

Rural Transportation Analysis

Community Guide

We would like to extend our gratitude to the community members, stakeholders, partners, and advisory group members whose insights, participation, and collaboration have been invaluable in shaping this project.

Your input has provided the foundation for a meaningful exploration of rural transportation needs, and your continued support will help us build a more accessible and connected future for all residents. Thank you for your commitment to this effort.

Prepared by:







May 2025



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Definitions

Public Transportation: Buses and other transit services that are open to everyone, often with regular routes and schedules.

Demand-Response Service: Transit that picks people up based on ride requests instead of a fixed schedule. Riders usually book ahead.

On-Demand Transit: Similar to demand-response, but riders request trips in real time using an app or phone.

Microtransit: Flexible transit using smaller vehicles that operate within a set area. Rides are requested by app or phone and often work well in low-density places.

Paratransit: Transportation for people with disabilities who can't use regular buses. May also serve older adults or others with limited mobility.

Express Bus: Bus routes with limited stops, usually during rush hours, that connect commuters from park-and-ride lots to job centers.

Fixed-Route Transit: Buses that follow the same route and schedule every day. Riders don't need to book a trip in advance.

First-Mile/Last-Mile: How you get to or from a transit stop, like walking, biking, or microtransit.

Park-and-Ride Lots: Designated spots where people park their cars and switch to bus or carpool.

Mobility Device: Equipment like wheelchairs, scooters, or walkers that help people get around. Transit systems must allow them.

Transit Propensity: A measure of how likely that people in an area will use public transportation.

Service Area: The geographic area where a transit service operates.

Transit-Oriented Development (TOD): Designing neighborhoods with homes, jobs, and shops near transit stops to make walking and riding easier.

Traditional Village Development (TVD): A compact, walkable neighborhood design often used in rural areas to reduce driving.

RideFinders: The regional program that helps organize carpools and vanpools to reduce solo driving.

Ridesharing: Sharing a ride with others going the same way, often through an app or employer.

Volunteer Transportation: Rides provided by volunteer drivers, often for seniors or people who can't drive, usually organized by nonprofits.



What is this Study?

The Rural Transportation Analysis (RTA) is a study focused on identifying and improving public transportation options in rural areas of the PlanRVA region.

By analyzing current needs and exploring innovative solutions, the RTA aims to enhance mobility, connect communities, and provide equitable access to essential services like jobs, healthcare, and education.

What is public transportation?

Public transportation refers to shared services that help people travel within and between communities.

These services are available to everyone and include:

- fixed-route bus
- bus rapid transit (BRT)
- metro/subway
- light rail
- commuter rail
- paratransit
- other forms of shared transportation that operate on fixed routes or schedules

Public transportation is essential for connecting people to jobs, schools, healthcare, shopping, and leisure activities. It also plays a key role in reducing traffic congestion, cutting greenhouse gas emissions, and supporting sustainable, accessible, and inclusive communities.





What is public transportation like in rural areas?

Rural counties in the Richmond region face transportation challenges due to their low population density, long distances, and limited public transit options. Many residents, including older adults and those without reliable transportation, struggle to access essential services.

Flexible solutions like on-demand transit, improved connections, and targeted investments are vital for closing these gaps and ensuring better mobility and quality of life for everyone.



What did the public say?

A survey gathering public input on rural transportation needs in our counties was conducted from August 15 to October 31. Based on what we heard, the main barrier to public transportation use is its lack of availability.

Residents have expressed a need for better walking and biking infrastructure to improve accessibility and complement public transit in the future. There is also a strong demand for enhanced road safety, including better lighting and maintenance.

Key improvements that would encourage public transportation use include more convenient routes, increased service frequency, and additional park-and-ride facilities.





Key Public Input Data Points

The Rural Transit Analysis Study opened a survey (August - Oct, 2024) for anyone who lives works and/or plays in the five rural counties of the PlanRVA region. Some key data points are presented here.

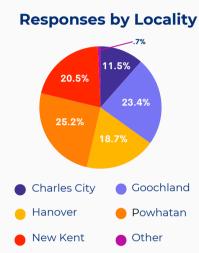
Total respondents: 321

A robust reporting of public input, comments, and staff recommendations incorporating this data is available in a Community Report available online here.

