



# ACTION PLANEDITION

Actions and Strategies for Improving Transportation Equity in Richmond

Part of the Richmond Connects
Strategic Multimodal Transportation Plan



# **Table of Contents**

Introduction	3
Action Plan Projects	10
Action Plan Strategies	
INC1A: Bicycle	
INC1B: Pedestrian	
INC2: Transit	29
INC3: Freight	32
INC4: Land Use	35
INC5: Safety	39
INC6: Connectivity	43
INC7: Maintenance	47
INC8: Economic Development	
INC9: Technology	54
INC10: Sustainability	
How We Do Business	61
Using This Plan	66
Appendix A: Action Plan Projects Details	67
Prioritize What the People Need - High Priority Projects	68
Priority Sidewalk Gap Projects	108
Priority Sidewalk Repair Projects	111
Priority Bus Stop Infrastructure Projects	
Priority Pavement Maintenance Projects	
Finish What We Started - Priority Completion Projects	
Finish What We Started - Other Completion Projects	
Move Forward With What We Can - Short-Term Projects	135
Appendix B: List of Acronyms	141

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# INTRODUCTION

### Transportation investments have the potential to transform Richmond into a more equitable city where all residents can thrive.

Past transportation decisions have created injustices that have harmed people of color, low-income communities, and other marginalized groups of people. These injustices and the burdens they place persist today. Access to opportunities is not equal for all Richmonders. The color of your skin and the neighborhood you live in often determine how easy or hard it is to get around. Getting to employment, education, food, healthcare, and other destinations is much more burdensome for some Richmonders than others.

Richmond Connects is one piece of the City of Richmond's efforts to change. It's a plan to create a different future where everyone has ample access to opportunities and no group of people encounters more barriers to safe and reliable transportation than any other group.

The Richmond Connects process will result in three plan documents:

- The Richmond Connects Strategic Plan is the multimodal transportation plan for the City of Richmond. This comprehensive document identifies projects and strategies to make transportation in Richmond more equitable, based on a rigorous equity-centered data analysis and equity-focused community engagement.
- 2. The **Richmond Connects Near-Term Action Plan** showcases the most important project and strategy recommendations with specific next steps for the next 5 to 10 years.
- 3. The **Richmond Connects Long-Term Scenario Plan** will guide transportation investments into the 2050 planning horizon.

This document is the Richmond Connects Near-Term Action Plan.

The content of the Richmond Connects plans emerged from an inclusive process that amplified community voices often overlooked in decision-making. The process identified transportation injustices of the past, mapped current access barriers, and emphasized an inclusive, data-driven approach to create an equitable transportation network.

In Richmond Connects, "equity in transportation" means removing barriers and increasing access to opportunities, so that no group faces more barriers to accessing opportunities than any other.

The Richmond Connects Near-Term Action Plan lays out two lists of actions:

- High Priority Projects: Infrastructure projects and transit service improvements to physically change Richmond's transportation system to be safer and more equitable
- **High Priority Strategies:** Programmatic and policy changes to address issues that infrastructure projects alone cannot solve

Together, these projects and strategies are investments aimed at empowering communities, removing access barriers, and creating safer and more equitable walking, biking, and transit options. They are the City of Richmond's immediate priorities based on equity-focused community input and a robust analysis of data.

As the City of Richmond works through these immediate actions, the Richmond Connects Near-Term Action Plan will be updated periodically, so that it continues to serve as the City's guiding action plan for making transportation equitable.



### **IMAGINE WHEN** RICHMOND TRANSPORTATION IS EQUITABLE Isabella's uncle can take a free ride to work in an electric van to the neighboring county where he has full-time salaried job. Her cousin Tim rides the same van to daycare for free. Isabella and her friends can safely walk to school on a network of well-maintained, safe sidewalks and trails. Richmonders drive slowly because the streets are designed to discourage speeding. Richmond drivers stop for pedestrians, are educated on road safety, and care deeply about walkers and bikers. Isabella's family can quickly and easily visit each other by taking a network of Bus Rapid Transit lines that connect North, South, East, and West corners of the city. In 2037, 6-year-old Isabella lives in a home that is affordable to her single parent, Alex. Isabella's family and friends can all easily get to parks, community Isabella's parent is later gardens, shopping, and other Isabella's parent is able to able to take a bus ride to activities on bikes and don't have to navigate her Grandmother's her night shift at the local worry about their safety when riding wheelchair on accessible hospital. She can stop at a in bike lanes. sidewalks to a multimodal hub, local grocery store on her where she can easily and safely way home and access get her to a doctor's healthy food options. She appointment. There is shade feels safe and secure and Isabella's family, friends, and along her trip and landscaping the bus is frequent and neighbors can move safely helps her stay cool. reliable and free. throughout the city regardless of their income and race - everyone has the same opportunities and all can thrive. Vision Zero is achieved! RICHMOND Solve Connects rvaconnects.com

Figure 1. Richmond Connects Equitable Transportation Vision.



# It's about equity, not equality

Equality is the concept of providing equal resources to all people. Equity is the process of eliminating disparities among people to improve outcomes.



Figure 2. Equality vs. Equity (from the Robert Wood Johnson Foundation). This graphic depicts how providing different levels of aid based on a person's needs will result in a more equal outcome.

The Path to Equity Policy Guide explains how transportation investments over the past 150+ years have been inequitable and discriminatory. The results of these disparities are present today. The areas of Richmond with the highest percentages of Communities of Concern have the poorest access to destinations by walking, bicycling, and transit (see Figure 32).

For the purpose of data analysis, Richmond Connects defines a Community of Concern as an area where a high percentage of the population are Black, Indigenous, or People of Color (BIPOC), low-income, seniors, renters, non-English primary, at-risk youth, BIPOC renters, or limited mobility. The numeric thresholds and analysis methods are further described in the Richmond Connects Strategic Plan.

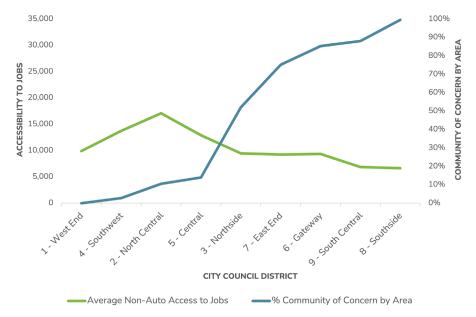


Figure 3. Non-Auto Accessibility to Jobs vs. Community of Concern Percentage by Council District. Getting to jobs by walking, bicycling, and transit is harder in Districts with high percentages of Communities of Concern, where non-auto access is most needed.

A "Community of Concern" or "Community of Opportunity" is a geographic location or group of similar people who have been traditionally marginalized.

In developing the high priority projects and strategies in this Action Plan, the Richmond Connects team focused on addressing transportation injustices of the past and current access barriers. Overall, the plan aims to allocate transportation dollars to areas with the greatest historical and current inequities.



# **Richmond Connects "Big Moves"**

Rethink Essential Transit Infrastructure: Bus stops dignified as a placemaking opportunity.

Richmonders were loud and clear that waiting at the bus stop out of the elements was a priority, and the plan prioritizes improvements based on equity-centered needs. The recommendations elevate the GRTC Essential Transit Infrastructure plan to a Richmond City priority.





Act Quick: Responsive Lighter, Quicker, Cheaper projects to address safety NOW. Safety projects are abundant in the plan. Many projects have LQC options identified for immediate implementation. We cannot wait 10 years to solve these problems, and this plan identifies opportunities to act quickly.

Achieve Spatial Justice Through Transit: Transportation access is a civil right, and all Richmonders deserve access. Recommendations like the North-South Bus Rapid Transit and new bus service on Mechanicsville Turnpike will provide key access for the essentials of daily life. The plan proposes strategies to invest more into increasing frequency and reliability of the existing bus service, which is a lifeline service for many Communities of Concern.





Close the Gaps: Address accessibility and affordability through recommended equity-centered programming and actions. Building bike lanes and new transit service only matters if it's affordable and connects to something. Many programs described within the plan aim to link land use and transportation to ensure transportation connects to relevant places. The plan also offers recommendations to increase access to key programs for our most vulnerable Richmonders, including through free programs and reduced fees.

Sidewalks, Sidewalks: Restore and close gaps in the sidewalk network as a means of mending the fabric of social connectivity. Sidewalks connect many Richmonders to their community and to essential destinations. Communities with no sidewalks or trails, or whose walkways are in disrepair, are left disconnected. Without ADA-compliant curb ramps, people who use wheelchairs or other mobility devices are forced to ride or walk in the street. The plan proposes a new program to fund major sidewalk construction and identifies specific sidewalk and trail projects that are needed most.





# **An Equity-Centered Process**

Richmond Connects was rooted in a data-driven process to define equity-centered transportation needs. It identified transportation system needs and people needs separately, and combined them to identify equitable outcomes that redress past injustices and remove barriers that persist today.

The data analysis was centered around 11 Investment Need Categories and the 10 Equity Factors defined in the Path to Equity. This process is documented in the full Richmond Connects Strategic Plan.

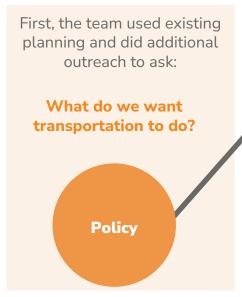
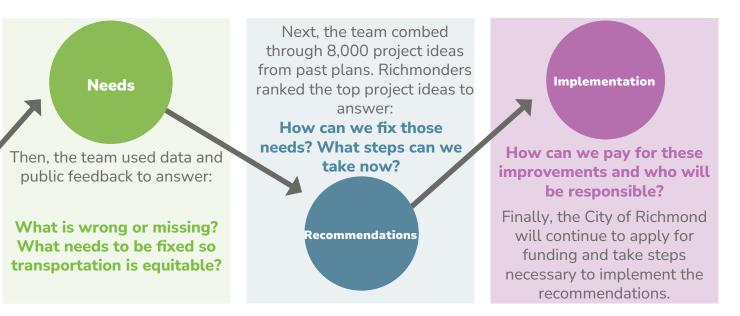


Figure 4. Richmond Connects process.





The process was driven by equity-centered community engagement at every step. Beyond data analysis, the equitable transportation needs were identified through thousands of public comments. In every stage of plan development, continuous community engagement focused on meeting people where they were, listening to traditionally underrepresented communities, and compensating people for their time and knowledge. Public support, especially among Communities of Concern, was the highest weighted criterion for selecting both high priority projects and strategies.

The ambitious list of projects and strategies in this Action Plan reflect the priorities of thousands of Richmonders, especially those who currently face barriers to accessing opportunities. There are many projects that didn't make it to this final list. Other priority projects and strategies are included in the Richmond Connects Strategic Plan.

While the path to achieving transportation equity in Richmond will not be quick or easy, the City of Richmond is committed to taking this path. This Richmond Connects Action Plan provides the first steps.



Figure 5. Community Engagement Approaches. The Richmond Connects team employed a wide variety of approaches and incentives to engage traditionally under-represented and marginalized communities.



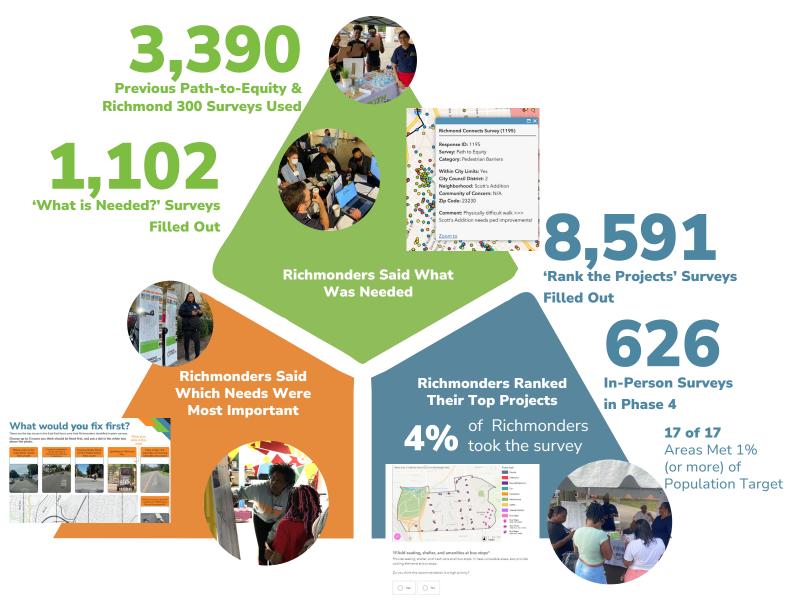
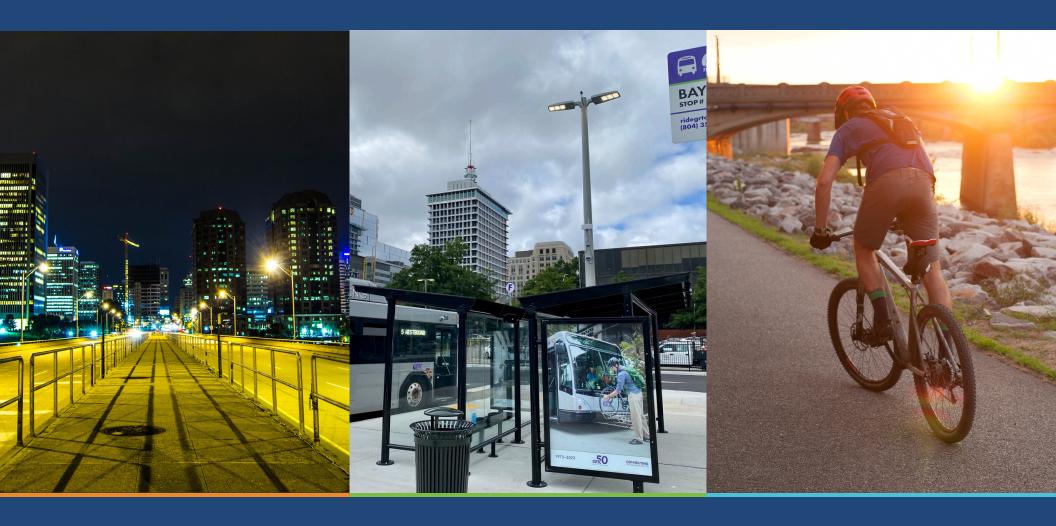


Figure 6. Richmond Connects Community Engagement Overview.



# **ACTION PLAN PROJECTS**



# **ACTION PLAN PROJECTS**

"Action Plan projects are mappable infrastructure improvements and transit service improvements. These projects are most critical to improving transportation equity in Richmond and address the highest equity needs. The Action Plan projects are presented in three categories.

PRIORITIZE WHAT THE PEOPLE NEED: Highest priority for implementation. These projects directly address issues that Communities of Concern said were most needed, with extra weight given to projects that are direct investments in disinvested areas. These projects may be difficult to implement, but are the most important to move the needle on transportation equity. These projects are also called "High Priority Projects", and they are listed first in the Action Plan Projects table.

FINISH WHAT WE STARTED: These projects are already underway. They have already received at least partial funding for design and implementation. Filling any remaining funding gaps is a priority to bring these projects to completion, making the best use of taxpayer dollars. There are two types of projects within this category:

- Priority Completion Projects These projects were included in the draft list of recommendations presented to the public in the Phase 4 survey, and meet a top equity need.
- Other Completion Projects These are projects that were not included in the Phase 4 survey of draft recommendations. These are projects currently in the City's Capital Improvement Program and meet an equity need identified in the Richmond Connects needs analysis.

MOVE FORWARD WITH WHAT WE CAN: These projects are low-cost or easily implementable, and have at least a moderate level of support from the general public and Communities of Concern. These projects are also called "Shorter Term Projects."

The Action Plan Projects are displayed in the map on the next page. The subsequent pages contain the Action Plan Project List, which provides a high level Cost Legend
\$ - Low cost: Less than \$500,000
\$\$ - Moderate cost: \$500,000 to \$3 mil.
\$\$\$ - High cost: \$3 mil. to \$10 mil.
\$\$\$\$ - Very high cost: Over \$10 mil.

general magnitude of cost, support score, and page reference for each project.

The support score shows the level of support the project has from the general public and Communities of Concern. It's a number from 1 (lowest support) to 5 (highest support). The scores were computed from the results of the survey on draft recommendations. Up to 4 points were possible based on the survey results, and an extra point was given to projects that are direct investments in Community of Concern areas. The survey and analysis methods are described in more detail in the Richmond Connects Strategic Plan.

The page reference is a link to more information on the project in Appendix A including an explanation of why this project is a priority for improving transportation equity in Richmond, a full project description, and immediate next steps.

Prioritize What the People Need projects are listed first, then the Finish What We Started projects, and then the Move Forward With What We Can projects. Projects are ranked by their support score. More information on each project is provided in Appendix A.



# Richmond Connects Action Plan Projects Map

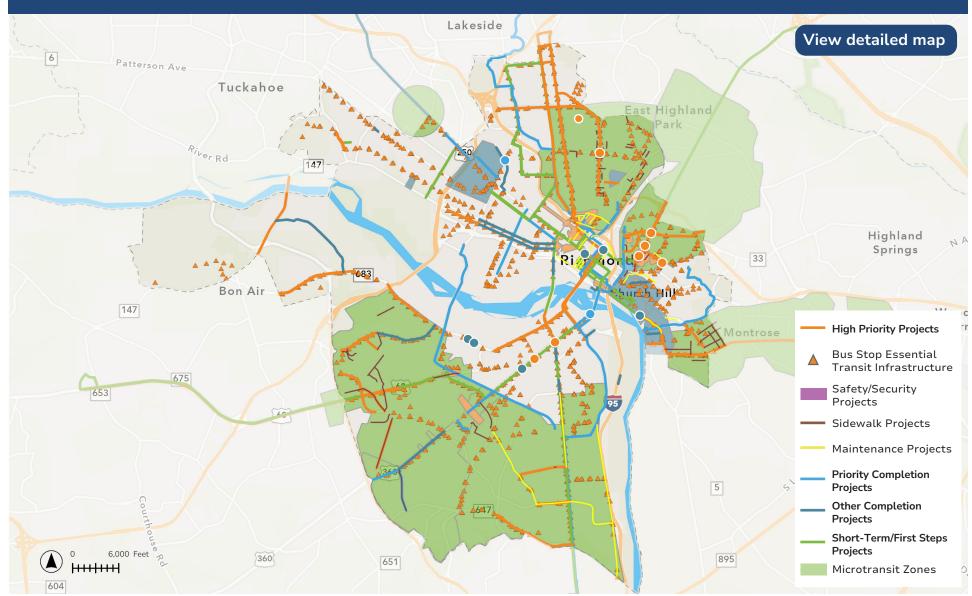


Figure 7. Richmond Connects Action Plan Projects Map.



