - 01 Not well
  - 98 Prefer not to answer

#### **ASK EVERYONE:**

- D9. Do you identify as having a disability?
  - 01 Yes
  - 02 No
  - 98 Prefer not to answer



THOSE	wно н	AVE A DISABILITY [D9(01)], ASK:	
D10.	Do yo	use any of the following mobility aids when riding transit? If so, please select them from the following list.	
	Please	select all that apply. (MULTIPLE RESPONSES ACCEPTED.)	
	01	Manual wheelchair	
	02	Motorized wheelchair	
	03	Scooter	
	04	Leg braces	
	05	Prosthesis	
	06	Service/Guide animal	
	07	Support cane	
	80	Long cane (for the blind)	
	09	Crutches	
	10	Walker	
	11	Respirator/Oxygen tank	
	12	Travel with a companion	
	13	Rollator	
	95	Other (specify)	
	97	I do not use mobility devices	
	98	Prefer not to answer	
			_
ASK EV	ERYON		
D11.		s your current employment status? Are you? (ACCEPT MULTIPLE RESPONSES. DON'T ALLOW 97 WITH 01	
	OR 02	)	
		06 A full-time worker	
		07 A part-time worker	
		08 A homemaker	
		09 A student	
	0.0	10 Active military	
	06	Retired	
	97	Not currently employed	
	98	Prefer not to answer	
D12.	Includ	ng yourself, how many people live in your household? (RANGE=1-50.)	
DIZ.	merad	_ number of people in household	
	98	Prefer not to answer	
	30	Trefer not to unswer	
Q16.	Do vo	ı have any additional comments you would like to make regarding transportation in Northern Virginia? (OPI	EN-
	-	D. DO NOT REQUIRE AN ANSWER.)	
	<b>-</b>	,	
D13.	To be	entered into the drawing for a chance to win a \$50 gift card, please provide either your email address and/o	r
		number.	



A.

В.

 $\bigcirc$ 

EMAIL:\_

TELEPHONE NUMBER:\_\_

Do not wish to enter into drawing

# **APPENDIX H.PHASE 3 SURVEY WEIGHTING**

NVTA Survey Responses - As of 5/19/2025 - cleaned

Jurisdiction of Residence	Responses	% Responses Overall	% Responses within the region	Population in 2025 Source: COG cooperative forecasts	% Population in 2025 (Target)	Weighted Response Target	Weight	Check
Arlington County	118	20.1%	22.2%	245,773	9.1%	48.22429789	0.408680491	48.22429789
Fairfax County	136	23.2%	25.6%	1,202,436	44.4%	235.9357288	1.734821535	235.9357288
Loudoun County	39	6.6%	7.3%	456,238	16.9%	89.52064394	2.295401127	89.52064394
Prince William County	44	7.5%	8.3%	515,200	19.0%	101.0898605	2.297496829	101.0898605
City of Alexandria	117	19.9%	22.0%	180,528	6.7%	35.42226384	0.302754392	35.42226384
City of Fairfax	24	4.1%	4.5%	27,813	1.0%	5.45732199	0.227388416	5.45732199
City of Falls Church	29	4.9%	5.5%	15,479	0.6%	3.037208754	0.104731336	3.037208754
City of Manassas	19	3.2%	3.6%	43,740	1.6%	8.58243497	0.451707104	8.58243497
City of Manassas Park	5	0.9%	0.9%	19,011	0.7%	3.730239397	0.746047879	3.730239397
Outside of Northern VA	42	7.2%	-	-	-	42	1	42
Prefer not to answer	14	2.4%	-	-	-	14	1	14
Total	587	100.0%	100.0%	2,706,218	100.00%	587		587
NoVA Region Total	531							