65 - 74

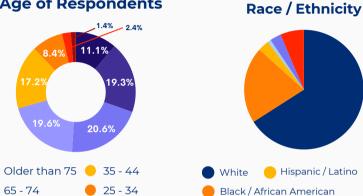
55 - 64

45 - 54



How Do You Mostly

Age of Respondents



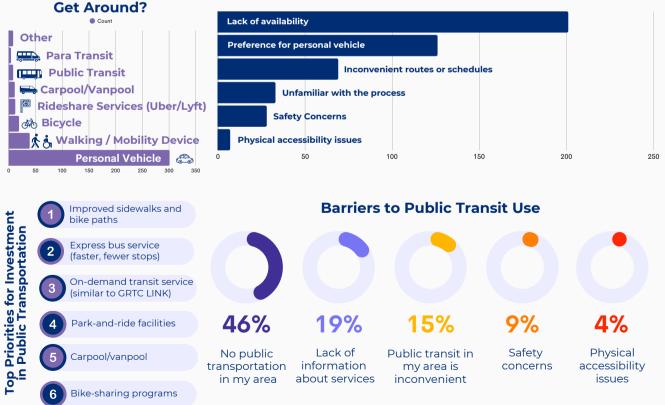
Prefer Not to Answer 📃 Asian

American Indian or Alaska Native

What Are the Reasons You Don't Use Public Transit?

18 - 24

Under 18





What did the Open Comments Say?

Sentiment Breakdown

Most feedback on rural transportation was positive (61.6%), with 26.7% expressing negative views and the remainder being neutral or mixed.

Need for Expanded Transit Options

Residents emphasized the need for more sidewalks, bike paths, microtransit services, and connections to essential destinations. Priorities included improving transportation for seniors, low-income residents, and individuals with disabilities.

Barriers to Access

The lack of public transportation limits access to services, particularly for those with mobility challenges. There is strong interest in more flexible transit options to enhance accessibility across rural areas.

Opposition to Transit Expansion

Some community members expressed skepticism, viewing public transit as underutilized and unnecessary for rural settings.

Community Engagement and Education

Education campaigns are essential to address misconceptions about public transit and promote its benefits. Ongoing engagement with residents is crucial to ensure solutions meet community needs.





What do previous studies say about rural public transportation?

Microtransit and Flexible Solutions

Microtransit and demand-response services are proven as cost-efficient and effective alternatives to fixed routes in rural areas, helping residents access jobs, healthcare, and essential services.

Community Engagement and Partnerships

Engaging local stakeholders and partnering with organizations, healthcare providers, and private mobility companies are critical for expanding services and securing funding for rural transit.

Tailored and Sustainable Approaches

Successful rural public transportation requires customized solutions tailored to community needs, local geography, and future growth, with a focus on sustainability and accessibility for disadvantaged populations.

Infrastructure and Service Gaps

Studies emphasize addressing service gaps in isolated areas by improving multimodal connections, adding bike paths and sidewalks, and extending service hours to meet residents' needs.

Technology and Innovation

Emerging technologies, including electrification, shared mobility, and advanced scheduling tools, are transforming transit systems, making them more efficient, accessible, and responsive to rural communities.



Two of our youngest stakeholders who engaged with this project shared their visions of transportation in our region

"A portal that takes you where you want to go" –Stella Jo, 7 "Free rollercoasters that

take you to other places" –Liam, 9

A **rollercoaster transit system** with free rides sounds like a blast! While building rollercoasters everywhere might be a bit tricky due to high construction and maintenance costs, the idea of fare-free travel isn't far off. In fact, GRTC already offers fare-free transit, making it easier for people to get where they need to go without worrying about the cost. Just like free rollercoaster transportation, fare-free transit helps reduce barriers, encourages more people to ride, and keeps our community moving smoothly—though maybe without the loops and drops!

A **portal system** would be an amazing breakthrough for transportation! Teleportation would erase traffic and be carbon neutral since no fuel would be needed beyond what powers the portal itself. While we're not quite there yet with teleportation technology, it's exciting to think about what the future holds and how emerging innovations, like electric and autonomous vehicles, can improve how we move around.