**SHORTER-TERM** 

# **ACTION PLAN PROJECTS LIST**

Rank	Project ID	Project Name	Cost	Support Score	Page Reference
1	4C	Richmond Connects Equity-Driven Sidewalks Projects	Very High (\$\$\$\$)	5.0	68
2	5B	Mosby Street/ Mechanicsville Turnpike Pedestrian Safety Improvements	Moderate (\$\$)	5.0	69
3	1C.3	Laburnum Avenue Safety Improvements	High (\$\$\$)	5.0	70
4	1C.1	Chamberlayne Avenue Pedestrian Safety Improvements	High (\$\$\$)	4.9	71
5	1C.2	Brook Road Traffic Calming and Pedestrian Safety Improvements	High (\$\$\$)	4.9	72
6	12C	Midlothian Turnpike Safety Improvements - German School Road to Carnation Street	Very High (\$\$\$\$)	4.9	73
7	10A.1	Bells Road Sidewalks	High (\$\$\$)	4.9	74
8	10A.2	Walmsley Boulevard Shared Use Path	Very High (\$\$\$\$)	4.9	75
9	10A.3	Terminal Boulevard Shared Use Path	High (\$\$\$)	4.9	76
10	3A	North Avenue Pedestrian Safety Improvements	Moderate (\$\$)	4.8	77
11	12A	Jahnke Road Pedestrian Improvements - Blakemore Road to Hioaks Road	High (\$\$\$)	4.7	78
12	6A	Fairmount Avenue Pedestrian Safety Improvements and Traffic Calming	Moderate (\$\$)	4.6	79
13	9A	Semmes Avenue and Cowardin Avenue Traffic Calming and Safety Improvements	High (\$\$\$)	4.6	80
14	1F	Essential Transit Infrastructure (Shelters, Seating, and Trash Cans) at Bus Stops	Individual Stop = Low (\$) Overall = Very High (\$\$\$)	4.6	81
15	5C	Fairfield Pedestrian Security and Shade Project	Low (\$)	4.5	82
16	6D	Church Hill Street Lighting	Moderate (\$\$)	4.5	83
17	4A	Downtown Safety Spot Improvements	Low (\$)	4.5	84
18	7B	Government Road Streetscape Improvements	Very High (\$\$\$\$)	4.5	85
19	7G	Pulse Bus Rapid Transit Eastern Extension	High (\$\$\$)	4.3	86
20	9C	Hull Street Intersection Pedestrian Improvements - Hull Street at US Route 1, Hull Street at Midlothian Turnpike	High (\$\$\$)	4.3	87
21	11F	Richmond High School of the Arts Pedestrian Safety Improvements	Very High (\$\$\$\$)	4.2	88
22	12B.1	Southside Pedestrian Improvements - Old Warwick Road north of US Route 60	Moderate (\$\$)	4.2	89
23	12B.2	Southside Pedestrian Improvements - Old Warwick Road south of US Route 60	Moderate (\$\$)	4.2	90



# **ACTION PLAN PROJECTS LIST**

Rank	Project ID	Project Name	Cost	Support Score	Page Reference
24	12B.3	Southside Pedestrian Improvements - Carnation Street	Moderate (\$\$)	4.2	91
25	12B.4	Southside Pedestrian Improvements - German School Road	Moderate (\$\$)	4.2	92
26	12B.5	Southside Pedestrian Improvements - Whitehead Road	High (\$\$\$)	4.2	93
27	3B	Dove Street Pedestrian Safety Improvements	Moderate (\$\$)	4.2	94
28	5A.1	Coalter Street Traffic Calming	Low (\$)	4.1	95
29	5A.2	Fairfield Avenue/Fairfield Way Traffic Calming	Low (\$)	4.1	96
30	7A	Williamsburg Road/Williamsburg Avenue Traffic Calming	Moderate (\$\$)	4.1	97
31	1A	Westbrook Avenue Pedestrian Improvements	Low (\$)	4.1	98
32	4K	Richmond Connects Equity-Centered Pavement Maintenance Prioritization	Very High (\$\$\$\$)	4.1	99
33	4G	Reconnect Jackson Ward	Very High (\$\$\$\$)	4.0	100
34	13A	Forest Hill Avenue Pedestrian Safety Improvements - Dorchester Road to Powhite Pkwy	Very High (\$\$\$\$)	3.9	101
35	1E	North-South Bus Rapid Transit	Very High (\$\$\$\$)	3.9	102
36	11A	Southside Plaza Pedestrian Connections Across Railroad Tracks	Very High (\$\$\$\$)	3.9	103
37	16A	Three Chopt Road Sidewalks	High (\$\$\$)	3.8	104
38	17A	Forest Hill Avenue Traffic Streetscape	Moderate (\$\$)	3.8	105
39	17F	Huguenot Road Bikeway	Moderate (\$\$)	3.8	106
40	14L	Carytown Pedestrian Safety Improvements	Low (\$)	n/a	107
1	9B	Hull Street Streetscape - Mayo Bridge to 9th Street	Partially Funded	4.8	119
2	11C	Southwood Parkway Sidewalks	Partially Funded	4.2	119
3	12F	Hull Street Improvements Phase II - Hey Road to Brookhaven Drive	Partially Funded	3.7	119
4	6C	Shockoe Valley Street Improvements	Partially Funded	3.7	120
5	9D	Mayo Bridges Pedestrian and Bicycle Facilities	Partially Funded	3.7	120
6	15C	Arthur Ashe Boulevard Bridge Replacement	Partially Funded	3.7	120
7	11B	Hey Road Improvements	Partially Funded	3.6	121
8	16D	Broad Street Streetscape with Pulse BRT Expansion	Partially Funded	3.5	121



# **ACTION PLAN PROJECTS LIST**

The "Other Completion" projects without a public input score - those in the darker blue - were added after the survey was published and represent existing CIP projects that meet an equity need.

# HIGH PRIORITY PRIORITY COMPLETION OTHER COMPLETION SHORTER-TERM

Rank	Project ID	Project Name	Cost	Support Score	Page Reference
9	15B	Clay Street Streetscape Improvements	Partially Funded	3.4	122
10	6F	Gillies Creek Greenway	Partially Funded	3.2	122
11	5J	Oliver Hill Way Bike Lanes	Partially Funded	3.2	123
12	14H.1	Franklin Street Cycle Track - Lombardy Street to Belvidere Street	Partially Funded	3.2	123
13	14G	Allen Avenue Bike-Walk Street	Partially Funded	3.0	123
14	14J	State Route 161 Bicycle Infrastructure	Partially Funded	2.9	123
15	11	Fall Line Trail	Partially Funded	2.6	124
16	11H	Hull Street Shared Use Path - Arizona Drive to James River Branch Trail	Partially Funded	2.6	124
17	3L	Rowen Avenue/ N 5th Street/ N 3rd Street Bike Lanes	Partially Funded	2.5	124
18	111	James River Branch Trail	Partially Funded	1.6	124
-	C1	Cary Street Safety Curb Extensions	Partially Funded	n/a	125
-	C2	Forest Hill Avenue Pedestrian Safety Improvements - 41st & 43rd Streets	Partially Funded	n/a	125
-	C3	Hull Street at 29th Street Pedestrian Hybrid Beacon	Partially Funded	n/a	125
-	C4	Main Street Safety Curb Extensions	Partially Funded	n/a	125
-	C5	Richmond Highway Phase II Improvements	Partially Funded	n/a	126
-	C6	Richmond Signal System Phase IV	Partially Funded	n/a	126
-	C7	Riverfront/ Orleans BRT Streetscape Improvements	Partially Funded	n/a	126
-	C8	Scott's Addition BRT Streetscape Improvements	Partially Funded	n/a	127
-	C9	Scott's Addition Green Space	Partially Funded	n/a	127
-	C10	Shockoe Bottom BRT Streetscape Improvements	Partially Funded	n/a	127
-	C11	Centralized Transit Signal Priority and Emergency Vehicle Preemption	Partially Funded	n/a	127
-	C12	Highland Grove/ Dove Street Redevelopment	Partially Funded	n/a	128
-	C13	Jefferson Avenue Improvements	Partially Funded	n/a	128
-	C14	Laburnum Median Improvements	Partially Funded	n/a	129
-	C15	Nicholson Street Streetscape	Partially Funded	n/a	129



# **ACTION PLAN PROJECTS LIST**

The "Other Completion" projects without a public input score - those in the darker blue - were added after the survey was published and represent existing CIP projects that meet an equity need.

# HIGH PRIORITY PRIORITY COMPLETION OTHER COMPLETION SHORTER-TERM

Rank	Project ID	Project Name	Cost	Support Score	Page Reference
-	C16	Richmond Fiber Optic Network System	Partially Funded	n/a	130
-	C17	Semmes Avenue, Forest Hill Avenue and Dundee Avenue Pedestrian Safety and Operational Enhancements	Partially Funded	n/a	130
-	C18	Street Lighting - General	Partially Funded	n/a	130
-	C19	Street Lighting - LED Conversion	Partially Funded	n/a	131
-	C20	Westhampton Area Improvements - Phase III	Partially Funded	n/a	131
-	C21	Deepwater Terminal Road Connector to Goodes Street	Partially Funded	n/a	131
-	C22	Hull Street Improvements Phase I - Hey Road to Warwick Road	Partially Funded	n/a	131
-	C23	Jahnke Road Improvements Blakemore Road to Forest Hill Avenue	Partially Funded	n/a	131
-	C24	Maury Street Streetscape	Partially Funded	n/a	132
-	C25	Richmond Highway Improvements	Partially Funded	n/a	132
-	C26	Route 5 Relocation/Williamsburg Road Intersection Improvement	Partially Funded	n/a	132
-	C27	Science Museum BRT Shared Use Path	Partially Funded	n/a	132
-	C28	Capital Trail/Canal Walk Connector to Brown's Island - Phase 1	Partially Funded	n/a	132
-	C29	Cherokee Road Roadside Safety Improvements	Partially Funded	n/a	133
-	C31	Belvidere Street Gateway - Phase IV	Partially Funded	n/a	133
-	C32	Biotech Research Park Roadway Improvements	Partially Funded	n/a	133
-	C33	Mary Munford Elementary School Pedestrian Safety Improvements	Partially Funded	n/a	133
-	G1	Western Pulse Extension	Partially Funded	n/a	133
-	G2	GRTC Dedicated Lanes Study	Partially Funded	n/a	134
-	G3	Downtown Transfer Center	Partially Funded	n/a	134
1	8A	Dock Street Pedestrian Improvements	Moderate (\$\$)	3.6	135
2	12H	GRTC Route 1A (Midlothian Turnpike) Improvements	Moderate (\$\$)	3.5	135
3	5E	Mechanicsville Turnpike Bus Route	Moderate (\$\$)	3.4	136
4	10J	Richmond Highway Transit Improvements	Moderate (\$\$)	3.4	137
5	<b>1</b> J	Brook Road Bike Lanes Protection	Low (\$)	3.4	137







Rank	Project ID	Project Name	Cost	Support Score	Page Reference
6	1G	GRTC Route 14 Increased Frequency	Moderate (\$\$)	3.4	138
7	14H.2	Monument Avenue Bike Lanes	Moderate (\$\$)	3.2	138
8	16E	Willow Lawn Park-and-Ride	Moderate (\$\$)	3.1	139
9	2E	Link: On-Demand Microtransit	Moderate (\$\$)	3.1	139
10	16B	York Road Sidewalks	Low (\$)	2.7	140
11	16H	Malvern Avenue Sight Distance Evaluation	Low (\$)	n/a	140



# Lighter, Quicker, Cheaper Implementation

Transportation projects are often expensive and securing the funding to construct them can take many years. Some improvements can be implemented on a temporary, interim basis with lighter materials or tested out with removable materials. The City intends to implement components of some of the Action Plan Projects using this "Lighter, Quicker, Cheaper" (LQC) implementation strategy.

When a project is implemented in a LQC manner, it does not mean the LQC version replaces a more permanent installation. LQC installations are meant to provide temporary improvements quickly, until the permanent solution can be implemented. LQC projects may implement certain components of a recommendation, and the full permanent improvement will follow.

The project information in Appendix A identifies potential LQC applications, which may include:



• Bikeway improvement: A dedicated path provides increased safety for cyclists by separating them from vehicular traffic. These can be short-lived pop-up demonstration projects or quick build projects using interim materials to bridge the gap for more permanent installations, such as vertical barriers or wider buffers.



Crosswalk improvement: Temporary or demonstration pedestrian safety measures such as high visibility crosswalks, pedestrian refuges within crossings, or curb extensions can slow down cars and make the street more pedestrian-friendly.







- Demonstration of potential improvements:
   Demonstration events are intended to test public support for a project before longer-term solutions are implemented. They are a community engagement tool to collect user feedback and help determine the design and material for permanent improvements.
- Interim street furniture: Temporary structures to protect riders from the elements and seating can be placed at bus stops awaiting more permanent improvements. As GRTC works through its Essential Transit Infrastructure plan to improve amenities at bus stops over the next five years, we can bridge the gap and develop a movable seating/shelter solution that can be transported from stop to stop as they receive permanent infrastructure.
- Traffic calming: Traffic calming measures are intended to lower vehicular speeds, especially on neighborhood roads or commercial corridors where there are many pedestrians and cyclists. Potential improvements include roundabouts, pedestrian refuge islands, raised crosswalks, curb bump-outs, "road diets", centerline hardening, and chicanes.



# **ACTION PLAN STRATEGIES**



# **ACTION PLAN STRATEGIES**

The rigorous community-focused engagement uncovered many problematic policies in need of change and programmatic strategy ideas. The Action Plan strategies listed in the following pages are designed to address issues that infrastructure projects alone cannot solve.

These strategies were developed to address needs that could not be mapped. The strategies were vetted, revised, and prioritized by focus groups representing Communities of Opportunity and by the Richmond Connects Advisory Committee. The strategies are presented by Investment Need Category, yet many strategies are relevant to multiple categories and will have impacts beyond the singular category under which they are listed. Many of these strategies are policies and programs the City of Richmond could quickly adopt and initiate.

Most of them require additional staff, funding and program development, but luckily do not require in-depth engineering studies. As such, many could be implemented quickly and move the needle towards a more equitable city more rapidly than the hard infrastructure projects listed in the previous pages.



Figure 8. Photos of Focus Groups. Participants representing Communities of Opportunity were paid to attend an all-day focus group session to revise and prioritize the strategies.

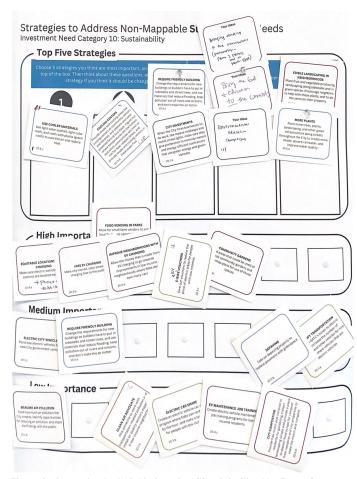


Figure 9. Strategies for INC 10: Sustainability, Prioritized by Focus Groups.

Many strategies are adapted from the Richmond 300 Master Plan, RVAgreen 2050, or Vision Zero Action Plan. These strategies are noted with an asterisk (\*) in the following pages.



# ACTION PLAN STRATEGIES | INC1A: BICYCLE



# Top Non-Mappable Bicycle Needs

### **DRIVER BEHAVIOR**

Drivers don't share the road, aren't friendly with bicyclists, and park in bike lanes.

### **BIKE PARKING**

There aren't enough bike racks or other places to park a bike.

# BIKE ACCESS AND AFFORDABILITY

Some people can't afford to own a bike or use bikeshare. Some people have a physical disability and can't ride a bike.

### **Bicycle Strategy Recommendations**

### **BIKE LANE BARRIERS (1A.1)**

Install temporary barriers between bike lanes and car lanes for a brief test period. This could include testing more robust separation, including more flex posts spaced closer together that are placed at the edge of the parking lane, removeable planters, or other more robust forms of separation.

### **PUBLIC SAFETY CAMPAIGN (1A.2)\***

Conduct a campaign to teach bicyclists, pedestrians, and drivers of their rights and responsibilities, including how to safely share the road, how to safely park a car to avoid blocking the bike lane, promoting the health benefits of cycling, and discouraging distracted driving and distracted walking.

### MORE BIKE RACKS (1A.3)\*

Install more bike racks and corrals for bikes and scooters, and provide free locks or locks on racks, focusing on Communities of Opportunity areas first.

### ACCESS TO BIKES (1A.4)\*

Make RVA bikeshare free for RRHA and other low-income residents permanently, and reduce the price of bikeshare on an income-based sliding scale for all Richmonders. Add more bikeshare stations near bus stops and low-income communities. Add alternative sit-on bikes for those with limited mobility, explore options for family bike carts, and remove rental time and distance limits. For those without access to free bikeshare, recycle and fix up old bicycles, and give them to low-income residents for free through an application process.

<sup>\*</sup>Strategy is adapted from the Richmond 300 Master Plan, Vision Zero Action Plan, or RVAgreen2050 Climate Equity Action Plan 2030. These strategies are not intended to conflict with or supercede the original strategies in other adopted plans. They are repeated here because they are critical to improving transportation equity in Richmond. Wording changes were made to make the language more accessible to the general public. In some cases, the focus group and Advisory Committee intentionally changed the wording of the strategies to clarify the intent and reflect the priorities of Communities of Concern.



# ACTION PLAN STRATEGIES | INC1A: BICYCLE



### **BIKE LANE BARRIERS (1A.1)**

Install temporary barriers between bike lanes and car lanes for a brief test period. This could include testing more robust separation, including more flex posts spaced closer together that are placed at the edge of the parking lane, removeable planters, or other more robust forms of separation.

### **Next Steps:**

### **DPW**

- Hire a Lighter, Quicker, Cheaper coordinator.
- Identify appropriate staff to lead this effort.
- Use the Richmond Connects needs assessment and project list to develop a pipeline for bike lane demo projects.
- Identify key metrics of success on which DPW/OETM should collect data during demos.
- Identify dedicated funding for demo projects and a dedicated project manager for implementing and monitoring these demo projects.

### **OETM**

- Advocate for demos.
- Provide support in acquiring funding.
- Support DPW project managers



LQC Implementation could involve: Installing temporary barriers (bollards, planters, etc.) between bike and car lanes to test which are best.

### **PUBLIC SAFETY CAMPAIGN (1A.2)\***

Conduct a campaign to teach bicyclists, pedestrians, and drivers of their rights and responsibilities, including how to safely share the road, how to safely park a car to avoid blocking the bike lane, promoting the health benefits of cycling, and discouraging distracted driving and distracted walking.

\*This strategy is originally from the Vision Zero Action Plan, Culture strategies and actions, which reads, "Conduct strategic, multi-modal high visibility enforcement campaigns with educational components that are designed to reach all users of the transportation system." The following next steps are intended to support the action as presented in the Vision Zero Action Plan.

### **Next Steps:**

### **OETM**

- Identify key staff.
- Identify community partners, such as OSC, RPD, Office of the Mayor, BikeWalk RVA, VA Community Voice, Safe-Routes-to-School, local universities, Strong Towns, local news organizations, etc.
- Facilitate community partnership work sessions to set and track campaign objectives, collectively develop various messaging that spans a range of interest levels and educational backgrounds, and identify ways to distribute the messages online and in-person that reach all Richmonders, including people who have limited technology access.
- Identify funding, including small grants for community partners to help disseminate collectively-defined messaging.

### **Community Partnerships**

- Participate in community partnership work sessions.
- Spread messaging and report back.



LQC Implementation could involve: Signage to post "no parking" in bike lanes; Allow and incentivize community organizations to post 'notices' on cars in the bike lanes; and Pop-up events and educational resources.



Partners in this strategy could include: OSC, RPD, Office of the Mayor, BikeWalk RVA, VA Community Voice, Safe-Routes-to-School, local universities, Strong Towns, and local news organizations

Actions and Strategies for Improving Transportation Equity in Richmond



# ACTION PLAN STRATEGIES | INC1A: BICYCLE



### MORE BIKE RACKS (1A.3\*)

Install more bike racks and corrals for bikes and scooters, and provide free locks or locks on racks, focusing on Communities of Opportunity areas first. Install bike racks or corrals in parking spaces between bike lanes and vehicle lanes, especially at the first parking space at intersections to improve sight distance.

\*This strategy is originally from Richmond 300, Objective 8.3, Strategy F, which reads, "Increase the number of bike racks on sidewalks and/or use the curb to provide on-street bike parking."

### **Next Steps:**

### **OETM**

- Work with DPW and PDR to establish processes for responding to requests for new bike racks in the public right-of-way and proactively identifying locations for bike rack installation. Identify dedicated staff and funding streams.
- Develop a free bike lock program. Identify potential funding sources and community partnerships. Define parameters for eligibility.

### **DPW & PDR**

 Support OETM to establish the processes and identify staff and funding streams.



**LQC Implementation could involve:** Installing bike corrals in on-street parking spaces.



Partners in this strategy could include: Community organizations and businesses.

### ACCESS TO BIKES (1A.4)\*

Make RVA bikeshare free for RRHA and other low-income residents permanently, and reduce the price of bikeshare on an income-based sliding scale for all Richmonders. Add more bikeshare stations near bus stops and low-income communities. Add alternative sit-on bikes for those with limited mobility, explore options for family bike carts, and remove rental time and distance limits. For those without access to free bikeshare, recycle and fix up old bicycles, and give them to low-income residents for free through an application process.

\*This strategy is originally from the RVAgreen 2050 Climate Equity Action Plan 2030, Strategy TM-2.1, Action iv, which reads, "Expand the bike and e-bike share program citywide and make it accessible and affordable."

### **Next Steps:**

### **OETM**

- Assess funding availability for additional subsidies for low-income bike riders.
- Assess funding availability for alternative cycle models with sit-on bikes and/or bikes with side cars or carts for children.
- Complete a bikeshare and bike access plan to document the costs of, benefits of, and precedents for bike-share and bike access improvements and programs.



**LQC Implementation could involve:** Have bike cards available to check out at public libraries.



Partners in this strategy could include: BikeWalk RVA and other community partners.





# Top Non-Mappable Pedestrian Needs

### **CAR-CENTRIC CITY**

In Richmond, it's much harder to get around by walking, biking, or taking the bus than by driving a car. If you don't own your own car, it's really hard to get where you need to go.

### **ADA ACCESSIBILITY**

Richmond's streets lack safe, clear, stable, and smooth paths for people who use wheelchairs or other mobility devices, push strollers, or "roll" with other wheels on sidewalks.

### **NIGHTTIME LIGHTING**

Richmond's streets are too dark at night.

### CAR-CENTRIC ROAD DESIGN

Streets are designed for cars to go fast, and drivers often can't see pedestrians.

### **Pedestrian Strategy Recommendations**

### **BETTER STREET LIGHTING (1B.1)\***

Install more night lighting, including human-scaled lighting, on streets with lots of crashes so drivers can see people walking better. Replace street lights with LED bulbs, and run them off solar power so they still work when the power goes out. Develop an equity-based process to figure out which areas have the most crashes, crimes, or beautification needs, and install more lighting with solar-powered LED bulbs in these areas first.

# PRIORITIZE FIXING BUS STOPS AND SIDEWALKS NEAR DISABLED COMMUNITIES (1B.2)

Identify disability hotspots where lots of neighbors have physical disabilities, like near assisted living group homes or senior living, and destinations these people frequently go to. Fix the streets and sidewalks and make ADA upgrades to bus stops in these areas first. Preserve and increase the tree canopy during sidewalk projects

### **NEW TECHNOLOGY FOR PEDESTRIANS WITH DISABILITIES (1B.3)\***

Research and install new technology for traffic signals and crosswalks, in accordance with PROWAG, to make it safer and easier for people who are blind or visually impaired to cross the street.

### **DEVELOPMENT REQUIREMENTS (1B.4)\***

When a new building is being constructed, require the builders to provide wide sidewalks, street trees, benches, and other improvements that create a sense of pedestrian priority. Discourage the creation of new surface parking lots along pedestrian-oriented and transit accessible corridors.

### SLOW DOWN INTERSECTIONS AND PRIORITIZE NON-CAR TRAVELERS (1B.5)\*

Install features at intersections that make cars slow down at crosswalks and make it easier for drivers to see pedestrians trying to cross the street. This could include curb extensions (e.g. curb bump-outs) at intersections, removing slip lanes, and preventing drivers from parking too close to the intersection. At intersections with cycle tracks, eliminate left turn on red and install 'left turn yield to bikes' signs. Combine these features with friendly design and pedestrian detection signals that prioritize non-car users to get the green light/walk sign faster, making bus, walking, and bikes the priority at intersections.

<sup>\*</sup>Strategy is adapted from the Richmond 300 Master Plan, Vision Zero Action Plan, or RVAgreen2050 Climate Equity Action Plan 2030. These strategies are not intended to conflict with or supercede the original strategies in other adopted plans. They are repeated here because they are critical to improving transportation equity in Richmond. Wording changes were made to make the language more accessible to the general public. In some cases, the focus group and Advisory Committee intentionally changed the wording of the strategies to clarify the intent and reflect the priorities of Communities of Concern.





### BETTER STREET LIGHTING (1B.1)\*

Install more night lighting, including human-scaled lighting, on streets with lots of crashes so drivers can see people walking better. Replace street lights with LED bulbs, and run them off solar power so they still work when the power goes out. Develop an equity-based process to figure out which areas have the most crashes, crimes, or beautification needs, and install more lighting with solar-powered LED bulbs in these areas first. Focus street lighting projects on "Smart City" technologies, which can be add-ons to the LED street light conversions, including monitors related to environmental quality, climate change, pedestrian movement, and safety.

\*This strategy incorporates strategy concepts from several other plans, including:

- Vision Zero Action Plan, Legislative and Budget strategies and actions "Enhance lighting on the high injury street network to improve visibility."
- RVAgreen 2050 Climate Equity Action Plan 2030, Strategy BE-1.1, Action i, which reads: "Convert all city-owned streetlights to LED, integrate solar options where feasible, and streamline efficiency measures; Prioritize improvements in formerly redlined neighborhoods and proactively communicate climate impact and resilience benefits with the communities."

### **Next Steps:**

### **OETM**

- Convene a community meeting to discuss the street lighting prioritization process and seek feedback on ways to make it more equitable.
- Seek additional dedicated CIP funding to implement street lighting projects using an equity-based, community-led prioritization process.

### DPU

 Revise internal processes to include equity, climate justice, and crime risks in street lighting priorities.

### **DPW**

 Support PDR in developing public realm standards to include requirements for pedestrian-level lighting per the *Richmond 300* Master Plan Objective 4.4.



**LQC Implementation could involve:** Demonstration with movable construction lights, solar powered lights.



Partners in this strategy could include: Mayor's Office & Council, community partners, Richmond Police Department.





### PRIORITIZE FIXING BUS STOPS AND SIDEWALKS NEAR DISABLED COMMUNITIES (1B.2)\*

Identify disability hot-spots where lots of neighbors have physical disabilities, like near assisted living group homes or senior living, and destinations these people frequently go to. Fix the streets and sidewalks and make ADA upgrades to bus stops in these areas first. Preserve and increase the tree canopy during sidewalk projects.

This strategy is related to several strategies from other adopted plans, including: Vision Zero Action Plan, Executive strategies and actions: "Provide safe access to transit stops in high priority areas as determined by the Greater Richmond Transit Company (GRTC)" and "Identify and address transportation challenges for mature road users."; Richmond 300, Objective 7.1, Strategy B, which reads: "Provide safe and Americans with Disabilities Act (ADA)-compliant access to transit stops in the high-injury street network as determined by GRTC (per the Vision Zero Action Plan)."; and Richmond 300, Objective 8.1, Strategy D, which reads: "Construct ADA-compliant sidewalks and street crossing and retrofit existing sidewalks with ADA-compliant ramps, per federal requirements."

### **Next Steps:**

### **OETM**

 Work with residents, community organizations, and disability advocates and representatives to identify and develop map of disability hot-spots.

### **DPW**

- Review and revise the prioritization rubric used to determine sidewalk
  maintenance and ADA upgrade priority, to include disability hot-spots as a priority.
- Expand the ADA audit currently completed for the downtown core and adjacent neighborhoods to include the entire City. Focus on completing the audit in disability hot-spots first.
- Hire an ADA compliance position, and allocate annual CIP funds dedicated to ADA compliance.



**LQC Implementation could involve:** Demonstrations with temporary/movable ADA ramps made of rubber.



Partners in this strategy could include: Richmond's Office of Aging & Disability Services, Senior Connections, Disability advocacy groups, Other community partners

### **NEW TECHNOLOGY FOR PEDESTRIANS WITH DISABILITIES (1B.3)\***

Research and install new technology for traffic signals and crosswalks, in accordance with PROWAG, to make it safer and easier for people who are blind or visually impaired to cross the street.

\*This strategy is originally from several Richmond 300 strategies, including: Objective 10.1, Strategy A, which reads: "Continue to implement technology that prioritizes traffic signal timing for walking, biking, and transit.; and Objective 10.1, Strategy E, which reads: "Leverage new and existing technologies to accommodate individuals with visual impairments."

### **Next Steps:**

### **DPW**

- Hire an Emerging Technology Coordinator.
- Research emerging technologies and test improvements via demonstration projects before large investments are made.



LQC Implementation could involve: Demonstrating technologies in disability hotspots identified in Strategy 1B.2.



Partners in this strategy could include: OETM, OIPI, VDOT, OOS, DIT





### **DEVELOPMENT REQUIREMENTS (1B.4)\***

When a new building is being constructed, require the builders to provide wide sidewalks, street trees, benches, and other improvements that create a sense of pedestrian priority. Discourage the creation of new surface parking lots along pedestrian-oriented and transit accessible corridors.

\*This strategy is originally from several Richmond 300 strategies, including:

- Objective 1.1, Strategy E, which reads: "Rezone parcels in Nodes with design requirements that encourage walking, such as providing sidewalks, street trees, shade structures, pedestrian-level lighting, street furniture, and street-level windows and doors; prohibiting parking facing the street; and limiting driveway entrances.";
- Objective 4.4, Strategy A, which reads: "Develop city-wide public realm standards to include shade trees, bike parking, bike share, signage, public art, screened parking, street furniture, pedestrian-level lighting, and other elements in the public right-of-way that enhance walkability."

This strategy includes strengthening the Better Streets Manual to require new developments to provide the preferred pedestrian travel zone and buffer zone widths instead of the minimum widths. Requirements need to include requiring developers to provide adequate width sidewalks, either by deeding right-of-way or providing easements. PDR is currently working on rewriting the Zoning Ordinance, which is a primary mechanism for achieving this strategy.

### **Next Steps:**

### **PDR**

- Amend the Zoning Ordinance to require necessary public improvements, including providing sidewalks, street trees, benches, and other improvements that make the public realm feel designed for pedestrians instead of cars. This could include creating a zoning overlay in Nodes and along Great Streets that specifies more complete and prescribed minimums for improvements to the transportation infrastructure. Include requirements for developers to provide the preferred pedestrian travel zone and buffer zone widths from the Better Streets Manual instead of the minimum widths, either by deeding right-of-way or providing easements.
- Consider zoning mechanisms to discourage surface lots in favor of multi-story parking garages, or multimodal improvements with a logical nexus to the development project.

### **COR Dept. of Finance**

 Consider taxation mechanisms to discourage surface lots in favor of multistory parking garages, or multimodal improvements with a logical nexus to the development project.

### **OETM & DPW**

 Work with PDR to incorporate this strategy into the Zoning Ordinance rewrite.



Partners in this strategy could include: Private developers, community advocates, OOS





### SLOW DOWN INTERSECTIONS AND PRIORITIZE NON-CAR TRAVELERS (1B.5)\*

Install features at intersections that make cars slow down at crosswalks and make it easier for drivers to see pedestrians trying to cross the street. This could include curb extensions (e.g. curb bump-outs) at intersections, removing slip lanes, and preventing drivers from parking too close to the intersection. At intersections with cycle tracks, eliminate left turn on red and install 'left turn yield to bikes' signs. Combine these features with pedestrian friendly design and pedestrian detection signals that prioritize non-car users to get the green light/walk sign faster, making bus, walking, and bikes the priority at intersections.

\*This strategy incorporates several Vision Zero Action Plan Legislative and Budget strategies and actions, including:

- "Fund engineering design projects to adjust target speed and design speed where feasible and appropriate."
- "Communicate appropriate speeds through good design."
- "Apply signal timing/crossing modifications."
- "Implement proven geometric intersection treatments."
- "Install or upgrade pedestrian crossing treatments."

Virginia Commonwealth University completed a Pedestrian Safety Study in 2023 that makes several recommendations in the Monroe Park Campus and Academic Medical Center that are relevant to this strategy, including:

- No Turn on Red signage
- Pedestrian crossing improvements (longitudinal crosswalk markings, curb extensions, and corner clearance markings)
- Signal improvements (leading pedestrian intervals, rectangular rapid flashing beacons, pedestrian hybrid beacons, and left-turn hardening)
- Roadway improvements (speed tables, raised intersections, and road closures). This strategy includes evaluating these potential improvements and identifying locations where they are most needed over the entire City.

### **Next Steps:**

### **DPW**

- Support current signal timing adjustments, and advocate for continued improvements to prioritize non-car travelers at intersections.
- Install new paint, visibility improvements, curb extensions, vertical features, and lighting improvements at intersections to improve pedestrian safety.
- Identify locations where 2-way stop intersections can be converted to 4-way stop control.



LQC Implementation could involve: movable planters, paint, flex posts, rubber pedestrian islands, curb extensions with paint and flex posts, and raised pedestrian crosswalks.



# ACTION PLAN STRATEGIES | INC2: TRANSIT



# Top Non-Mappable Transit Needs

### RELIABILITY

GRTC buses are not reliable.

### LIMITED SERVICE

GRTC buses don't run late at night and have limited weekend service.

### **FARE-FREE**

Need to keep buses free.

### **BUS DRIVER SHORTAGE**

There is a nationwide shortage of qualified licensed bus drivers.

### **SERVICE AREAS**

There aren't enough options for getting around by bus if you live in the far-south and south-western parts of Southside, and ride-sharing (Uber/Lyft) is expensive.

### **Transit Strategy Recommendations**

### PRIORITIZE BUS RELIABILITY AND LONGER SERVICE HOURS (2.1)

Prioritize spending money to hire more bus drivers and buy more buses to extend GRTC service hours. Invest in signal and communication technology to make the bus system more reliable. Focus on the areas and bus routes that are late or off-schedule most frequently. Explore the potential for bus-only lanes (including 24-hour and peak-period only).

### FARE-FREE GRTC (2.2)

Prioritize keeping the bus free to reduce barriers to entry, increase access, and minimize bus loading times for better reliability.

### TRAIN MORE BUS DRIVERS (2.3)

Create a program, combining strengths and abilities from multiple City departments and other agencies, to hire and train bus drivers from low-income areas and high schools. Retain bus drivers with living wages, benefits, and a positive work environment.

### **IMPROVE BUS SERVICE (2.4)**

In areas where fixed route bus service exists, focus investments to make these bus routes more reliable and frequent, and improve sidewalks and pedestrian crossings. Provide micro-transit and other shared-mobility solutions in areas that are not covered by frequent, reliable, and accessible fixed-route bus service.

<sup>\*</sup>Strategy is adapted from the Richmond 300 Master Plan, Vision Zero Action Plan, or RVAgreen2050 Climate Equity Action Plan 2030. These strategies are not intended to conflict with or supercede the original strategies in other adopted plans. They are repeated here because they are critical to improving transportation equity in Richmond. Wording changes were made to make the language more accessible to the general public. In some cases, the focus group and Advisory Committee intentionally changed the wording of the strategies to clarify the intent and reflect the priorities of Communities of Concern.



# ACTION PLAN STRATEGIES | INC2: TRANSIT



### PRIORITIZE BUS RELIABILITY AND LONGER SERVICE HOURS (2.1)

Prioritize spending money to hire more bus drivers and buy more buses to extend GRTC service hours. Invest in signal and communication technology to make the bus system more reliable. Focus on the areas and bus routes that are late or off-schedule most frequently. Explore the potential for bus-only lanes (including 24-hour and peak-period only).

### **Next Steps:**

### **GRTC**

• Advocate for a transparent process to prioritize reliability concerns and mitigation strategies through a comprehensive, publicly-shared reliability assessment and reliability improvement plan. Reliability issues stemming from City of Richmond owned assets (e.g. signal timing) should be named and priority given to these improvements as they are identified.



**LQC Implementation could involve:** Temporary demonstrations of bus-only lanes.



Partners in this strategy could include: DPW, OETM, and COR representatives on the GRTC Board of Directors

### **FARE-FREE GRTC (2.2)**

Prioritize keeping the bus free to reduce barriers to entry, increase access, and minimize bus loading times for better reliability.

### **Next Steps:**

### **OETM and GRTC**

• Support and advocate for a 10 year commitment to fare-free.



# ACTION PLAN STRATEGIES | INC2: TRANSIT



### TRAIN MORE BUS DRIVERS (2.3)

Create a program, combining strengths and abilities from multiple City departments and other agencies, to hire and train bus drivers from low-income areas and high schools. Retain bus drivers with living wages, benefits, and a positive work environment.

### **Next Steps:**

### **GRTC**

- Work with DMV to support existing programs to increase CDL drivers such as the 'troops-to-trucks' program that trains ex-military civilians to get a CDL, which can be used to drive buses.
- Work with DMV, Office of Community Wealth Building, Mayor's Youth Academy, Richmond Public Schools, local community colleges, local universities, and other partners to develop pipeline programs to train at-risk-youth for jobs in the transit industry.



Partners in this strategy could include: OCWB, DMV, RPS, higher education institutions

### **IMPROVE BUS SERVICE (2.4)**

In areas where fixed route bus service exists, focus investments to make these bus routes more reliable and frequent, and improve sidewalks and pedestrian crossings. Provide micro-transit and other shared-mobility solutions in areas that are not covered by frequent, reliable, and accessible fixed-route bus service.

### **Next Steps:**

### OETM

• Support GRTC in providing micro-transit and other non-traditional transit to communities not currently served by reliable, frequent fixed route service.



**LQC Implementation could involve:** Piloting micro-transit and other new shared ride programs



# ACTION PLAN STRATEGIES | INC3: FREIGHT



# Top Non-Mappable Freight Needs

### TRUCK TRAFFIC

Some streets have too much truck traffic.

### SUPPLY CHAIN DISRUPTIONS

Low-income residents are most vulnerable to negative effects of supply chain disruptions.

### FOOD ACCESS AND INSECURITY

It costs a lot to have groceries delivered to your door. Rising home delivery costs make it harder for low-income households to know where their next meal is coming from.

### **Freight Strategy Recommendations**

### **Transportation-Primary Freight Strategy Recommendations**

### **DELIVERY MANAGEMENT (3.1)**

Figure out how to manage delivery trucks, vans, drones, and robots traveling on the roads and sidewalks, and parking next to the curb. Develop methods (signs, phone apps) to help delivery drivers find loading zones off of main streets, including improving alleys and encouraging delivery drivers to utilize alleys. Discourage and enforce penalties for delivery vehicles and pick-up/drop-off vehicles from blocking bike lanes and sidewalks.

### MAXIMIZE PORT AND RAILWAYS (3.2)\*

Support the Richmond Marine Terminal and freight rail as economic development engines for the City. Work with these entities to use Richmond's port and railways to their full capacities to help City growth, improve reliability of goods delivery to city stores and job sites, and create full time jobs. Improve truck access to the Richmond Marine Terminal in alignment with Vision Zero objectives.

### **Supporting Freight Strategy Recommendations**

- FOOD ACCESS AND URBAN FARMING (3.3)\*
- FREE GROCERY DELIVERY (3.4)
- FOOD RESILIENCY PLANNING & ZONING (3.5)
- MORE PLANTS & EDIBLE LANDSCAPING (See Strategy 10.6 under INC 10 Sustainability)

<sup>\*</sup>Strategy is adapted from the Richmond 300 Master Plan, Vision Zero Action Plan, or RVAgreen2050 Climate Equity Action Plan 2030. These strategies are not intended to conflict with or supercede the original strategies in other adopted plans. They are repeated here because they are critical to improving transportation equity in Richmond. Wording changes were made to make the language more accessible to the general public. In some cases, the focus group and Advisory Committee intentionally changed the wording of the strategies to clarify the intent and reflect the priorities of Communities of Concern.



# ACTION PLAN STRATEGIES | INC3: FREIGHT



### **DELIVERY MANAGEMENT (3.1)**

Figure out how to manage delivery trucks, vans, drones, and robots traveling on the roads and sidewalks, and parking next to the curb. Develop methods (signs, phone apps) to help delivery drivers find loading zones off of main streets, including improving alleys and encouraging delivery drivers to utilize alleys. Discourage and enforce penalties for delivery vehicles and pick up/drop-off vehicles from blocking bike lanes and sidewalks.

### **Next Steps:**

### **DPW**

- Complete a curbside and right-of-way management plan. This plan should include an assessment of delivery modes and need for regulating ordinances. It should address drones, delivery robots, rideshare pick-up and drop-off, meal delivery drivers, dockless scooter and bikeshare parking (especially to prevent blocking ADA pedestrian paths), and increased demand for traditional delivery trucks.
- Identify locations for on-street temporary loading zones. Install with proper signage and pavement markings.
- Hire an Emerging Technology Coordinator to assess drone and robot delivery modes.

### **PDR**

 Require temporary delivery locations in development, with standards for signage and marking.



Partners in this strategy could include: OETM, business and restaurant owners

### **MAXIMIZE PORT AND RAILWAYS (3.2)\***

Support the Richmond Marine Terminal and freight rail as economic development engines for the City. Work with these entities to use Richmond's port and railways to their full capacities to help city growth, improve reliability of goods delivery to city stores and job sites, and create full time jobs. Improve truck access to the Richmond Marine Terminal in alignment with Vision Zero objectives.

\*This strategy is originally from Richmond 300, Objective 11.4, Strategy C, which reads "Implement strategies to support the Richmond Marine Terminal and freight rail as economic development engines for the City."

### **Next Steps:**

### DED

• Work closely with the Port of Richmond to assess barriers to capacity building and threats to port resiliency to be included in the next update of the Richmond Connects Action Plan via a food or general resiliency plan.



Partners in this strategy could include: Port of Virginia Richmond Marine Terminal, DRPT, OETM, DPW



# ACTION PLAN STRATEGIES | INC3: FREIGHT



### FOOD ACCESS AND URBAN FARMING (3.3)\*

Provide funding to community organizations and collectives working on food insecurity and food access. Prioritize funding and land for local food production, and provide incentives to mobile farm pantries and farmers markets on wheels.

\*This strategy is originally from Richmond 300, Objective 17.4, Strategy D, which reads "Attract healthy food retailers to low-income areas by increasing residential density and providing financial and technical support for retailer creation, expansion, remodeling, or equipment upgrades."

### **Next Steps:**

### 005

• Identify funding to support these programs, identify lead staff, and make COR procurement opportunities accessible.



**LQC Implementation could involve:** pop-up mobile community gardens, raised planters, and farm stands.



Partners in this strategy could include: OETM, DED, PCRF, OCWB, Chamber of Commerce, PDR

### FREE GROCERY DELIVERY (3.4)

Provide money to cover grocery delivery service fees for low-income and elderly areas and neighborhoods in food deserts.

### **Next Steps:**

### **OETM**

• Develop program parameters and seek grant funding.



LQC Implementation could involve: pilot program.

Partners in this strategy could include: RRHA, OCWB, DSS, Office of Aging & Disability Services

### FOOD RESILIENCY PLANNING & ZONING (3.5)

Complete a supply chain resiliency plan for low-income Richmond neighborhoods that describes how to get people food access when transportation, health, or climate emergencies happen. Ensure zoning updates allow for flexible use of space to meet food insecurity and resiliency issues identified through this planning. Further develop program parameters for food access in this plan.

### **Next Steps:**

### **00S**

Identify funding to support this planning effort and identify lead staff.



**Partners in this strategy could include:** PDR, OETM, PlanRVA



# ACTION PLAN STRATEGIES | INC4: LAND USE



# Top Non-Mappable Land Use Needs

### **PARKING**

Provide the right amount of parking so there's enough, but not too much.

### AFFORDABLE HOUSING

There isn't enough affordable housing near job centers and other major areas of activity, and near transit.

### TRANSIT DESTINATIONS

There aren't enough destinations (shopping, parks) that you can get to by riding the bus.

### Land Use Strategy Recommendations

**Transportation-Primary Land Use Strategy Recommendations** 

### **COORDINATE TRANSIT AND DEVELOPMENT (4.1)\***

Include GRTC in conversations with Richmond's Office of Equitable Development, Department of Planning and Development Review, Office of Equitable Transit and Mobility, and Department of Public Works, to coordinate new housing and new development with transit planning. Work with developers and property managers to offer affordable units in transit-oriented developments and fill them with voucher recipients.