These ideas remind us how important it is to think big! While we may not have rollercoaster transit or portals just yet, **every great idea starts with imagining what's possible**. Planning for transportation isn't just about solving today's challenges—it also involves looking ahead 10, 20, 50, or even 100 years into the future. The choices we make now will shape the way we move around tomorrow, and this creativity helps spark the conversations that lead to real solutions. **Keep these ideas coming**—we're building a better future together!





What are the Transportation Needs?

The Rural Transportation Analysis Report identifies key transportation challenges across Charles City, Goochland, Hanover, New Kent, and Powhatan counties. The region faces significant barriers to mobility, especially for vulnerable populations, due to limited transit services, infrastructure gaps, and economic constraints.

Key Issues:



Limited public transit services



Economic barriers such as cost of vehicle ownership or poverty



Inconsistent volunteer and demand-response services



Growing needs for vulnerable populations



Infrastructure and safety concerns



Dependence on Personal Vehicles

Geographic isolation from essential services



Fragmented regional connectivity



Insufficient Pedestrian and Bicycle Infrastructure



Growing number of older populations



Limited transportation options for people with disabilities



Trips from rural areas typically must cross jurisdictional boundaries





From the Source

A regional questionnaire involving local governments, non-profits, and community groups revealed significant transportation challenges in rural areas, often described as "nonexistent" or "very limited."

Stakeholders expressed strong interest in solutions like microtransit, volunteer driver programs, and regional transit coordination, particularly to support vulnerable populations such as older adults and those without vehicles.

Key barriers include limited options for lowincome residents, individuals with disabilities, and those with limited English proficiency, as well as a lack of awareness about existing community-led initiatives.





The findings emphasize the need for structural transit improvements and better communication to ensure equitable and accessible transportation for rural communities.



What needs were identified?

The identified needs, based on past studies and stakeholder input, highlight demographic challenges, service gaps, and infrastructure limitations that restrict mobility for vulnerable populations.

The analysis emphasizes the importance of tailored, flexible solutions such as expanded demand-response services, improved pedestrian and bicycle infrastructure, and stronger regional collaboration. Addressing these gaps will support the development of an equitable, sustainable, and accessible transportation network for all residents.



What are the Possible Solutions?

The spectrum of possible solutions refers to a variety of transportation alternatives designed to meet the unique needs of different communities.

In rural areas, these solutions must tackle challenges such as low population density, limited existing services, and the need for flexible, accessible, and affordable options.

The goal is to enhance mobility, improve access to essential services, and ensure transportation equity for all residents, including older adults, individuals with disabilities, and lowincome households.





Recommended Alternatives

Our team has reviewed community and stakeholder feedback, analyzed travel patterns, and assessed transportation data across Charles City, Goochland, Hanover, New Kent, and Powhatan counties. From this work, we've developed a set of recommended alternatives—different transportation programs or services that are most likely to meet local needs and improve mobility in rural areas.

Recommended alternatives are the transportation options we think are most feasible and effective. These include express bus routes, microtransit service zones, and demand-response programs tailored to the unique needs of each locality.

What We've Heard

Survey results and engagement efforts highlighted key challenges for rural residents, including:

- Long travel distances to essential services
- Limited or no access to public transit
- High costs of vehicle ownership
- Mobility barriers for older adults and people with disabilities
- A need for more flexible, reliable, and affordable transportation options





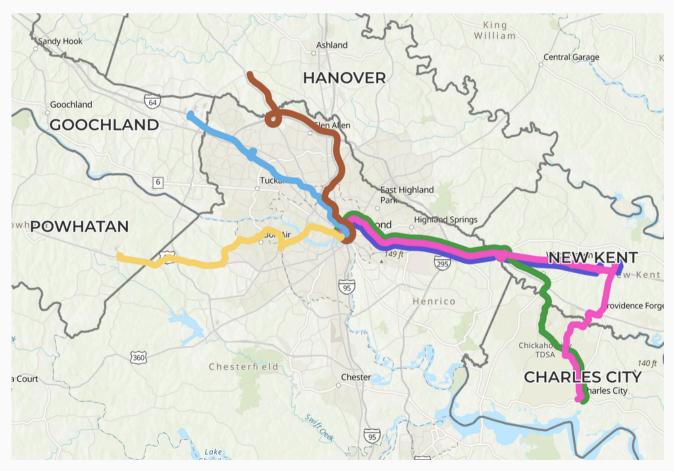
Alternatives Considered

Based on our analysis and stakeholder feedback, the following alternatives have been proposed for each county.