### ACCESS TO PARKS (4.2)\*

Work with GRTC to improve transit access to existing parks. Create new parks throughout the City so all Richmond residents live within a ten minute walk of a park. When deciding where to put a new park, make sure residents can get to the park by riding the bus or provide new bus service there. Improve ADA-accessibility to and from parks.

### PRIORITIZE HANDICAPPED PARKING (4.3)

Preserve limited street parking as accessible spaces for people with physical disabilities when parking is removed or moved elsewhere.

### **Supporting Land Use Strategy Recommendations**

- ZONING REWRITE (4.4)
- HOUSING VOUCHERS (4.5)
- WEALTH-BUILDING & HOME OWNERSHIP RESOURCES (See Strategy 8.6 under INC 8 Economic Development)

<sup>\*</sup>Strategy is adapted from the Richmond 300 Master Plan, Vision Zero Action Plan, or RVAgreen2050 Climate Equity Action Plan 2030. These strategies are not intended to conflict with or supercede the original strategies in other adopted plans. They are repeated here because they are critical to improving transportation equity in Richmond. Wording changes were made to make the language more accessible to the general public. In some cases, the focus group and Advisory Committee intentionally changed the wording of the strategies to clarify the intent and reflect the priorities of Communities of Concern.



# ACTION PLAN STRATEGIES | INC4: LAND USE



### **COORDINATE TRANSIT AND DEVELOPMENT (4.1)\***

Include GRTC in conversations with Richmond's Office of Equitable Development, Department of Planning and Development Review, Office of Equitable Transit and Mobility, and Department of Public Works, to coordinate new housing and new development with transit planning. Work with developers and property managers to offer affordable units in transit-oriented developments and fill them with voucher recipients.

\*This strategy is adapted from Richmond 300, Objective 6.1, Strategy D, which reads "Encourage collaboration across PDR, the Department of Economic Development (DED), the Department of Housing and Community Development (HCD), the Department of Public Works (DPW), and GRTC to focus infrastructure improvements and rezoning at Priority Growth Nodes to position them for future transit stops (make them pre-transit-oriented development [TOD] ready)."

### **Next Steps:**

### **PDR**

- Establish a TOD task force that meets quarterly to collaborate on TOD.
- Align new development and allowance of greater density in development with existing and planned transportation improvements and transit lines.
- Work with developers and property managers to offer affordable units in transit-oriented developments and fill them with voucher recipients.



Partners in this strategy could include: GRTC, OETM, PlanRVA

### **ACCESS TO PARKS (4.2)\***

Work with GRTC to improve transit access to existing parks. Create new parks throughout the City so all Richmond residents live within a ten minute walk of a park. When deciding where to put a new park, make sure residents can get to the park by riding the bus or provide new bus service there. Improve ADA-accessibility to and within parks.

\*This strategy is originally from Richmond 300, Objective 17.1, which reads "Increase the percentage of Richmonders within a 10-minute walk of quality open space to 100%, prioritizing low-income areas with a high heat vulnerability index rating, with a long-term goal of having all Richmonders within a 5-minute walk of a quality open space."

### **Next Steps:**

### **PCRF**

### • Develop a Parks Master Plan.

### OETM

- Work with PCRF in the development of the Parks Master Plan to coordinate with transportation assets.
- Share transportation accessibility modeling tools with PCRF to highlight areas with the worst access to parks by walking and by transit.
- Work with GRTC to identify bus route and frequency improvements that can improve access to parks, which could include adding bus stops at parks.



LQC Implementation could involve: Pop-up parklets or 'Park'-ing days demonstrating parking lots and other sites as potential regreening/park sites.



Partners in this strategy could include: GRTC, PDR



# ACTION PLAN STRATEGIES | INC4: LAND USE



### PRIORITIZE HANDICAPPED PARKING (4.3)

Preserve limited street parking as accessible spaces for people with physical disabilities when parking is removed or moved elsewhere.

This strategy addresses the issues that Richmond is too car-centric overall and poor access is exacerbated for Richmonders who have physical disabilities. People with physical disabilities and seniors often have a more acute need for access to a destination from a car than able-bodied persons.

### **Next Steps:**

### **DPW Parking & Capital Projects**

• Update the COR parking assessment as part of an overall curbside management plan, to include additional consideration for accessible spaces as the priority parking for downtown.



LQC Implementation could involve: signage

Partners in this strategy could include: DPW Right-of-Way, PDR. OETM

# **ZONING REWRITE** (4.4)\*

Rewrite the Zoning Ordinance to, among other things, build up the Nodes, encourage housing density near transit, limit surface parking in Nodes, supply diversity in housing, and address home ownership barriers.

\*This strategy is originally from Richmond 300, Objective 1.1, Strategy A, which reads "Re-write the Zoning Ordinance to achieve the goals set forth in Richmond 300."

### **Next Steps:**

#### **PDR**

#### OETM

- Lead the effort to rewrite the Zoning Ordinance.
- Participate in the zoning rewrite effort.
- Support PDR to communicate the transit-oriented development and affordable housing needs, and how the Zoning Ordinance rewrites will address these with City Council.



# ACTION PLAN STRATEGIES | INC4: LAND USE



# **HOUSING VOUCHERS (4.5)\***

Increase awareness and improve relationships with landlords regarding the Housing Choice Voucher program, particularly in areas within Nodes and a half mile of high-frequency transit stops, and highlight the new State Law (HB6 Virginia Fair Housing Law), which prevents landlords from discriminating against renters with Housing Choice Vouchers. Track landlord acceptance of housing choice vouchers, especially in transit-oriented developments.

\*This strategy is originally from Richmond 300, Objective 14.1, Strategy C, which reads "Increase awareness and improve relationships with landlords regarding the Housing Choice Voucher program, particularly in areas within Nodes and a half mile of high-frequency transit stops, and highlight the new State Law (HB6 Virginia Fair Housing Law), which prevents landlords from discriminating against renters with Housing Choice Vouchers."

Communities of Concern said one of the biggest barriers to affordable housing they encounter is landlords who do not honor housing choice vouchers and use them as a way to discriminate in housing applications. This strategy is intended to educate landlords. It is also intended to work in conjunction with Strategy 4.1 Coordinate Transit and Land Use to offer affordable units in transit-oriented developments and fill them with voucher recipients.

### **Next Steps:**

### **PDR**

- Research incentives and zoning strategies for affordable housing in TOD zones as part of the Zoning Ordinance rewrite.
- Incorporate all legally allowable affordable housing incentives into the Zoning Ordinance, especially in TOD areas.
- As part of the TOD task force that will be established under Strategy 4.1, continue to research and deploy new incentives and strategies for affordable housing in transit-oriented developments, and share information with TOD developers on the Virginia Fair Housing Law.

#### **RRHA**

### CAO Office, City Council, and DCHD



Partners in this strategy could include: HCD, OETM

Track voucher use 

 Advocate for inclusionary zoning at the state level.





# Top Non-Mappable Safety Needs

# SAFETY CULTURE & ENFORCEMENT

There is little (if any) enforcement for unsafe driving behavior, including illegal parking and drivers not stopping for pedestrians. We need to change normal acceptable driving, walking, and bicycling behavior to be focused on how to travel and share the road safely. Enforcing safety laws by writing tickets can inequitably harm minority and low-income communities. Not enforcing safety laws can also harm these communities.

### **ROAD DESIGN**

Streets are designed for cars to go fast, and drivers often can't see pedestrians.

### SAFE ROUTES TO SCHOOL

Safety programs like Safe Routes to School need more money.

### **PUBLIC FACILITIES**

There are few (if any) public restrooms or places for people to sit throughout the City when walking or biking.

# **Safety Strategy Recommendations**

# **Transportation-Primary Safety Strategy Recommendations**

## **PUBLIC SAFETY CAMPAIGN (1A.2)**

Conduct a safety campaign to teach drivers, bicyclists, and pedestrians their rights and responsibilities and how to safely share the road, and to discourage distracted driving and distracted walking. (See Strategy 1A.2 in the Strategy Recommendations for INC 1A Bicycle.)

## SAFE ROUTES TO SCHOOL (5.1)\*

Continue to seek more money for Safe Routes to School safety projects like more school crossing guards, better school-zone speed enforcement, and walking school bus programs. Hire school bus monitors to increase safety and security on school buses.

## **CROSSWALK VISIBILITY (5.2)\***

Improve intersections to make sure drivers can see people crossing the street and people waiting to cross, including increasing lighting at unsafe intersections and deploying sight clearance techniques.

## **COMPLETE STREETS (5.3)**

Change project development and funding processes to develop, design, and fund projects that prioritize pedestrians, bicyclists, and transit. Develop and design projects to holistically improve all sustainable modes, not just addressing one mode or issue at a time. Prepare corridor plans for safety for all modes along Great Streets as designated in Richmond 300.

## STUDY AND DEMO CAR-FREE STREETS (5.4)\*

Identify opportunities for using Richmond's streets to create great places for people and improve pedestrian safety through temporary or permanent street closures. This could include temporary weekend closures of Cary Street in Carytown, Hull Street in Old Manchester during Mayo Bridge rehabilitation, Shockoe Slip, Floyd Avenue, Grace Street, or other streets.

## **Supporting Safety Strategy Recommendations**

- ESSENTIAL PUBLIC FACILITIES (5.5)
- PUBLIC INPUT IN POLICING (5.6)

<sup>\*</sup>Strategy is adapted from the Richmond 300 Master Plan, Vision Zero Action Plan, or RVAgreen2050 Climate Equity Action Plan 2030. These strategies are not intended to conflict with or supercede the original strategies in other adopted plans. They are repeated here because they are critical to improving transportation equity in Richmond. Wording changes were made to make the language more accessible to the general public. In some cases, the focus group and Advisory Committee intentionally changed the wording of the strategies to clarify the intent and reflect the priorities of Communities of Concern.





### SAFE ROUTES TO SCHOOL (5.1)\*

Continue to seek more money for Safe Routes to School safety projects like more school crossing quards, better school-zone speed enforcement, and walking school bus programs. Hire school bus monitors to increase safety and security on school buses.

\*This strategy is originally from the Vision Zero Action Plan Legislative and Budget recommendations, which reads, "Expand Safe Routes to School to all schools, and integrate Vision Zero principles into the school transportation policies and efforts at Richmond Public Schools."

### **Next Steps:**

#### OETM

• Advocate to allocate City funds to SRTS • Hire school bus monitors to to leverage additional funds.

#### **Richmond Public Schools**

increase safety and security on school buses.

### **Richmond Police Department**

• Better enforce school-zone speed



Partners in this strategy could include: Greater Richmond Fit4Kids, VDOT, community partners

# **CROSSWALK VISIBILITY (5.2)\***

Improve intersections to make sure drivers can see people crossing the street and people waiting to cross, including increasing lighting at unsafe intersections and deploying sight clearance techniques.

\*This strategy is originally from the Vision Zero Action Plan Legislative and Budget recommendations, which reads, "Evaluate and update policy regarding sight distance at intersections (on-street parking and other factors) to improve safety."

Virginia Commonwealth University completed a Pedestrian Safety Study in 2023 that makes several recommendations in the Monroe Park Campus and Academic Medical Center that are relevant to this strategy, including No Turn on Red signage, pedestrian crossing improvements (longitudinal crosswalk markings, curb extensions, and corner clearance markings), signal improvements (leading pedestrian intervals, rectangular rapid flashing beacons, pedestrian hybrid beacons, and left-turn hardening), and roadway improvements (speed tables, raised intersections, and road closures). This strategy includes evaluating these potential improvements and identifying locations where they are most needed over the entire City.

#### **Next Steps:**

#### **DPW**

- Assess intersection lighting improvement prioritization for pedestrian safety.
- Create a transparent and accessible process for improving street lighting in areas with high safety/security needs.
- Identify locations where crosswalk visibility improvements are needed. Install improvements, which could include curb bump-outs, including curb bump-outs, pedestrian refuge islands, intersection murals, and crosswalk murals, and other intersection improvements to slow down vehicles.



# LQC Implementation could involve: Temporary or movable pedestrian refuge islands, raised crosswalks, curb bumpouts, test "road diets", left turn hardening hardening, chicanes, intersection murals, and crosswalk murals (placed in front of the crosswalk so as to not impede the crosswalk striping).



Actions and Strategies for Improving Transportation Equity in Richmond



## **COMPLETE STREETS (5.3)**

Change project development and funding processes to develop, design, and fund projects that prioritize pedestrians, bicyclists, and transit. Develop and design projects to holistically improve all sustainable modes, not just addressing one mode or issue at a time. Prepare corridor plans for safety for all modes along Great Streets as designated in Richmond 300.

### **Next Steps:**

### **OETM**

- Develop a legislative agenda and educational materials for key City leaders to advocate for changing local transportation funding processes to prioritize projects that holistically prioritize pedestrians, bicyclists, and transit.
- Develop key talking points and bill amendments to advocate to state and federal legislators to change state and national transportation funding processes to prioritize projects that holistically prioritize pedestrians, bicyclists, and transit.
- Develop an equity scorecard for reviewing all large transportation projects.

### DPW

- Develop corridor plans to redesign the Great Streets to prioritize pedestrians, transit, and bicyclists.
- Support OETM to advocate for changes to local, state, and federal funding programs.

# STUDY AND DEMO CAR-FREE STREETS (5.4)\*

Identify opportunities for using Richmond's streets to create great places for people and improve pedestrian safety through temporary or permanent street closures. This could include temporary weekend closures of Cary Street in Carytown, Hull Street in Old Manchester during Mayo Bridge rehabilitation, Shockoe Slip, Floyd Avenue. Grace Street. or other streets.

This strategy is originally from Richmond 300, Objective 8.1, Strategy F which reads "Consider permanent or temporary street closures and expanding and improving bike-walk streets, which are not entirely closed to cars but use physical infrastructure to slow cars. This could include, but is not limited to, weekend closures of Riverside Drive for bicycle and pedestrian use and/or weekend closures of Cary Street in Carytown for bicycle, pedestrian, and retail use."

This strategy is related to Strategy 6.5 Try Bike-Walk and Slow Streets under INC 6 Connectivity.

### Next Steps:

#### **OETM**

- Identify potential locations with resident and business support for street closure demonstrations.
- Study the potential access, safety, traffic, and business benefits and drawbacks of closing the street to vehicles, and identify time periods for temporary testing.
- Conduct temporary tests with data collection to validate impacts.



LQC Implementation could involve: weekend demos.



Partners in this strategy could include: PDR, DPW, local business associations





### **ESSENTIAL PUBLIC FACILITIES (5.5)**

Install more benches throughout the City and build free-standing public restrooms along routes where lots of people walk, or provide financial incentives to businesses for allowing public use of restrooms.

### **Next Steps:**

#### **OETM**

- Identify key staff and funding sources.
- Work with community organizations to designate key areas of need.



**LQC Implementation could involve:** temporary benches, parklets, and pop-up placemaking events.



Partners in this strategy could include: DPW, PDR, community partners

# **PUBLIC INPUT IN POLICING (5.6)**

Facilitate grassroots efforts for community policing, and lead a public outreach process so Richmonders can define and communicate how they want the police to enforce traffic and safety laws, including consideration for increases in enforcement as well as creation of an enforcement reporting system to allow Richmonders to report both excessive and insufficient enforcement.

### **Next Steps:**

#### **OETM**

- Identify key staff and funding sources.
- Work with community organizations to identify how and when to hold community meetings to develop a community policing strategy for each neighborhood.





# Top Non-Mappable Connectivity Needs

### LANGUAGE BARRIER

Most resources for understanding options for getting around by bus, bike, or walking in Richmond are only in English.

### **SAFETY**

Paths for walking and bicycling are mostly on roads with heavy traffic.

# **Connectivity Strategy Recommendations**

### **INTERCONNECTED TRAILS (6.1)\***

Create an interconnected system of parks, trails, and greenways, with primary trail sections connecting to Nodes and Great Streets, so people can travel throughout the City while avoiding using the streets. Use railroad alignments to build more trails (i.e. "rails-to-trails"). Identify opportunities for utilizing public alleys as biodiverse shared streets and active transportation corridors.

### **BILINGUAL TRANSPORTATION INFORMATION & SIGNAGE (6.2)**

Distribute resources both online and in hard copy, and in both Spanish and English, about Richmond's transportation options and how to use them. Work with Greyhound, Amtrak, GRTC, and other regional travel providers to ensure materials, signs, and booking platforms are available in both English and Spanish. Require all City and GRTC transportation materials to be bilingual.

## WHEELCHAIR RIDES (6.3)

Get the word out that people who use wheelchairs can get same-day, direct, non-stop rides through Round Trip and UZURV, and help low-income people pay for this service.

### **BRING TRANSIT TO MORE PEOPLE (6.4)**

Increase the percentage of housing and jobs near transit, by both expanding bus service into areas that are not served, and by increasing job and housing density in areas already served by transit. Support GRTC bus route expansion. Advertise the areas around bus stops to builders and businesses as good places to put more affordable housing and good paying jobs.

# TRY BIKE-WALK OR SLOW STREETS (6.5)\*

Experiment with creating bike-walk streets that are designed for people to walk in the street and cars go slow around them.

<sup>\*</sup>Strategy is adapted from the Richmond 300 Master Plan, Vision Zero Action Plan, or RVAgreen2050 Climate Equity Action Plan 2030. These strategies are not intended to conflict with or supercede the original strategies in other adopted plans. They are repeated here because they are critical to improving transportation equity in Richmond. Wording changes were made to make the language more accessible to the general public. In some cases, the focus group and Advisory Committee intentionally changed the wording of the strategies to clarify the intent and reflect the priorities of Communities of Concern.





### **INTERCONNECTED TRAILS (6.1)\***

Create an interconnected system of parks, trails, and greenways, with primary trail sections connecting to Nodes and Great Streets, so people can travel throughout the City while avoiding using the streets. Use railroad alignments to build more trails (i.e. "rails-to-trails"). Identify opportunities for utilizing public alleys as biodiverse shared streets and active transportation corridors.

\*This strategy is originally from Richmond 300, Objective 8.2, Strategy A: "Develop greenways throughout the city connecting Nodes, neighborhoods, and adjacent localities; focus efforts specifically in South Richmond and including, but not limited to, the following greenways: the Fall Line Trail, James River Branch, Kanawha Canal, Manchester Canal, and South Bank of the James River."

### **Next Steps:**

### **PCRF**

- Develop the Parks Master Plan
- Update the publicly accessible Parks and Open Space map to include existing and planned greenways and trails.

### DPW

- Identify and assess gaps in the future Greenways network established in Richmond 300 (Figure 27 in the Richmond 300 Master Plan).
- Seek funding, including alternative parks funding, to build these trails.
- Work with VDOT's office of trails, Department of Conservation, and tourism groups to raise capital for such a network.



Partners in this strategy could include: OETM, PDR, VDOT, PlanRVA, DED, community partners like Friends of James River Park, Friends of Bryan Park, and Friends of Forest Hill Park.

# **BILINGUAL TRANSPORTATION INFORMATION & SIGNAGE (6.2)**

Distribute resources both online and in hard copy, and in both Spanish and English, about Richmond's transportation options and how to use them. Work with Greyhound, Amtrak, GRTC, and other regional travel providers to ensure materials, signs, and booking platforms are available in both English and Spanish. Require all City and GRTC transportation materials to be bilingual.

### **Next Steps:**

#### OETM

- Work with the Office of Immigrant and Refugee Engagement and GRTC to conduct a comprehensive review of signs and other transportation materials for language accessibility.
- Change City requirements to require all transportation materials to be provided in English and Spanish.

#### GRTC

- Change requirements to require all transportation materials to be provided in both English and Spanish, if not required already.
- Conduct a review of existing transportation materials and prepare a plan to replace monolingual materials.



LQC Implementation could involve: quick installation of bilingual signage



Partners in this strategy could include: Office of Immigrant and Refugee Engagement, Amtrak, Greyhound





## WHEELCHAIR RIDES (6.3)

Get the word out that people who use wheelchairs can get same-day, direct, non-stop rides through Round Trip and UZURV, and help low-income people pay for this service.

### **Next Steps:**

### **OETM**

• Create and execute an on-the-ground information dissemination plan about this existing program.



LQC Implementation could involve: signage and awareness materials.



Partners in this strategy could include: Department of Aging & Disability Services, GRTC, PlanRVA, and community partners like Senior Connections

### **BRING TRANSIT TO MORE PEOPLE (6.4)**

Increase the percentage of housing and jobs near transit, by both expanding bus service into areas that are not served, and by increasing job and housing density in areas already served by transit. Support GRTC bus route expansion. Advertise the areas around bus stops to builders and businesses as good places to put more affordable housing and good paying jobs.

This strategy is related to Strategy 4.1 Coordinate Transit and Development under INC 4 Land Use.

### **Next Steps:**

#### **PDR**

Include CVTA in the TOD task force

### **OETM**

 Build a relationship with the CVTA members and offer to provide assistance with data and engagement.



Partners in this strategy could include: CVTA, GRTC





# TRY BIKE-WALK OR SLOW STREETS (6.5)\*

Experiment with creating bike-walk streets that are designed for people to walk in the street and cars go slow around them.

\*This strategy is originally from Richmond 300, Objective 8.1, Strategy F which reads "Consider permanent or temporary street closures and expanding and improving bike-walk streets, which are not entirely closed to cars but use physical infrastructure to slow cars. This could include, but is not limited to, weekend closures of Riverside Drive for bicycle and pedestrian use and/or weekend closures of Cary Street in Carytown for bicycle, pedestrian, and retail use."

### **Next Steps:**

#### **OETM & DPW**

• Incorporate into an OETM Lighter/Quicker/Cheaper program to demo creative solutions to the most pressing transportation problems.



LQC Implementation could involve: Demonstration days

Partners in this strategy could include: PDR, community partners



# ACTION PLAN STRATEGIES | INC7: MAINTENANCE



# Top Non-Mappable Maintenance Needs

### ROADS AND SIDEWALKS

There are lots of potholes in the streets. Sidewalks are broken, and it's not clear when the City is going to fix them.

### **BIKE LANES**

Bike lanes have trash or weeds growing in them.

# **Maintenance Strategy Recommendations**

### **MAINTENANCE INFORMATION & TRANSPARENCY (7.1)**

Educate Richmonders on who to call for road and sidewalk maintenance, how they can help spread the word, and what maintenance they and their neighbors are responsible for. Promote the 311 app, phone line, and website and continue to make maintenance prioritization and progress transparent.

## **MAINTENANCE TRACKER (7.2)**

Create an online tracker for maintenance projects in the 311 app so residents can see what is being worked on, when it is expected to be completed, and what is up next.

### **MAINTENANCE PROGRESS SHARING (7.3)**

Host events every six months to share City maintenance progress and work with residents to determine what needs to happen next. Invite City Council members and decision makers to have a role in these meetings. Locate these meetings at venues in the community.

### **BIKE LANE AND STREET CLEANING (7.4)**

Frequently clean the bike lanes and travel lanes. Replace broken trash bins with durable bins to reduce instances of trash spilling out from high winds. Communicate to residents that it is illegal to store trash, including yard debris, in the public right-or-way, including the bike lanes.

# PRIORITIZE FIXING BUS STOPS AND SIDEWALKS NEAR DISABLED COMMUNITIES (1B.2)

Identify disability hotspots where lots of neighbors have physical disabilities, like near assisted living group homes or senior living, and destinations these people frequently go to. Preserve and increase the tree canopy during sidewalk projects. Fix the streets and sidewalks and make ADA upgrades to bus stops in these areas first. (See Strategy 1b.2 in the Strategy Recommendations for INC 1b Pedestrian.)

<sup>\*</sup>Strategy is adapted from the Richmond 300 Master Plan, Vision Zero Action Plan, or RVAgreen2050 Climate Equity Action Plan 2030. These strategies are not intended to conflict with or supercede the original strategies in other adopted plans. They are repeated here because they are critical to improving transportation equity in Richmond. Wording changes were made to make the language more accessible to the general public. In some cases, the focus group and Advisory Committee intentionally changed the wording of the strategies to clarify the intent and reflect the priorities of Communities of Concern.



# ACTION PLAN STRATEGIES | INC7: MAINTENANCE



### **MAINTENANCE INFORMATION & TRANSPARENCY (7.1)**

Educate Richmonders on who to call for road and sidewalk maintenance, how they can help spread the word, and what maintenance they and their neighbors are responsible for. Promote the 311 app, phone line, and website, and continue to make maintenance prioritization and progress transparent.

### **Next Steps:**

### OSC

• Coordinate with DPW and OETM on key messaging.



Partners in this strategy could include: DPW, OSC

### **MAINTENANCE TRACKER (7.2)**

Create an online tracker for maintenance projects in the 311 app so residents can see what is being worked on, when it is expected to be completed, and what is up next.

### **Next Steps:**

### DIT

• Work with DPW to create an online maintenance tracker in the 311 app.



Partners in this strategy could include: DPW. OSC

# MAINTENANCE PROGRESS SHARING (7.3)

Host events every six months to share City maintenance progress and work with residents to determine what needs to happen next. Invite City Council members and decision makers to have a role in these meetings. Locate these meetings at venues in the community.

### **Next Steps:**

#### OSC

• Work with City Councilmembers to determine time and places to host progress meetings.



Partners in this strategy could include: DPW, OETM



# ACTION PLAN STRATEGIES | INC7: MAINTENANCE



# **BIKE LANE AND STREET CLEANING (7.4)**

Frequently clean the bike lanes and travel lanes. Replace broken trash bins with durable bins to reduce instances of trash spilling out from high winds. Communicate to residents that it is illegal to store trash, including yard debris, in the public right-or-way, including the bike lanes.

### **Next Steps:**

### **DPW**

- Publish bike lane and street cleaning schedule.
- Make adjustments to clean the bike lanes and streets more frequently.

### **DPU**

- Examine City trash can emptying schedule and identify resources (money, additional staff) needed to empty cans more frequently.
- Research options for more durable bins. Prepare a plan to replace bins with more durable options.



Partners in this strategy could include: Venture Richmond (Clean Streets program)





# Top Non-Mappable Economic Development Needs

### FRESH FOOD

In some areas, if you don't have a car, you cannot get to a place that sells fresh, healthy food.

### **LOW-DENSITY EDGE AREAS**

It costs a lot of money to run bus service to the low density areas at the city edges.

### TRANSPORTATION TO JOBS/ CHILDCARE

There are few affordable options for getting to high paying jobs or childcare if you don't have a car. Employers should help share the cost of transportation.

### DISPLACEMENT

Neighborhoods that used to be affordable are gentrifying, and investments in low-income neighborhoods can contribute to gentrification.

#### **WEALTH BUILDING**

Low-income and minority populations typically have lower rates of home ownership and fewer opportunities to build personal wealth.

#### BROADBAND

Some people don't have access to broadband, business level speeds, and office functions.

# **Economic Development Strategy Recommendations**

Transportation-Primary Economic Development Strategy Recommendations

### FREE RIDES TO WORK AND DAY CARE (8.1)

Expand the free rides to work program, which currently includes child care drop-offs, so Richmonders who are on the waitlist can be served. Encourage employers to financially contribute to this program. Give priority to Richmonders living in Communities of Concern.

### FREE GROCERY TRIPS (8.2)

Provide free Lyft/Uber rides to and from the grocery store for low-income residents and seniors, or consider providing free grocery delivery services.

Supporting Economic Development Strategy Recommendations

- ASSESS INVESTMENT EQUITY RISKS (8.3)\*
- NODE IDENTITY BRANDING (8.4)\*
- COMMUNITY VISION (8.5)\*
- WEALTH-BUILDING & HOME OWNERSHIP RESOURCES (8.6)\*
- ATTRACT GROCERY STORES (8.7)\*

<sup>\*</sup>Strategy is adapted from the Richmond 300 Master Plan, Vision Zero Action Plan, or RVAgreen2050 Climate Equity Action Plan 2030. These strategies are not intended to conflict with or supercede the original strategies in other adopted plans. They are repeated here because they are critical to improving transportation equity in Richmond. Wording changes were made to make the language more accessible to the general public. In some cases, the focus group and Advisory Committee intentionally changed the wording of the strategies to clarify the intent and reflect the priorities of Communities of Concern.





### FREE RIDES TO WORK AND DAY CARE (8.1)

Expand the free rides to work program, which currently includes child care drop-offs, so Richmonders who are on the waitlist can be served. Encourage employers to financially contribute to this program. Give priority to Richmonders living in Communities of Concern.

### **Next Steps:**

### **OETM**

- Secure additional funding and vendors to provide this service.
- Assign a dedicated manager to this program.



Partners in this strategy could include: OCWB, DSS

# FREE GROCERY TRIPS (8.2)

Provide free Lyft/Uber rides to and from the grocery store for low-income residents and seniors, or consider providing free grocery delivery services.

### **Next Steps:**

#### **OETM**

• Identify key staff and dedicated funding. Coordinate with GRTC. Start with a small pilot.



LQC Implementation could involve: pilot program

Partners in this strategy could include: DSS, RRHA, GRTC

# ASSESS INVESTMENT EQUITY RISKS (8.3)\*

Before a new building is built or a large transportation project is implemented, evaluate the risks and benefits of this investment to equity and displacement. Identify strategies to keep existing residents from getting pushed out. Provide education on and access to abatement and displacement mitigation programs.

\*This strategy is related to Richmond 300, Objective 11.2, Strategy A, which reads, "Develop equity scorecard to evaluate public-private development projects, including items such as ensuring residents within a community are first hired/considered for development projects."

### **Next Steps:**

#### OFTM

 Develop an equity scorecard to evaluate equity risks and benefits of transportation infrastructure projects, private developments, and developments on City-owned properties.

#### **PDR**

 Require private developers to complete the equity scorecard as part of the development review process.

#### **DPW**

 Complete the equity scorecard for transportation projects as part of the project implementation workflow.



Partners in this strategy could include: Private developers, Community partners





## **NODE IDENTITY BRANDING (8.4)\***

Create an attractive easy-to-recognize identity for areas where more jobs and housing are desired, like in the Southside Nodes, to attract builders and businesses and bring more shopping, affordable housing, transit service, and jobs to these areas.

\*This strategy is originally from Richmond 300, Objective 11.5, Strategy D: "Develop marketing materials for Nodes that highlight the uniqueness of each Node, the forthcoming zoning and infrastructure improvements, and information on economic development incentives that are available in the area."

### **Next Steps:**

### **PDR**

- Continue the Node task force meetings in the CAO's office to develop branding for priority Nodes.
- Pursue small area planning grants.
- Designate Nodes as UDAs to access state planning dollars.



**LQC Implementation could involve:** pop-up placemaking and wayfinding.



Partners in this strategy could include: OSC, CAO Office, OETM

# **COMMUNITY VISION (8.5)\***

Work with community residents to create a vision for what the community should look and feel like in the future in low-density areas where more housing and jobs are needed, like Southside Nodes. Set City policy to make sure new roads, paths, and buildings are built in line with that vision.

\*This strategy is related to Richmond 300, Objective 1.2 which reads "Develop and adopt small area plans for areas that require more examination." While Richmond 300 Objective 1.2, Strategy B identifies small area plans for the Priority Growth Nodes at Shockoe, the Southside Plaza Area, and Stony Point, small area plans should also be developed for the other Nodes in Southside. Many of these Nodes have a high percentage of residents that are in Communities of Concern, who do not own a car. These areas are currently low-density, and it is difficult to justify providing frequent bus service to these areas from a financial standpoint. This strategy is intended to build up the housing and jobs in these Southside Nodes to make transit service more attractive and financially justifiable.

# **Next Steps:**

#### **PDR**

- Pursue small area planning grants.
- Designate Southside Nodes as UDAs to access site planning dollars.
- Prioritize Nodes in or near Communities of Opportunity and Southside Nodes for small area planning.



**LQC Implementation could involve:** pop-up placemaking and wayfinding.



Partners in this strategy could include: community partners such as VA Community Voice, neighborhood associations, and local economically disadvantaged developers.





### WEALTH-BUILDING & HOME OWNERSHIP RESOURCES (8.6)\*

Create a central place where low-income and minority residents can go to get information on homeownership and household financial planning, including information and help applying for home and maintenance loans and grants, financial literacy classes, and help with investing. Provide education to residents on credit and buying a house. Give grants to existing community members to buy or fix up houses to build wealth and preserve existing neighborhoods (i.e. preventing neighborhoods from being redeveloped from out-of-town developers). Create incentives for small and local developers.

\*This strategy is originally from Richmond 300, Objective 14.1, Strategy D, which reads "Create a center for homeownership that is a clearinghouse for information on City programs, grants, loans, and education, partnering with state agencies such as Virginia Housing Development Authority (VHDA) and the Virginia Department of Housing and Community Development to increase homeownership, particularly among Black and Latino households." This strategy is included in Richmond Connects because it was a top need identified in conversations with and prioritized by Communities of Concern.

### **Next Steps:**

### **OCWB & HCD**

• Apply for grants and seek resources to establish and expand existing programs.



Partners in this strategy could include: OETM, PDR, community partners like Maggie Walker Land Trust, Project Homes, Habitat for Humanity, Rebuild Together.

## **ATTRACT GROCERY STORES (8.7)\***

Attract healthy food retailers to low-income areas by increasing residential density and providing financial and technical support for retailer creation, expansion, remodeling, or equipment upgrades.

\*This strategy is taken verbatim from Richmond 300, Objective 17.4, Strategy D. It is repeated here to address the need that Richmonders consistently expressed in the Richmond Connects engagement process. The next steps presented here are intended to support advancement of the original Richmond 300 strategy.

### **Next Steps:**

#### PDR

 Conduct a food access assessment. Work with DED to identify sites where grocery retailers are most needed and could be good candidates. Identify site improvements that could be done to "ready" a site for this type of use.

### **DED**

 Promote the grocery retailer sites identified to developers and provide incentives.



Partners in this strategy could include: OETM. DPW



# ACTION PLAN STRATEGIES | INC9: TECHNOLOGY



# Top Non-Mappable Technology Needs

### **E-SCOOTERS**

E-scooters aren't easily available everywhere.

#### **ACCESSIBILITY ISSUES:**

Newer transportation options like bikeshare, e-scooters, and rideshare aren't available to people who have physical disabilities, don't speak English, or don't have a smartphone, bank account, or credit card.

# **Technology Strategy Recommendations**

### **BUS ARRIVAL TIME DISPLAYS (9.1)**

Add real-time displays showing bus arrival times to bus stops, especially in low-income areas.

### ALL-INCLUSIVE TRANSPORTATION TECHNOLOGIES AND MARKETING (9.2)\*

Figure out how to make new transportation technology, including e-bikes and bikeshare, scooter share, car-sharing, and electric vehicles, accessible to everyone, including non-English speakers, people who don't have smartphones or a bank account, and people who have a physical disability. Help educate people on disability transportation services offered already (eg. CARES and USERV GRTC programs).

## **AFTER-HOURS RIDES (9.3)**

Create an After-Hours Rides program - an uber-like service where bus riders can take a shared van instead of the bus from their block (instead of a bus stop) to their destination during hours that the bus doesn't run, and take this van for free if they are low-income.

### **MOBILITY AND PARKING APP (9.4)**

Create a user-friendly app to help RVA residents find bikeshare, scooters, and street parking, including electric vehicle parking, in real-time, and see prices and restrictions in advance. It should include trip planning for getting around without a car, and serve as a multimodal guide to key destinations (health care, parks, shopping, etc.) with walk routes, bike routes, and bus routes, schedules, and transfers to minimize travel times.

<sup>\*</sup>Strategy is adapted from the Richmond 300 Master Plan, Vision Zero Action Plan, or RVAgreen2050 Climate Equity Action Plan 2030. These strategies are not intended to conflict with or supercede the original strategies in other adopted plans. They are repeated here because they are critical to improving transportation equity in Richmond. Wording changes were made to make the language more accessible to the general public. In some cases, the focus group and Advisory Committee intentionally changed the wording of the strategies to clarify the intent and reflect the priorities of Communities of Concern.



# ACTION PLAN STRATEGIES | INC9: TECHNOLOGY



# **BUS ARRIVAL TIME DISPLAYS (9.1)**

Add real-time displays showing bus arrival times to bus stops, especially in low-income areas.

### **Next Steps:**

### **OETM**

- Work with GRTC to identify and prioritize bus stop locations.
- Collaborate with GRTC to apply for grants to purchase and install real-time bus arrival displays.



Partners in this strategy could include: GRTC

# ALL-INCLUSIVE TRANSPORTATION TECHNOLOGIES AND MARKETING (9.2)\*

Figure out how to make new transportation technology, including e-bikes and bikeshare, scooter share, car-sharing, and electric vehicles, accessible to everyone, including non-English speakers, people who don't have smartphones or a bank account, and people who have a physical disability. Help educate people on disability transportation services offered already (e.g. CARES and USERV GRTC programs).

\*This strategy is originally from Richmond 300, Objective 10.2, Strategy D, which reads "Develop programs to ensure equitable access to new mobility for individuals who are un-banked and/or do not have smart phones, and who are physically disabled."

### **Next Steps:**

#### **OETM**

- Explore information kiosks and booking kiosks as an option for multimodal hubs.
- Explore internet connectivity at bus stops and multimodal hubs.
- Work with experts on accessibility for ESL and senior populations to document barriers to accessing transportation technology.
- Hire an Emerging Technology Coordinator who will also be tasked with making technologies accessible to vulnerable Richmonders.



LQC Implementation could involve: kiosks

Partners in this strategy could include: Office of Aging and Disability Services, RRHA, OCWB, Office of Immigrant & Refugee Engagement, OSC



# ACTION PLAN STRATEGIES | INC9: TECHNOLOGY



# **AFTER-HOURS RIDES (9.3)**

Create an After-Hours Rides program - an uber-like service where bus riders can take a shared van instead of the bus from their block (instead of a bus stop) to their destination during hours that the bus doesn't run, and take this van for free if they are low-income.

### **Next Steps:**

#### **OETM**

• Collaborate with GRTC on applying for grants to accomplish this.



LQC Implementation could involve: service pilot.

Partners in this strategy could include: GRTC, PlanRVA

## **MOBILITY AND PARKING APP (9.4)**

Create a user-friendly app to help RVA residents find bikeshare, scooters, and street parking, including electric vehicle parking, in real-time, and see prices and restrictions in advance. It should include trip planning for getting around without a car, and serve as a multimodal guide to key destinations (health care, parks, shopping, etc.) with walk routes, bike routes, and bus routes, schedules, and transfers to minimize travel times.

### **Next Steps:**

### **DPW**

- Develop a curbside management plan, including a full parking assessment and ADA compliance assessment.
- Work with DIT to develop a concept for the app, including the information it would provide, and desired functionalities.



Partners in this strategy could include: OETM, PDR, DIT, OSC





# Top Non-Mappable Sustainability Needs

### **EMISSIONS**

City government transportation-related activities rely on fossil fuels, like gasoline, and produce greenhouse gas emissions and other air pollution, and there is currently no way to measure and monitor local/neighborhood air quality and transportation-related air pollution.

### **EV ACCESS**

Electric vehicles and e-bikes cost too much to own or rent. EV charging stations are only available in affluent white neighborhoods.

### **FOOD ACCESS AND INSECURITY**

It's hard to get to fresh food, community gardens, and community spaces for food vending and farmers markets.

#### **URBAN HEAT**

Street pavement and lack of street trees makes the air hot, which increases heat risk for pedestrians, bicyclists, and people waiting for the bus, and worsens water quality.

# **Sustainability Strategy Recommendations**

Transportation-Primary Sustainability Strategy Recommendations

### **ENCOURAGE ELECTRIFICATION EQUITABLY (10.1)\***

Transition GRTC fleet to electric buses. Provide equitable financial or other incentives for purchasing, renting, and sharing electrified mobility like EVs, e-bikes, and electric scooters. Research options to make e-bikes and EVs accessible and affordable, like e-bike vouchers and rebates. Install EV and e-bike chargers equitably. Prepare an Electric Vehicle Action Plan to assist with deployment and adoption of e-bike and EV technology.

# **Supporting Sustainability Strategy Recommendations**

- USE COOLER MATERIALS (10.2)\*
- COOLING CENTERS (10.3)\*
- SUSTAINABLE BUILDING & CONTRACTING REQUIREMENTS (10.4)\*
- MORE PLANTS & EDIBLE LANDSCAPING (10.5)\*
- COMMUNITY LOCATED FOOD & EDUCATION (10.6)\*

<sup>\*</sup>Strategy is adapted from the Richmond 300 Master Plan, Vision Zero Action Plan, or RVAgreen2050 Climate Equity Action Plan 2030. These strategies are not intended to conflict with or supercede the original strategies in other adopted plans. They are repeated here because they are critical to improving transportation equity in Richmond. Wording changes were made to make the language more accessible to the general public. In some cases, the focus group and Advisory Committee intentionally changed the wording of the strategies to clarify the intent and reflect the priorities of Communities of Concern.





### **ENCOURAGE ELECTRIFICATION (10.1)\***

Transition GRTC fleet to electric buses. Provide equitable financial or other incentives for purchasing, renting, and sharing electrified mobility like EVs, e-bikes, and electric scooters. Research options to make e-bikes and EVs accessible and affordable, like e-bike vouchers and rebates. Install EV and e-bike chargers equitably. Prepare an Electric Vehicle Action Plan to assist with deployment and adoption of e-bike and EV technology.

\*This strategy is originally from RVAGreen 2050, Strategy TM-3.2, Action i, which reads, "Support equitable planning for the build-out of electric vehicle charging stations throughout the City and ensure equitable distribution of these stations geographically

### **Next Steps:**

### **OETM & OOS**

- Complete the Electric Vehicle Action Plan.
- Hire an Emerging Technology Coordinator to research and promote collaboration to deploy these technologies in an equitable way.

### GRTC

• Develop a fleet transition plan to transition fleet to cleaner fuel vehicles.

## **USE COOLER MATERIALS (10.2)\***

Use light color roofs and roofs with plants (green roofs) to cool the air and reduce heat.

\*This strategy is originally from RVAGreen 2050, Strategy ENV-2.1, Action ii, which reads, "Develop a cool surfaces program for lighter color and green roofs and lighter color surfaces such as streets and parking lots."

### **Next Steps:**

### **00S**

- Continue the conversation to embed climate sensitive building practices into City policies.
- Research and share best practices with DPW and PDR on new materials and risks and benefits of using them.