Express Bus Service

New and expanded express routes between key rural population centers and the GRTC frequent transit network, including concepts like:

- Charles City Express new service from Charles City to Downtown Richmond
- Chickahominy Express new service from CC & NK to Downtown Richmond
- Hanover Express new service from western Hanover to Downtown
 Richmond
- Goochland Express extension of Gaskins Express service to Goochland
- New Kent Express new service from New Kent to Downtown Richmond
- Powhatan Express extension of Stony Point Express service to Powhatan



Possible express routes. Clockwise from left: Powhatan Express (yellow), Goochland Express (blue), Hanover Express (brown), Charles City Express (green), Chickahominy Express (pink), and New Kent Express (blue)



Microtransit Zones

New and expanded flexible, ondemand service within defined zones that can connect people to nearby destinations or transit hubs.

- Hanover: Zone centered around western part of county, including the express bus terminus
- **Goochland**: Zone centered around eastern part of county, , including the express bus terminus



Demand Response Services

Expand demand-response programs to all rural counties where microtransit or fixed-route service is not practical. These are typically scheduled ahead of time and used for essential trips, often operated by transit service providers or contracted through a third party. Demand Response is already available to New Kent and Charles City through Bay Transit.

Transit-Supportive Infrastructure

There are various infrastructure needs for transit, depending on the service types. More rural transit with less frequent service and fewer stops means fewer projects that add up in cost. Things like sidewalks and bike lanes, which would be considered essential transit infrastructure in urban and most suburban settings, isn't expected to reach all surrounding residents in rural area.

Examples of different infrastructure are:

- <u>Park and Ride Lots</u>: Designated parking areas where commuters can leave their cars and connect to express buses or microtransit services
- <u>Bus Shelters and Benches</u>: Covered waiting areas with seating to enhance comfort and accessibility for riders
- <u>Sidewalks and Pedestrian Crossings</u>: Safe, well-marked walkways that improve first-mile/last-mile connections to transit stops
- <u>Bike Lanes and Bike Racks</u>: Basic infrastructure to support multimodal commuting



• Real-Time Arrival Displays: Digital or static information boards that provide updated bus arrival times and route details



Left: Park and ride bus shelter in Henrico Right: Bike parking sign at New Kent lot



Phased Infrastructure Needs

Infrastructure matters when it comes to making rural transit work. Each service type—like express bus or microtransit—comes with its own needs and limitations.

To run effectively, express bus routes need park-and-ride lots where people can leave their cars and catch the bus. Some lots are ready now, but others need upgrades or new agreements.

Short-term Park and Ride Needs

- With funding, the following lots can be served as is:
 - Bottoms Bridge (New Kent)
 - Providence Forge/Public Works (New Kent)
- With improvements:
 - Hickory Haven (Goochland)
 - Charles City (Charles City)
- With lease agreement:
 - Holly Hills (Powhatan)
 - Express service not possible without infrastructure (Hanover)



Long-term Park and Ride Needs

- New Lot Needed
 - Farrington (Hanover)
 - Holly Hills (Powhatan)
- Expansions to existing lots based on demand/growth (New Kent, Goochland)

GRTC is expected to operate these routes, but funding and capital planning (like vehicle storage) will need coordination.



Microtransit Needs

Vehicles, storage, and maintenance is not a constraint for GRTC or Bay Transit in planned or future microtransit service.

Zones will be layered on express service, to include park & ride touch point.



What happens next?

In 2025 and beyond, stakeholders will continue working together to refine these recommendations, identify implementation steps, and pursue funding opportunities at the local, state, and federal levels. This includes aligning efforts with ongoing studies, upcoming grant cycles, and infrastructure improvements such as park-and-ride upgrades and microtransit zone expansions.

Each county's needs and service opportunities—ranging from new express routes to demand-response transit—will be further explored with partners like GRTC, Bay Transit, and local governments. As implementation begins, continued community input and collaboration will be vital to ensuring that services are responsive, sustainable, and equitable.

You can keep up to date on this and other projects at engage.planrva.org

The full Rural Transportation Analysis Report can be found at **engage.planrva.org/rural-transportation**





Rural Transportation Analysis