Partners in this strategy could include: DPW, OETM, PDR, Private developers





## COOLING CENTERS (10.3)\*

Provide shade and cooling areas like cooling centers at community centers and libraries, and shelters and solar-powered fans at bus stops, with special attention paid to transit transfer centers. Figure out where temperatures are the hottest and which communities are most at risk for heat-related illnesses, and provide shade and cooling in these areas first.

\*This strategy is originally from RVAGreen 2050, Strategy C-2.4, Actions i and ii, which read, "Identify community facilities such as community centers and libraries to serve as resilience hubs and cooling centers to the community" and "Provide funding to these facilities to enable them to serve as resilience hubs for low-income, elderly, young, and populations experiencing homelessness."

### **Next Steps:**

#### 005

• Convene a heat island working group to collaborate across departments to find funding and staff to implement.



LQC Implementation could involve: Pop-up cooling stations on high heat days, movable planters, and movable shade structures.



Partners in this strategy could include: OETM, DPW, PCRF, GRTC

# SUSTAINABLE BUILDING & CONTRACTING REQUIREMENTS (10.4)\*

Change the requirements for new buildings so builders, including the City, are required to put in sidewalks with street trees, and use materials that reduce flooding, keep pollution out of rivers and streams, and don't make the air hotter. Require City contracts to prioritize vendors that are minority-owned and energy-efficient contractors that use green energy and green vehicles, and have green certifications.

\*This strategy is originally from Richmond 300, Objective 8.1, Strategy B, which reads "Require developers to construct sidewalks and street trees as part of their development projects (see Goal 4), including single-family infill developments in neighborhoods."

### **Next Steps:**

### 005

- Assess if green practices can be incorporated into COR contracting process.
- Continue the conversation to embed climate sensitive building practices into City policies.
- Work with PDR and City Council to develop heat island overlays that have strict requirements for heat mitigation elements.



Partners in this strategy could include: OETM, PDR, OMBE, Procurement Office





## MORE PLANTS & EDIBLE LANDSCAPING (10.5)\*

Plant more trees, landscaping, and other green infrastructure along streets throughout the City to create more shade, absorb rainwater, provide food, and improve water quality. Preserve and increase the tree canopy during sidewalk projects. Plant fruit and vegetable producing landscaping along sidewalks and in public parks and green spaces where possible. Allow residents to plant in City-owned green spaces. Explore planting fruiting trees within the right-of-way, with proper identification signage, for public use. Encourage neighbors to 'adopt' these gardens and tend to them.

\*This strategy is originally from Richmond 300, Objective 17.4, Strategy A, which reads: "Expand the community garden program by developing standards and guidelines for community gardens on public lands to ensure transparency, continuity of use, community benefit, and access to a water source."

### **Next Steps:**

### **PCRF**

- Identify staff, such as a city arborist, to lead this strategy.
- Research the potential costs, benefits, and precedents for this practice.
- Form partnerships with local universities and other community partners to test pilot plots.



**LQC Implementation could involve:** pop-up mobile community gardens and movable raised planters.



Partners in this strategy could include: OOS, DPW, local universities, community partners

## **COMMUNITY LOCATED FOOD & EDUCATION (10.6)\***

Bring fresh-food vendors into communities through partnerships, allow fee-free vegetable vending on site and in neighborhood parks, and bring education on environmental and bodily health into the communities at the same time.

\*This strategy is originally from Richmond 300, Objective 17.4, Strategy E, which reads "Expand where farmers' markets, grocery stores, and other healthy food retailers are permitted, especially in Nodes and along enhanced transit corridors."

### **Next Steps:**

### PCRF, Richmond Area Health District

· Identify key staff and funding needed.



LQC Implementation could involve: Program Pilot

Partners in this strategy could include: Community partners



# **HOW WE DO BUSINESS**

Equally as important as what projects and programs we implement, is how we implement them. In order to achieve the goals of the adopted Equity Agenda, the City of Richmond must take an "equity in all policies" approach. This means the outcomes and distinct recommendations of this plan cannot be taken as a comprehensive shift towards equity in transportation without an accompanying update to 'how we do business' across all of the City, including all of DPW. If the same guiding principles, equity factors, equitable transportation vision, and equity agenda that guided this process are not implemented across all levels of decision making and investment in transportation, equity goals will not be realized.

Several themes and policy challenges in "how we do business" as a City government have emerged through this process. Many of these do not fit neatly into a line on a map or a bounded, action-oriented strategy or program that can be prioritized. Many of these challenges represent institutional, pervasive, systemic culture shifts and policy changes that must happen from the inside out. The three Guiding Principles (Figure 10) from Path to Equity lay the groundwork for these 'How We Do Business" strategies, listed in the table on the following pages.

# WALK THE WALK, NOT JUST TALK THE TALK

Ensure that implementation and enforcement of any policy, program, or regulation does not disproportionately impact or burden, or displace, low-income communities and communities of color, and lifts up everyone.

# PUT YOUR MONEY WHERE YOUR MOUTH IS

Ensure taxpayer money spent on transportation projects, in City procurement, and for employee labor are weighted towards reducing income disparities and addressing the growing wealth gap in low-income communities and communities of color/BIPOC.

# LISTEN MORE THAN YOU TALK

Ensure outreach is equitable, community-based, accessible to all, begins early in the process, and that communities are given decision-making power.

Figure 10. Guiding Principles from the Path to Equity Policy Guide.

 $<sup>1\</sup> https://planning-org-uploaded-media.s3.amazonaws.com/publication/download_pdf/Planning-for-Equity-Policy-Guide-rev.pdf$ 



### LIGHTER QUICKER CHEAPER PROGRAM

Develop a program with dedicated funding to implement quick fixes and demo projects for the most pressing transportation needs. This program should eventually be a Richmonder-led process that is supported by City staff and funding.

The length of time to plan, engineer, fund, and implement a transportation project can be stifling to community safety and equity. Communities need a grassroots process to design, fund, and quickly build improvements to their neighborhoods, with support from City staff. This will move the needle towards community-led processes. It represents the highest level of citizen power and redresses the placative nature of many engagement processes.

### **Next Steps:**

### **OETM**

- Develop program parameters
- Develop guidebook for LQC process for Richmonders to follow
- Identify dedicated funding for annual program



Partners in this strategy could include: Richmonders, DPW, Participatory Budgeting Committee, City Council, community partners

### PEOPLE LED PROCESSES

Support and expand participatory budgeting and people-led planning processes, shifting to true community voice and power. Empower communities to have a direct vote on how their tax dollars are spent and how planning is accomplished.

Key components of environmental justice include deferring to local knowledge and co-creating solutions.¹ Moving towards people-led processes gives power back in the hands of disenfranchised communities and builds change from the bottom up rather than top down. It allows for the highest degree of citizen participation and embodies the goals of empowering communities.

### **Next Steps:**

#### **Richmonders**

• Collaborate with participatory budgeting committee already underway



Partners in this strategy could include: OETM, DPW, City Council, CAO, Finance

<sup>1</sup> https://planning-org-uploaded-media.s3.amazonaws.com/publication/download\_pdf/Planning-for-Equity-Policy-Guide-rev.pdf



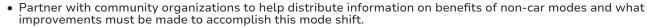
### SHIFT THE CAR NARRATIVE

Work with Richmonders to raise awareness and education around disparities created by a car-centric culture, and the history of this injustice and disparities it has perpetuated. Continue to research and measure outcomes of car-centric design and culture on health and wealth outcomes.

Much of the systemic and embedded conversation around transportation involves single-occupant vehicles. The shift towards car-free and car-light lifestyles requires the support of significant programmatic and infrastructure improvements. A community understanding of why it is important to reduce car trips is vital to this effort. This information is not readily available, and a lack of understanding of the purpose of certain multimodal improvements means these projects often face resistance, including from internal DPW staff. An inside-out culture must happen for this to take hold and make lasting change.

### **Next Steps:**

#### **OETM**







Partners in this strategy could include: Richmonders, community organizations

### MESSAGING TRANSPARENCY

Develop guidelines for temporary signs and information kiosks to accompany construction of improvements. Communicate what is underway and what are the benefits via signage at implementation sites. Develop outreach guidelines for both property owners and renters.

Knowledge is power. Richmonders often lack the knowledge to understand the intent of certain roadway treatments and improvements, and only see it as a burden or a taking. The City of Richmond must work to improve messaging and information sharing about every transportation project that is implemented. Benefits must be documented with data and research. Evidence-based decision-making must be transparent. Messaging cannot rely only on digital means; signs, placards, information kiosks, in-person ambassadors, and pamphlets must be considered as information-sharing mechanisms every time a project is planned or started on City streets.

### **Next Steps:**

### OSC

• Research, develop, and deploy alternative messaging strategies other than digital only.



Partners in this strategy could include: OETM, DPW, City Council



## **EQUITABLE, HOLISTIC PROJECT PRIORITIZATION & FUNDING**

Incorporate equity into the processes for prioritizing sidewalk, maintenance, and other ongoing improvement line items in the CIP. Make these processes transparent and community driven. Work to break down silos in transportation funding such as bus stops vs. sidewalks, which come from completely different funding mechanisms. Continue work within DPW to incorporate improvements into existing funding streams and improvement programs (e.g. bike lanes with pavement maintenance), and bundle projects to accomplish multiple modal improvements in one project. Develop corridor master plans with ultimate build-out so that improvements can work towards a clear end vision.

### **Next Steps:**

#### **DPW & OETM**

- Assess all prioritization processes for adherence to equity goals.
- Develop equitable transportation scorecard for all processes.



Partners in this strategy could include: City Council

### PROGRAMMATIC FUNDING

Consider ways to elevate programs into the same status of importance as capital improvements. Oftentimes programmatic recommendations receive cents compared to the dollars that capital projects receive, when these can often close the gaps in accessibility for the most vulnerable residents.

### **Next Steps:**

#### **OETM**

- Research barriers to programmatic funding.
- Propose legislative changes to overcome the barriers.
- Lobby local legislators to change funding categories to improve funds for equitable programming not just capital improvements.



Partners in this strategy could include: DPW, City Council

## **ACQUIRE FUNDING EQUITABLY**

Research and deploy equitable practices in municipal bonding and other revenue generating mechanisms.

### **Next Steps:**

#### CAO

Consider partnerships with Public Finance Initiative and other organizations already activating in this space.<sup>1</sup>



Partners in this strategy could include: Finance, OETM, DPW, City Council

1 https://www.nlc.org/wp-content/uploads/2022/11/Racial-Equity-and-Bonds-Brief-2.pdf



# PROCURE EQUITABLY

Purchase from disadvantaged businesses. Incorporate equity in the required components of procurement scoring criteria.

### **Next Steps:**

### **OETM**

- Assess weaknesses and strengths of current procurement processes for transportation projects.
- Advocate for inclusion of equity-based scoring criteria to be mandatory in procurements.<sup>1</sup>

# HIRE EQUITABLY

Promote workforce equity when making hiring decisions and acknowledge City dollars can close the wealth gaps.

### **Next Steps:**

### CAO

• Utilize GARE resource guides on how to make public sector jobs opportunities for advancing racial equity.<sup>2</sup>



Partners in this strategy could include: DPW, City Council

<sup>2</sup> https://racialequityalliance.org/wp-content/uploads/2015/02/Public-Sector-Jobs-Final1.pdf



<sup>1</sup> https:// racialequityalliance.org/wpcontent/uploads/2015/12/GAREContract\_For\_Equity.pdf

# **USING THIS PLAN**

This plan will feed projects and programs into multiple funding streams for years to come. Funding large transportation projects can be complex and require pulling funding from multiple sources, including local, regional, state and federal dollars. The Department of Public Works and its Office of Equitable Transit and Mobility will work to develop project applications based on the projects prioritized in this document. Some LQC projects may be implemented as soon as Spring 2024. Others may not come to fruition for years as planning, community engagement, design and engineering, and environmental work is completed. Others may have engineering completed but still not be implemented for several years as the City works to piece together funding.

Richmonders can help move projects forward by writing their representatives and council members, and continue to advocate for system level change in the way State and Federal dollars are allocated across project types. Richmonders can also get involved through the OETM Lighter, Quicker, Cheaper program being developing in 2024.

We invite Richmonders to stay in touch with the City to track project status, and be on the lookout for additional community engagement opportunities as projects move forward through many stages of development and delivery.



# **APPENDIX A:**

Action Plan Projects Details

# 4C: Richmond Connects Equity-Driven Sidewalks Projects

Support Score: 5.0

Cost: Very High (\$\$\$\$)

What is the need?
Why is this project a priority
to make transportation more
equitable?

### What should be done?

What are the first steps?

Communities of Concern and the general public consistently said filling in sidewalk gaps and fixing broken sidewalks was a top priority need, especially in Southside, East End, and other areas in Communities of Concern, where sidewalks are lacking and a lot of people rely on walking to get around.

This recommendation had the highest support from Communities of Concern and the general public in the survey of draft recommendations in many neighborhoods throughout the City. Many people said fixing sidewalks was the #1 improvement needed to make transportation in Richmond equitable.

This recommendation prioritizes sidewalk gaps and maintenance in areas with high equity needs for pedestrian safety (EF6) and in areas densely populated with Communities of Concern (EF9).

New citywide program to fill sidewalk gaps, repair broken sidewalks, install curb ramps, and add street trees and native landscaping in areas with the highest equity-based needs, and permeable materials in high flood areas. Sidewalk projects should preserve street trees, especially large mature trees, and create healthy foundations for the growth of large mature trees.

Projects for pursuing first include:

- 16 new sidewalk construction projects in Southside representing the highest equity-based pedestrian needs,
- 9 new sidewalk construction projects in Fulton, identified by Communities of Concern as a Super Need, and
- 60 blocks of sidewalk repair projects in Highland Park and Fairfield

These projects are listed separately in the <u>Priority Sidewalk Gap Projects</u> and <u>Priority Sidewalk Repair Projects</u>, but they are not a comprehensive list of all sidewalk projects within Tier 1 equity-weighted need areas.

Where new sidewalks may not be feasible on residential streets, try implementing bike-walk or slow streets (Strategy 6.5).

Prioritize additional sidewalk projects to reflect the disability hot-spots that will be identified in Strategy 1B.2. The goal of this project is to repair all broken sidewalks throughout the City, and prioritize limited resources to fix sidewalks in disability hot-spots first.

- Create a new line item in the Capital Improvement Program with dedicated annual funding for equity-driven sidewalk projects.
- 2. Pursue funding for the <u>Priority Sidewalk Gap Projects</u>. New sidewalk construction projects in Southside and Fulton far exceed current available funding and project limits. These projects should be pursued in smaller segments. The City should work with VDOT and federal/state legislators and program administrators to determine new ways of funding these large sidewalk construction projects.
- 3. Prioritize sidewalk repair for the <u>Priority Sidewalk Repair Projects</u>. Sidewalks on these streets in Fairfield and Highland Park are in disrepair. Communities of Concern repeatedly said these need to be fixed.
- 4. Revise the sidewalk maintenance process and project development process to prioritize sidewalk repair and filling in sidewalk gaps in Communities of Concern and/or disability hotspots. This could be accomplished by:
  - Developing a new citywide sidewalk dataset (or modifying the existing dataset) to identify sidewalk gaps
  - Developing a process for keeping the new sidewalk dataset up-to-date and using it to identify highestpriority sidewalk projects for the new program based on equity needs
  - Combining this information with the equity-based pedestrian need scores and sidewalk condition scores
  - Working with residents, community organizations, and disability advocates and representatives to develop a process for prioritizing sidewalk repair and sidewalk construction projects that equitably prioritizes residents who have physical disabilities.
- 5. Pursue some of these sidewalk projects through CVTA funding because they connect to the Fall Line Trail and/or Capital Trail. Richmond Connects also encourages incorporation of BRT as qualifying connectors in the CVTA eligibility criteria (e.g. sidewalk connections to BRT will become eligible for CVTA regional funding)."



Support Score: 5

# 5B: Mosby Street/ Mechanicsville Turnpike Pedestrian Safety Improvements

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
Communities of Concern consistently said crossing the street feels unsafe on Mosby Street and Mechanicsville Turnpike. This was a top public comment in the East End.  The data-based needs analysis identified Tier 1 equity-based pedestrian and safety/security needs here. This recommendation had the highest support from Communities of Concern and the general public in the survey of draft recommendations in the Fairfield area.  This recommendation will improve infrastructure in previously redlined areas (EF1), slow traffic in areas with equity needs related to bike/pedestrian safety (EF6), and add green infrastructure in areas with disparate climate impacts (EF8, EF10). It is located in an area with densely populated Communities of Concern (EF9).	Various potential improvements may be considered at 11 intersections on Mosby Street/Mechanicsville Turnpike, including:  • High visibility crosswalks, • Crosswalk signage, • Curb extensions to shorten crossing distances and slow vehicle speeds, • Pedestrian median refuges, • Rectangular rapid flashing beacons, and • Curb ramp improvements.  Not all improvements will be installed at all 11 intersections.  Improvements could also include: • A raised crosswalk in front of the school entrance • Marking lane edge lines to visibly narrow road widths to slow vehicle speeds • Converting Mechanicsville Turnpike south of I-64 from 4 lanes to 2 lanes to slow vehicle speeds  These improvements will be vetted with the community to determine which improvements get implemented.	<ol> <li>Identify benefits and drawbacks of potential improvements, including analysis of traffic impacts of potential roadway conversion, fire/ EMS impacts of raised crosswalks or other vertical speed management features.</li> <li>Share drawings of the options for improvements with the community and discuss the pros and cons. Work with the community to finalize the concept, and make sure the community supports it.</li> <li>Develop engineering plans for improvements.</li> <li>Identify and allocate funding.</li> </ol> LQC option: Crosswalk improvement



Cost: Moderate (\$\$)

# 1C.3: Laburnum Avenue Safety Improvements

What is the need?			
Why is this project a priority to make transportation			
more equitable?			

Communities of Concern consistently said speeding on Laburnum Avenue is a problem, and the intersection of Laburnum Avenue and Hermitage Road feels unsafe. These were identified as Super Needs.

The data-driven needs analysis identified **Tier 1 equity-based pedestrian and safety/security needs** on Laburnum Avenue near Hermitage Road.
Pedestrian safety improvements had **high support from Communities of Concern and the general public** in the survey of draft recommendations.

This recommendation would improve infrastructure in **previously redlined areas** (EF1) and improve walkability in areas with equity needs related to **carcentric planning** (EF5), **bike/pedestrian safety** (EF6), and **disparate climate impacts** (EF8).

### What should be done?

Support Score: 4.9

Cost: High (\$\$\$)

Work with the community to develop concepts for improvements to slow vehicle speeds and improve pedestrian crossings. Improvements could include installing pedestrian hybrid beacons and curb extensions at several intersections along Laburnum Avenue. These intersections could include:

- Laburnum Avenue at Montrose Avenue
- Laburnum Avenue at Noble Avenue
- Laburnum Avenue at Seminary Avenue
- Laburnum Avenue at Rosedale Avenue

A pedestrian hybrid beacon already exists at the intersection of Laburnum Avenue and Monticello Street.

Pedestrian median refuge islands could also be installed at the intersections of Laburnum Avenue at Montrose Avenue, and Laburnum Avenue at Noble Avenue.

Roundabouts may be an option at several intersections. Roundabouts are proven to reduce vehicle speeds and reduce severe crashes. Intersections that could be considered for roundabouts include:

- Laburnum Avenue at Brook Road
- Laburnum Avenue at Chamberlayne Avenue
- Laburnum Avenue at North Avenue.

Additionally, a study is currently underway for the intersection of Laburnum Avenue and Hermitage Road to determine the best configuration for the intersection, which may include a roundabout.

These improvements will be vetted with the community to determine which improvements get implemented.

### What are the first steps?

- 1. Complete the intersection study of Laburnum Avenue and Hermitage Road to identify feasible options that benefit all modes. Discuss the pros and cons with the community. Include the community to decide which configuration to implement.
- 2. Share drawings of the potential improvements at the other intersections along Laburnum Avenue with the community, and discuss the pros and cons. Work with the community to finalize the improvements at each intersection, and make sure the community supports them.
- Prepare the engineering design plans. Identify and allocate funding.

LQC options: Crosswalk improvements, traffic calming



# 1C.1: Chamberlayne Avenue Pedestrian Safety Improvements

# What is the need? Why is this project a priority to make transportation more equitable?

Communities of Concern and the general public consistently said walking along and riding a bike on Chamberlayne Avenue feels unsafe, citing speeding as a contributing factor. Crossing Chamberlayne feels unsafe, especially at John Marshall High School

The data-driven needs analysis revealed **high equity-driven safety/ security needs** along Chamberlayne Avenue. Pedestrian safety improvements on Chamberlayne Avenue was the **highest supported recommendation** in the survey on draft recommendations in several Northside areas. Chamberlayne Avenue is part of the high-injury street network. GRTC is planning bus rapid transit service along Chamberlayne Avenue.

This recommendation will improve infrastructure in **previously redlined areas** (EF1) and improve walkability in areas with equity needs related to **car-centric planning** (EF5), **bike/pedestrian safety** (EF6), and **disparate climate impacts** (EF8).

Improvements are already in various phases of implementation at many intersections along Chamberlayne Avenue. These include:

- Pedestrian Hybrid Beacons at Westminster Avenue (SS4A), Walton Avenue (HSIP), and Hammond Avenue (SS4A), and Sledd Street (SS4A)
- High visibility crosswalks at North Avenue, Laburnum Avenue, and Brookland Park Boulevard
- Red light running camera at Overbrook Road
- New traffic signal at Bacon Street

and Westbrook Avenue.

- Signs and pavement markings at unsignalized intersections
- Flashing yellow arrows and high visibility signal backplates at signalized intersections
- Transit stop accessibility improvements at 7 bus stops south of Brookland Park Boulevard
- Streetlight LED conversions south of Brookland Park Boulevard

### What should be done?

Support Score: 4.9

Consider seeking an additional pedestrian hybrid beacon at Westbrook Avenue for access to Henderson Middle School and at North Avenue.

In addition, a roadway conversion may be considered at along Chamberlayne to convert one of the two lanes in each direction to a bus-only lane. This potential improvement would need to be studied for feasibility and traffic impacts. GRTC Route 1 currently runs along Chamberlayne Avenue. GRTC and the City are planning to implement bus rapid transit along Chamberlayne Avenue. A roadway conversion could implement bus only lanes prior to construction of the BRT stations to improve bus reliability and calm general traffic speeds.

Implementation of these improvements should involve conversations with the community to make sure they are adequately addressing the identified needs.

The buffered bike lanes on Brook Road provide a protected bicycle facility for north-south travel parallel to Chamberlayne Avenue. Hardening the bike lanes protection on Brook Road is part of another Recommendation 1J.

### What are the first steps?

Cost: High (\$\$\$)

- Share drawings of the potential improvements at intersections along Chamberlayne Avenue with the community. Work with the community to identify additional improvement locations.
- Study the potential roadway conversion. Share the findings with the community, and work with the community and GRTC to develop the preferred concept.
- 3. Prepare the engineering design plans. Identify and allocate funding.

LQC options: Crosswalk improvements, traffic calming, roadway conversion demonstration, placing bike racks or corrals in select parking spaces



# 1C.2: Brook Road Traffic Calming and Pedestrian Safety Improvements Support Score: 4.9 Cost: High (\$\$\$)

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
Communities of Concern consistently said speeding along Brook Road is an issue. This was identified as a Super Need.  This recommendation will improve infrastructure in previously redlined areas (EF1) and improve walkability in areas with equity needs related to carcentric planning (EF5), bike/pedestrian safety (EF6), and disparate climate impacts (EF8).	Potential improvements may include:  Installing marked crosswalks and concrete islands in the buffer between the bike lanes and the vehicle lanes on either side of crosswalks, potentially with landscaping and vegetation  Pedestrian hybrid beacons at select intersections  Roundabouts, which are proven to slow vehicle speeds and reduce severe crashes, potentially at Laburnum Avenue and/or Brookland Parkway  These improvements will need to be studied for feasibility, and will be vetted with the community to determine which improvements get implemented.  Recommendation 1J to harden the buffer between the bicycle lanes and vehicle lanes on Brook Road is related, and could potentially be combined with these recommendations into one project.	<ol> <li>Study the potential roundabout and pedestrian hybrid beacons for feasibility.</li> <li>Share drawings of the potential improvements and study findings with the community. Work with the community to finalize the improvements.</li> <li>Prepare the engineering design plans. Identify and allocate funding.</li> </ol> LQC options: Crosswalk improvements, traffic calming



12C: Midlothian Turnpike Safety Improvements - German School Road to Carnation Street Support Score: 4.8 Cost: Very High (\$\$\$\$)

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
Although sidewalks and crosswalks at signalized intersections were installed along Midlothian Turnpike in 2011, Communities of Concern consistently said pedestrian crossings on Midlothian Turnpike feel unsafe.  The data analysis revealed very high equity-weighted pedestrian needs along this section of Midlothian Turnpike. There is a high density of Communities of Concern that live near and walk along Midlothian Turnpike. This section of Midlothian connects two Nodes. This recommendation was very highly supported in the survey of draft recommendations among all respondents overall and especially among Community of Concern respondents.  This recommendation will improve walkability in a low-income inner-ring suburb (EF4) with equity needs related to car-centric planning (EF5), bike/pedestrian safety (EF6), and disparate climate impacts (EF8).	Potential improvements for pedestrian crossings on Midlothian Turnpike may include:  • ADA curb ramp improvements, pedestrian signal upgrades, and pedestrian median refuges islands with push-buttons at signalized intersections  • Close entrances within 100 ft of intersections  • Install two pedestrian hybrid beacons to provide safe crossing opportunities between signalized intersections.  • Install bus shelters and benches at bus stops.  • Widen sidewalk on north side from 5 ft to 8-to-10 ft to serve as a shared-use path for bicyclists and pedestrians.  • Consolidate entrances to create more continuous path with fewer points of conflict with turning vehicles.  • Adding a traffic signal at Old Warwick Road with crosswalks, curb ramps, and pedestrian signals.  Additionally, GRTC and the City are planning bus rapid transit on Midlothian Turnpike. A roadway conversion to provide bus-only lanes could be studied, which might help to slow traffic speed and improve the pedestrian experience.  These potential improvements need to be examined in more detail to determine feasibility. They will be vetted with the community to determine which improvements get implemented.	<ol> <li>Examine feasibility and identify benefits and drawbacks of the potential improvements.</li> <li>Share drawings of the potential improvements and study findings with the community. Work with the community to finalize the improvements.</li> <li>Prepare the engineering design plans. Identify and allocate funding.</li> </ol> LQC option: Roadway conversion demonstration



#### 10A 1. Bells Road Sidewalks

LOA.1: Bells Road Sidewalks	Support Score: 4.8 Cost: High (\$\$\$)	
What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
Communities of concern consistently said missing sidewalks and speeding on Bells Road are important issues that need to be addressed. These were identified as Super Needs.  The data-based analysis revealed Tier 1 equity-weighted pedestrian and bicycle needs along Bells Road. Bells Road at Richmond Highway is a Richmond 300 Node. Pedestrian improvements on Bells Road, Walmsley Boulevard, and Terminal Avenue was a highly supported recommendation in the survey on draft recommendations among Communities of Concern and the general public.  This recommendation will improve pedestrian safety to connect Communities of Concern to opportunities (EF6) and provide an investment in pedestrian infrastructure in low-income inner ring suburbs where families are pushed (EF4).	On-street separated bike lanes on Bells Road were installed in 2023 from Richmond Highway to the west, connecting to the separated bike lanes on Warwick Road.  Potential improvements include:  • Filling in missing sidewalk gaps on Bells Road between Richmond Highway and Belt Boulevard  • Marking crosswalks across Bells Road, potentially with a rectangular rapid flashing beacon or pedestrian hybrid beacon at Belt Boulevard and at the bus stops just west of Castlewood Road  These improvements would need to be examined in more detail to determine feasibility. They will be vetted with the community to determine which improvements get implemented.	<ol> <li>Examine feasibility and identify benefits and drawbacks of the potential improvements.</li> <li>Share drawings of the potential improvements and study findings with the community. Work with the community to finalize the improvements.</li> <li>Prepare the engineering design plans. Identify and allocate funding.</li> </ol>



Support Score: 4.8

Cost: Very High (\$\$\$)

#### 10A.2: Walmsley Boulevard Shared Use Path

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
Communities of concern consistently said the lack of sidewalks on Walmsley Boulevard is a major concern. This was identified as a Super Need. People frequently walk on this road, including to and from Boushall Middle School.  The data-based analysis revealed Tier 1 equity-based pedestrian and bicycle needs on Walmsley Boulevard. Pedestrian improvements on Bells Road, Walmsley Boulevard, and Terminal Avenue was a highly supported recommendation in the survey on draft recommendations among Communities of Concern and the general public.  This recommendation will provide a safe connection for walking and bicycling in a low-income inner ring suburb (EF4), and improve pedestrian safety in a carcentric area (EF5) where the lack of walk and bike connections limit access (EF6).	Potential improvements to Walmsley Boulevard from Richmond Highway to Hopkins Road include:  Constructing a shared use path for pedestrians and bicyclists on the north side of Walmsley Boulevard  Installing marked crosswalks aross Walmsley Boulevard, potentially with rectangular rapid flashing beacons at bus stop locations  These improvements would need to be examined in more detail to determine feasibility. They will be vetted with the community to determine which improvements get implemented.	<ol> <li>Examine feasibility and identify benefits and drawbacks of the potential improvements.</li> <li>Share drawings of the potential improvements and study findings with the community. Work with the community to finalize the improvements.</li> <li>Prepare the engineering design plans. Identify and allocate funding.</li> </ol>



Support Score: 4.8

Cost: High (\$\$\$)

#### 10A.3: Terminal Boulevard Shared Use Path

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
The data-based analysis revealed Tier 1 equity-based pedestrian and bicycle needs on Terminal Avenue. Terminal Avenue is a key connection between US Route 1 and Belt Boulevard.  Pedestrian improvements on Bells Road, Walmsley Boulevard, and Terminal Avenue was a highly supported recommendation in the survey on draft recommendations among Communities of Concern and the general public.  This recommendation will provide a safe connection for walking and bicycling in a car-centric (EF5), low-income inner ring suburb (EF4), where the lack of walk and bike connections limit access (EF6).	Sidewalk was recently installed on the south side of Terminal Avenue. There is a ~200-ft gap in the sidewalk across the railroad track.  This recommendation includes:  Closing the gap over the railroad track  Widening the existing sidewalk to convert it to a shared-use path for pedestrians and bicyclists, providing a comfortable off-road bicycle connection  These improvements would need to be examined in more detail to determine feasibility. They will be vetted with the community to determine which improvements get implemented.	<ol> <li>Examine feasibility and identify benefits and drawbacks of the potential improvements.</li> <li>Share drawings of the potential improvements and study findings with the community. Work with the community to finalize the improvements.</li> <li>Prepare the engineering design plans. Identify and allocate funding.</li> </ol>



Support Score: 4.8

Cost: Moderate (\$\$)

#### 3A: North Avenue Pedestrian Safety Improvements

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
Communities of Concern consistently said crossing North Avenue feels unsafe, especially at Brookland Park Boulevard. This was identified as a Super Need.  The data analysis revealed a Tier 1 equity-based pedestrian need on North Avenue between Laburnum Avenue and Chamberlayne Avenue.  Improving pedestrian safety on Chamberlayne Avenue, Brook Road, and North Avenue was highly supported in the survey of draft recommendations in the Highland Park needs area, especially among Communities of Concern.  This recommendation will improve infrastructure in previously redlined areas (EF1) and improve walkability in areas with equity needs related to carcentric planning (EF5), bike/pedestrian safety (EF6), and disparate climate impacts (EF8).	<ul> <li>Potential improvements along North Avenue include:</li> <li>Marking crosswalks and installing curb extensions to shorten pedestrian crossing distances at Montrose Avenue, Nottingham Place, Moss Side Avenue, Corbin Street, Piney Road, and Old Brook Road.</li> <li>Installing a roundabout, which can reduce vehicle speeds and reduce severe crashes, at the intersection of North Avenue at Laburnum Avenue, with improved access management and pedestrian infrastructure.</li> <li>Making pedestrian improvements at the intersection of North Avenue and Brookland Park Boulevard by removing turn lanes and installing curb extensions to shorten pedestrian crossing distances, and introducing a pedestrian-only "scramble" signal phase where pedestrians can move in any direction.</li> <li>These improvements will need to be examined in more detail to determine feasibility. They will be vetted with the community to determine which improvements get implemented.</li> </ul>	<ol> <li>Examine feasibility and identify benefits and drawbacks of the potential improvements.</li> <li>Share drawings of the potential improvements and study findings with the community. Work with the community to finalize the improvements.</li> <li>Prepare the engineering design plans. Identify and allocate funding.</li> <li>LQC Options:         <ul> <li>Traffic calming</li> <li>Pedestrian scramble signal phase which would allow all pedstrians to cross at once without any conflicting car traffic and without lane modifications</li> <li>Demostration test of turn lane closures</li> </ul> </li> </ol>



12A: Jahnke Road Pedestrian Improvements - Blakemore Road to Hioaks Road Support Score: 4.7 Cost: High (\$\$\$)

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
The data analysis revealed Tier 1 equity-based pedestrian needs along Jahnke Road. The equity-based needs west of German School Road are among the highest in the City, primarily due to very poor walk accessibility in an area of high density of Communities of Concern, connecting two Richmond 300 Nodes.  Public comments identified Jahnke Road as feeling unsafe for pedestrians. This recommendation was highly supported in the survey on draft recommendations in the Midlothian/German School Road needs area.  This recommendation will add connections for inner ring suburbs (EF4), improve pedestrian safety, and reduce need for car ownership (EF5, EF6).	The City is currently implementing a project on Jahnke Road from Forest Hill Avenue to Blakemore Road that will include sidewalks and shared use paths.  This recommendation is focused on improving pedestrian safety west of Blakemore Road, where the equity-based need analysis score is highest, past where the current project ends.  Potential improvements include:  Installing sidewalk or a shared use path on the north side of Jahnke Road between German School Road and Hioaks Road.  Installing a new crosswalk with pedestrian hybrid beacon at the bus stop between Blakemore Road and German School Road to provide direct pedestrian crossing.  Installing a new crosswalk with pedestrian hybrid beacon at bus stop between Westover Gardens Boulevard and Hioaks Road to provide direct pedestrian crossing.  Improved crossing facilities with ADA curb ramps and pedestrian push-buttons at Westover Gardens Boulevard.  These improvements will need to be examined in more detail to determine feasibility. They will be vetted with the community to determine which improvements get implemented.	<ol> <li>Examine feasibility and identify benefits and drawbacks of the potential improvements.</li> <li>Share drawings of the potential improvements and study findings with the community. Work with the community to finalize the improvements.</li> <li>Prepare the engineering design plans. Identify and allocate funding.</li> </ol> LQC Option: Crosswalk improvements



Support Score: 4.6

### 6A: Fairmount Avenue Pedestrian Safety Improvements and Traffic Calming

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
Communities of concern in the East End consistently said speeding is a concern on Fairmount Avenue. This was identified as a Super Need. They noted it is difficult for pedestrians to navigate the roundabout at 25th Street and Fairmount Avenue. Public comments mentioned drivers not yielding to pedestrians and speeding.  This recommendation will improve pedestrian safety (EF6) and invest in infrastructure in a previously redlined area (EF1).	Potential improvements on Fairmount Avenue may include:  • ADA curb ramp improvements and curb extensions to narrow the lane widths, slow vehicles, make pedestrians more easily visible to drivers, and reduce pedestrian crossing distances at unsignalized intersections  • High visibility crosswalk marking patterns and in-road signage to warn drivers of the possible presence of pedestrians  • Speed tables and/or traffic circles at select intersections, pending review of heavy vehicles and volumes  • Potential crosswalk improvements at the roundabout at 25th Street, including potentially moving the crosswalks closer to the roundabout.  These improvements will need to be examined in more detail to determine feasibility. They will be vetted with the community to determine which improvements get implemented.	<ol> <li>Examine feasibility and identify benefits and drawbacks of the potential improvements.</li> <li>Share drawings of the potential improvements and study findings with the community. Work with the community to finalize the improvements.</li> <li>Prepare the engineering design plans. Identify and allocate funding.</li> <li>LQC Options: Temporary speed table/ traffic circle/ in-roadway signs for pedestrians, and high visibility crosswalk markings; Paint and post daylighting of intersections.</li> </ol>



Cost: Moderate (\$\$)

9A: Semmes Avenue and Cowardin Avenue Traffic Calming and Safety Improvements Support Score: 4.6

What is the need? Why is this project a priority to make transportation more equitable?
Communities of Concern consistently voiced concerns about <b>not feeling safe crossing the</b>
street along Semmes Avenue and along Cowardin Avenue. This was identified as a Super Need.

Communities of Concern identified the intersection

unsafe.

of Semmes Avenue and Cowardin Avenue as feeling

The data analysis identified **equity-based safety/ security needs** along Semmes Avenue and Cowardin Avenue. This recommendation was **highly supported** in the survey on draft recommendations by both Communities of Concern and the general public.

This recommendation will **improve walkability** in an area with high equity needs related to pedestrian safety (EF6).

#### What should be done?

Potential improvements could include:

- Intersection improvements at Semmes
   Avenue and Cowardin Avenue, including
   removing southbound right turn lane, ADA
   curb ramp improvements, and changing lane
   configurations to provide median refuge and
   reduce pedestrian crossing distances.
- Roadway conversion on Semmes Avenue, potentially converting outer through lane to a parking lane to slow speeds, reduce pedestrian crossing distances, and buffer the bicycle lane.
- Roadway conversion on Cowardin Avenue to reduce the number of through lanes to 2-lanes in the NB/SB directions to reduce speeds, allow for improvements to turn lanes, reduce pedestrian crossing distances, and possibly wider medians.

These improvements will need to be examined in more detail to determine feasibility. They will be vetted with the community to determine which improvements get implemented.

#### What are the first steps?

Cost: High (\$\$\$)

- 1. Examine feasibility and identify benefits and drawbacks of the potential improvements.
- Share drawings of the potential improvements and study findings with the community.
   Work with the community to finalize the improvements.
- 3. Prepare the engineering design plans. Identify and allocate funding.

LQC Options: Crosswalk improvements, traffic calming, temporary demonstration of road diet.



#### 1F: Essential Transit Infrastructure (Shelters, seating, and trash cans) at Bus Stops

1F: Essential Transit Infrastructure (Shel	ters, seating, and trash cans) at Bus Stops	Support Score: 4.5 Cost: Very High (\$\$\$\$)
What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
Communities of Concern consistently said the lack of shelters and seating at bus stops is a very high priority. It was one of the most commonly voiced needs throughout the City. This recommendation was highly ranked in the survey of draft recommendations across nearly every area of the City.	Work with GRTC to install shelters, seating, trash cans, and other items at bus stops, prioritizing bus stops with high equity-based needs first.  Work with GRTC to incorporate cooling elements at bus stops in heat-vulnerable areas, public art at bus stops in high economic development need areas, and real-time bus arrival information and WiFi in high technology need areas.	Work with GRTC to develop a process for identifying and implementing infrastructure elements for highest priority bus stops, incorporating the equity-based analysis of needs from Richmond Connects, inlcuding cooling elements at bus stops in heat-vulnerable areas, public art at bus stops in high economic development need areas, and real-time bus arrival information and WiFi in high technology need areas. See the Priority Bus Stop Infrastructure Projects for more information.



Support Score: 4.5

Cost: Low (\$)

### 5C: Fairfield Pedestrian Security and Shade Project

The data analysis revealed several areas in Fairfield have some of the highest safety/security needs in the City based on fatal and serious injury crashes and reported crimes. Some of these areas also have high heat vulnerability and high urban heat island effect. The Tier 1 need areas for Safety/ Security are also where the population includes high concentrations of Communities of Concern. There were a cluster of safety-related comments in these areas.  This recommendation addresses safety concerns in areas with densely populated Communities of Concern (EF9) and high equity needs for bike/pedestrian safety (EF6).	What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
	have some of the highest safety/security needs in the City based on fatal and serious injury crashes and reported crimes. Some of these areas also have high heat vulnerability and high urban heat island effect. The Tier 1 need areas for Safety/ Security are also where the population includes high concentrations of Communities of Concern. There were a cluster of safety-related comments in these areas.  This recommendation addresses safety concerns in areas with densely populated Communities of Concern (EF9) and high equity needs for bike/	alleys in high security needs areas, with special consideration for lighted shade structures to address	



Support Score: 4.5

Cost: Moderate (\$\$)

#### 6D: Church Hill Street Lighting

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
The data analysis identified specific pockets of very high equity-based safety/security needs in the Church Hill/Nine Mile Road area. Communities of Concern expressed support for increasing lighting in these areas. This recommendation was very highly supported in the survey of draft recommendations.  This recommendation invests in infrastructure in a previously redlined area (EF1), with bike/pedestrian safety equity needs (EF6).	Design and install pedestrian-scaled aesthetically-pleasing lighting in areas with high equity-based transportation safety/security needs. Design lighting to minimize light pollution and the negative health impacts associated with excessive or unnecessary artificial light at night.	<ol> <li>Develop a process to incorporate equity needs in the prioritization of installing new lights and/or replacing bulbs with LED.</li> <li>Conduct a study to examine the urban design of high security need areas and identify opportunities for applying CPTED principles in these areas.</li> </ol>



Support Score: 4.4

Cost: Low (\$)

#### 4A: Downtown Safety Spot Improvements

in a Dominion Garaty apart improvements		
What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
The data analysis results indicate the areas highlighted in Gilpin, Jackson Ward, Monroe Ward, and the Downtown Core have some of the highest safety/security equity needs in the City. These areas have high rates of violent and property crimes and high fatal and serious injury crash rates, especially crashes involving pedestrians. These areas were also clusters of safety-related public comments.  This recommendation is located in an area with densely populated communities of concern (EF9).	Add more street lamps, pedestrian crossings, and traffic calming, and convert existing street lamps to LEDs in specified areas of high safety/security need.	Conduct a study to examine the urban design of high security need areas and identify opportunities for applying CPTED principles in these areas.



Support Score: 4.4

Cost: Very High (\$\$\$\$)

#### **7B: Government Road Streetscape Improvements**

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
The data analysis revealed a Tier 1 equity need in the economic development category in some areas on the west side of Government Road, primarily due to low market values, and amplified by a high density of Communities of Concern populations. The proposed sidewalk, ornamental lighting, and ADA ramp investments would provide a visible sign of investment in this area.  This recommendation is an investment in infrastructure in a previously redlined area negatively impacted by urban renewal (EF1, EF2) with equity needs related to bike/pedestrian safety (EF6). It is located in an area with densely populated communities of concern (EF9).	The City is seeking funding to complete the stabilization of the Chimborazo Park slope failure, which includes Government Road.  In addition to the slope repair, potential improvements on Government Road to help address the Economic Development needs could include:  • Constructing new sidewalk to fill in sidewalk gaps  • Constructing ADA-compliant curb ramps  • Pedestrian-scaled ornamental lighting  These improvements will need to be examined in more detail to determine feasibility. They will be vetted with the community to determine which improvements get implemented.	<ol> <li>Examine feasibility and identify benefits and drawbacks of the potential improvements.</li> <li>Share drawings of the potential improvements and study findings with the community. Work with the community to finalize the improvements.</li> <li>Prepare the engineering design plans. Identify and allocate funding.</li> </ol> LQC Options: Crosswalk improvements, traffic calming



Support Score: 4.3

Cost: High (\$\$\$)

### 7G: Pulse Bus Rapid Transit Eastern Extension

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
Communities of Concern consistently said bus service in the East End is infrequent and requires too many transfers. This was identified as a Super Need.  Providing bus service to the airport was a common public comment. East end residents representing Communities of Concern said they need bus service to White Oak Village to access grocery stores and other stores. Bus rapid transit would also represent an economic investment in this area.  This recommendation is economic investment in a previously redlined area (EF1), reduces car dependency in an area with high equity needs related to car-centric planning (EF5) and bike/ pedestrian safety (EF6). It is located in an area densely populated with Communities of Concern (EF9).	Extend Pulse Bus Rapid Transit (BRT) to the Richmond Airport via Williamsburg Road.	<ol> <li>Conduct a study to identify desired densities for near-term bus and long-term BRT service, as well as barriers for implenting service, and actions to increase densities and improve readiness.</li> <li>Implement Microtransit zone for Montrose/White Oak Village that improve transit access for Fulton residents.</li> <li>Work with Henrico County to implement Mobility Hubs at Airport and White Oak Village</li> </ol>



9C: Hull Street Intersection Pedestrian Improvements - at US Route 1 and at Midlothian Tpke Support Score: 4.2 Cost: High (\$\$\$)

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
Communities of Concern consistently said these two intersections (Hull Street at US Route 1 and Hull Street at Midlothian Turnpike) feel unsafe. This was identified as a Super Need. General public comments noted these intersections as pedestrian barriers, and that sidewalks and roads need to be fixed.  The data analysis shows a Tier 1 safety/security need at the intersection of Hull Street and US Route 1 due to a high number of serious crashes.  Improves walkability in areas with high equity needs for pedestrian safety (EF6), transit reliability (EF7), and disparate climate impacts (EF8).	Potential improvements at the intersection of Hull Street and US Route 1 could include:  • Improvements to the bus stop at the southwest corner  Potential improvements at the intersection of Hull Street and Midlothian Turnpike could include:  • Marked crosswalks closer to the bus stops, possibly relocating the bus stop locations  • Reconfiguring lanes on intersection approaches to shorten pedestrian crossing distances  • Converting the intersection to a roundabout, which can slow vehicle speeds and reduce crash potential  • Introducing a pedestrian-only "scramble" signal phase where pedestrians can move in any direction  These improvements will need to be examined in more detail to determine feasibility. They will be vetted with the community to determine which improvements get implemented.	<ol> <li>Examine feasibility and identify benefits and drawbacks of the potential improvements.</li> <li>Share drawings of the potential improvements and study findings with the community. Work with the community to finalize the improvements.</li> <li>Prepare the engineering design plans. Identify and allocate funding.</li> </ol> LQC Option: Temporary demo test of lane configuration changes



#### 11F: Richmond High School of the Arts Pedestrian Safety Improvements Support Score: 4.2 Cost: Very High (\$\$\$\$)

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
Communities of Concern consistently voiced concerns about the lack of safe pedestrian access to Richmond High School of the Arts (formerly George Wythe High School), including a lack of safe pedestrian crossings across Midlothian Turnpike and lack of pedestrian paths near the gradeseparated interchange of Midlothian Turnpike and Belt Boulevard. This was identified as a Super Need. Communities of Concern noted that a high school student was killed walking home from school. The data analysis reveals Tier 1 equity needs for pedestrian, safety/security, and connectivity categories.  This recommendation will connect suburban students to their school (EF4), improve pedestrian safety and reduce the need for car ownership/use especially for low-income students (EF5, EF6, EF9).	The James River Branch Trail is being constructed in the CSX right-of-way, next to the Richmond High School of the Arts. The trail will have crossings at Midlothian Turnpike, Crutchfield Atreet, and Hull Street.  Potential improvements could include:  Pedestrian crossing with pedestrian hybrid beacon across Midlothian Turnpike at high school entrance  Shared-use path along Old Midlothian Turnpike with crossing at Belt Boulevard and CSX railroad  Redesign the grade separated interchange for multimodal safety improvements, and provide pedestrian facilities (sidewalks and crosswalks) along Midlothian Turnpike from high school to Covington Road.  Roadway conversion on Midlothian Turnpike east of Belt Boulevard to slow traffic speeds  These improvements will need to be examined in more detail to determine feasibility. They will be vetted with the community to determine which improvements get implemented.	<ol> <li>Examine feasibility and identify benefits and drawbacks of the potential improvements.</li> <li>Share drawings of the potential improvements and study findings with the community. Work with the community to finalize the improvements.</li> <li>Prepare the engineering design plans. Identify and allocate funding.</li> </ol>



12B.1: Southside Pedestrian Improvements - Old Warwick Road north of US Route 60 Support Score: 4.2 Cost: Moderate (\$\$)

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
The data analysis identified Old Warwick Road as being one of the highest Tier 1 equity need segments for pedestrian improvements in one of the highest pedestrian need areas. This is a key sidewalk gap in an area with a high density of Community of Concern populations where many people rely on walking to meet daily needs, where pedestrian accessibility is poor due to both lack of safe pedestrian facilities and lack of destinations within walking distance. Advisory Committee members confirmed the need to fill sidewalk gaps here. This street is on the border of the Midlothian/ Chippenham Node. Filling in missing sidewalks was a Super Need identified by Communities of Concern throughout Southside.  This recommendation will improve pedestrian safety (EF6), connect communities (EF2, EF4), and increase access for those with limited mobility (EF9).	The proposed improvement on Old Warwick Road north of US Route 60 (Midlothian Turnpike) is to fill the sidewalk gap from Carnation Street to Midlothian Turnpike, and provide an improved crossing at the intersections with Carnation Street and Everglades Drive.  This improvement may be combined with 12B.2 into one larger project.  Recommendation 12C (Midlothian Turnpike Safety Improvements - German School Road to Carnation Street) includes a potential new traffic signal with pedestrian crossing at Old Warwick Road. This could also be incorporated into this project.	Prepare the engineering design plans. Identify and allocate funding.



12B.2: Southside Pedestrian Improvements - Old Warwick Road south of US Route 60 Support Score: 4.2 Cost: Moderate (\$\$)

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
The data analysis identified Old Warwick Road as being one of the highest Tier 1 equity need segments for pedestrian improvements in one of the highest pedestrian need areas. This is a key sidewalk gap in an area with a high density of Community of Concern populations where many people rely on walking to meet daily needs, where pedestrian accessibility is poor due to both lack of safe pedestrian facilities and lack of destinations within walking distance. Advisory Committee members confirmed the need to fill sidewalk gaps here. This street is on the border of the Midlothian/Chippenham Node. Filling in missing sidewalks was a Super Need identified by Communities of Concern throughout Southside.  This recommendation will improve pedestrian safety (EF6), connect communities (EF2, EF4), and increase access for those with limited mobility (EF9).	The proposed improvement on Old Warwick Road south of US Route 60 (Midlothian Turnpike) is to fill in sidewalk gaps from Midlothian Turnpike to Warwick Drive.  This improvement may be combined with 12B.1 into one larger project.  Recommendation 12C (Midlothian Turnpike Safety Improvements - German School Road to Carnation Street) includes a potential new traffic signal with pedestrian crossing at Old Warwick Road. This could also be incorporated into this project.	Prepare the engineering design plans. Identify and allocate funding.



#### 12B.3: Southside Pedestrian Improvements - Carnation Street Support Score: 4.2 Cost: Moderate (\$\$)

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
The data analysis identified Carnation Street as being one of the highest Tier 1 equity need segments for pedestrian improvements in one of the highest pedestrian need areas. This is a key sidewalk gap in an area with a high density of Community of Concern populations where many people rely on walking to meet daily needs, where pedestrian accessibility is poor due to both lack of safe pedestrian facilities and lack of destinations within walking distance. Advisory Committee members confirmed the need to fill sidewalk gaps here. This street is on the border of the Midlothian/ Chippenham Node. Filling in missing sidewalks was a Super Need identified by Communities of Concern throughout Southside.  This recommendation will improve pedestrian safety (EF6), connect communities (EF2, EF4), and increase access for those with limited mobility (EF9).	The proposed improvements on Carnation Street are:  Fill in sidewalk gaps from Warwick Road to Hioaks Road  Add marked pedestrian crossings at:  Old Warwick Road/Atmore Drive  Sugar Maple Drive/Warwick Road  Tim Price Way	<ol> <li>Examine the identified potential crosswalk locations, and examine other potential crossing locations. Evaluate the need for additional signage or other features at new crosswalks.</li> <li>Share the concepts with the community. Work with the community to finalize the crossing locations and treatments.</li> <li>Prepare engineering design plans. Identify and allocate funding.</li> </ol>



Support Score: 4.2

Cost: Moderate (\$\$)

#### 12B.4: Southside Pedestrian Improvements - German School Road

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
The data analysis identified German School Road from Glenway Drive to Jahnke Road as being one of the highest Tier 1 equity need segments for pedestrian improvements in one of the highest pedestrian need areas. This is a key sidewalk gap in an area with a high density of Community of Concern populations where many people rely on walking to meet daily needs, where pedestrian accessibility is poor due to both lack of safe pedestrian facilities and lack of destinations within walking distance. Advisory Committee members confirmed the need to fill sidewalk gaps here. This street is in the Micro Node at German School Road and Jahnke Road. Filling in missing sidewalks was a Super Need identified by Communities of Concern throughout Southside.  This recommendation will improve pedestrian safety (EF6), connect communities (EF2, EF4), and increase access for those with limited mobility (EF9).	The proposed improvements on German School Road are:  Fill in sidewalk gaps from Glenway Drive to Jahnke Road  Add marked pedestrian crossings at:  Glenway Drive  Alexander Apartments/Renaissance Apartments entrances  Food Lion entrance	<ol> <li>Examine the identified potential crosswalk locations, and examine other potential crossing locations. Evaluate the need for additional signage or other features at new crosswalks.</li> <li>Share the concepts with the community. Work with the community to finalize the crossing locations and treatments.</li> <li>Prepare engineering design plans. Identify and allocate funding.</li> </ol>



#### 12B.5: Southside Pedestrian Improvements - Whitehead Road Support Score: 4.2 Cost: High (\$\$\$)

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
The data analysis identified Whitehead Road as being one of the highest Tier 1 equity need segments for pedestrian improvements in one of the highest pedestrian need areas. This is a key sidewalk gap in an area with a high density of Community of Concern populations where many people rely on walking to meet daily needs, where pedestrian accessibility is poor due to both lack of safe pedestrian facilities and lack of destinations within walking distance. Advisory Committee members confirmed the need to fill sidewalk gaps here. This street is a key connection to Reid Elementary School and to the Hull/Chippenham Neighborhood Node. Filling in missing sidewalks was a Super Need identified by Communities of Concern throughout Southside.  This recommendation will improve pedestrian safety (EF6), connect communities (EF2, EF4), and increase access for those with limited mobility (EF9).	The proposed improvements on Whitehead Road are:  • Fill in sidewalk gaps from Elmbridge Road to Ellis Woods Way  • Add marked pedestrian crossings at:  • Daytona Drive  • Wheaton Road  • Worthington Road  • Swanson Road	<ol> <li>Examine the identified potential crosswalk locations, and examine other potential crossing locations. Evaluate the need for additional signage or other features at new crosswalks.</li> <li>Share the concepts with the community. Work with the community to finalize the crossing locations and treatments.</li> <li>Prepare engineering design plans. Identify and allocate funding.</li> </ol>



Support Score: 4.2

Cost: Moderate (\$\$)

### **3B: Dove Street Pedestrian Safety Improvements**

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
The data analysis revealed a Tier 1 Pedestrian equity need on Dove Street from Lamb Avenue to 1st Avenue. This is a key pedestrian connection to Overby-Sheppard Elementary School. This is a key connection for pedestrians, especially Communities of Concern. Public comments noted the lack of lighting at night on Dove Street.  This recommendation will improve walkability in an area with equity needs related to pedestrian safety (EF6), transit (EF7) and disparate climate impacts (EF8).	Proposed improvements include new sidewalk, ADA improvements, and lighting along Dove Street from Lamb Avenue to Althea Street, with new connection to Cannon Creek Greenway. This project will require road widening and potential drainage improvements near Richmond-Henrico Turnpike.	<ol> <li>Examine feasibility and identify benefits and drawbacks of the potential improvements.</li> <li>Share drawings of the potential improvements and study findings with the community. Work with the community to finalize the improvements.</li> <li>Prepare the engineering design plans. Identify and allocate funding.</li> </ol> LQC Option: Crosswalk improvement



Support Score: 4.1

Cost: Low (\$)

### **5A.1: Coalter Street Traffic Calming**

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
Communities of Concern consistently said speeding along Coalter Street is an issue. This was identified as a Super Need.  The data analysis revealed a Tier 1 equity-based pedestrian need Coalter Street. Focus groups confirmed speeding is an issue on Coalter Street, especially near Redd Street, and said speed bumps are needed.  This recommendation will improve infrastructure in a previously redlined area (EF1), slow traffic in an area with equity needs related to bike/pedestrian safety (EF6), and add green infrastructure in an area with disparate climate impacts (EF8, EF10). It is located in an area with densely populated Communities of Concern (EF9).	Potential improvements on Coalter Street may include:  Speed tables Raised crosswalks at bus stops Traffic circles at unsignalized intersections Raised intersections Curb extensions at intersections to reduce vehicle speeds and make pedestrians more visible to drivers Striping lane edge lines to narrow lane widths to slow vehicle speeds Removing on-street parking and bringing the curb further into the street to slow vehicle speeds and plant vegetation and trees to reduce urban heat island effect Temporary intersection narrowing and raised crosswalks  These improvements will need to be examined in more detail to determine feasibility. They will be vetted with the community to determine which improvements get implemented.	<ol> <li>Examine feasibility and identify benefits and drawbacks of the potential improvements.</li> <li>Share drawings of the potential improvements and study findings with the community. Work with the community to finalize the improvements.</li> <li>Prepare the engineering design plans. Identify and allocate funding.</li> </ol> LQC Option: Add temporary intersection narrowing and raised crosswalks.



Support Score: 4.1

Cost: Low (\$)

#### 5A.2: Fairfield Avenue/ Fairfield Way Traffic Calming

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
Communities of Concern consistently said crossing the street on Fairfield Avenue feels unsafe. This was identified as a Super Need. Focus groups identified speeding on Fairfield Avenue as an issue along the entire street, especially for the safety of children and seniors. Fairfield Avenue and Fairfield Way are on the High Injury Street Network, with high rates of fatal and serious injury crashes, several involving loss of vehicle control or pedestrians.  This recommendation will improve infrastructure in a previously redlined area (EF1), slow traffic in an area with equity needs related to bike/pedestrian safety (EF6), and add green infrastructure in an area with disparate climate impacts (EF8, EF10). It is located in an area with densely populated Communities of Concern (EF9).	Potential improvements on Fairfield Avenue east of 20th St could include:  Curb extensions with vegetation to slow vehicle speeds and make pedestrians more visible to drivers  Removing parking (completely or just a portion) and replacing asphalt with vegetation to reduce urban heat island effect  Potential improvements on Fairfield Avenue between 20th St and Mechanicsville Turnpike could include:  Modifying the crosswalks to provide refuge in the median  Potential improvements on Fairfield Way west of Mechanicsville Turnpike could include:  Hardening the buffer between the vehicle lane and bicycle lane, potentially with vegetation  Widening the median to remove asphalt and add more trees  These improvements will need to be examined in more detail to determine feasibility. They will be vetted with the community to determine which improvements get implemented.	<ol> <li>Examine feasibility and identify benefits and drawbacks of the potential improvements.</li> <li>Share drawings of the potential improvements and study findings with the community. Work with the community to finalize the improvements.</li> <li>Prepare the engineering design plans. Identify and allocate funding.</li> </ol> LQC Option: Crosswalk improvements



Support Score: 4.1 Cost: Moderate (\$\$)

#### 7A: Williamsburg Road/ Williamsburg Avenue Traffic Calming

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
Communities of Concern consistently said speeding and lack of safe pedestrian crossings on Williamsburg Road are important issues. These were identified as a Super Needs.  This recommendation will invest in infrastructure in a previously redlined area (EF1), with bike/pedestrian safety equity needs (EF6). It is located in an area densely populated with Communities of Concern.	Potential improvements on Williamsburg Avenue/ Williamsburg Road east/north of Hatcher Street include:  Roadway conversion from 2 lanes each direction to 1 lane each direction to slow vehicle speeds. Asphalt can be converted to sidewalks with wide vegetated buffers or other use with vegetation to reduce urban heat island effect Pedestrian hybrid beacons at one or more locations, potentially: Stony Run Road Admiral Gravely Boulevard Orleans Street Goddin Street Plant trees or other vegetation along the road to visually enclose the space.  Potential improvements on Williamsburg Road west of Hatcher Street include: Curb extensions at unsigalized intersections to slow vehicle speeds and make pedestrians more visible to drivers Raised crosswalks Rectangular rapid flashing beacons at select intersections  These improvements will need to be examined in more detail to determine feasibility. They will be vetted with the community to determine which improvements get implemented.	<ol> <li>Examine feasibility and identify benefits and drawbacks of the potential improvements.</li> <li>Work with property owners to identify locations for planting trees and vegetation. Property owners along Williamsburg Avenue/Road include City of Richmond Dept. of Parks &amp; Recreation, Dept. of Public Utilities, Economic Development Authority, and Fulton Village HOA.</li> <li>Share drawings of the potential improvements and study findings with the community. Work with the community to finalize the improvements.</li> <li>Prepare the engineering design plans. Identify and allocate funding.</li> <li>Work with PDR to put PHB locations into plans to require new development to provide.</li> </ol> LQC Option: Crosswalk improvements, Traffic calming



Support Score: 4.0

Cost: Low (\$)

#### 1A: Westbrook Avenue Pedestrian Improvements

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
The data analysis revealed a Tier 1 equity-based pedestrian need on Westbrook Avenue from Henderson Middle School to West Seminary Avenue. Sidewalks are missing on Westbrook Avenue between Chamberlayne Avenue and Brook Road.  This recommendation will increase pedestrian safety and reduce the need for car ownership (EF5, EF6). It will improve connectivity for Communities of Concern (EF7).	Add sidewalks along Westbrook Avenue from Brook Road to Chamberlayne Avenue. Add marked crosswalks, if needed.  The Dept. of Public Works has requested CIP funding for a project to make drainage improvements along Westbrook Avenue. This project has not been selected for funding. If this project is selected for funding in the future, it should also include sidewalk construction.	<ol> <li>Conduct a study to determine the appropriate crossing treatment(s) and location(s) between Brook Road and Chamberlayne Avenue.</li> <li>Prepare design plans for sidewalk improvements as a stand-alone project (without drainage improvements). If drainage improvement project proceeds, incorporate sidewalks into that project.</li> </ol> LQC Option: Crosswalk improvements



Support Score: 4.0

4K: Richmond Connects Equity-Centered Pavement Maintenance Prioritization

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
Communities of Concern consistently identified poor pavement condition as an issue needing to be addressed along several roads including Williamsburg Road and Government Road in the East End, generally throughout Downtown including Gilpin, and on Commerce Road, Bells Road, Richmond Highway, and Belt Boulevard in Southside. These were identified as Super Needs. Pavement condition was also a common theme in the public comments.  This recommendation will prioritize pavement maintenance requests from Communities of Concern (EF9).	The Priority Pavement Maintenance Projects table lists roadways that Communities of Concern have identified as needing to be repaved. Move these repaving projects to the top of the repaving cycle list and/or seek funding for additional funds to repave these roads.	Move the paving projects identified in the Priority Pavement Maintenance Projects table to the top of the repaving cycle list so they are completed first, and/or seek funding for additional funds to repave these roads.



Cost: Very High (\$\$\$\$)

Support Score: 4

Cost: Very High (\$\$\$\$)

#### 4G: Reconnect Jackson Ward

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
The data analysis revealed Tier 1 needs for bicycle, pedestrian, and freight modes where a connection between Jackson Ward and Gilpin over I-95 would provide needed connectivity. Many public comments noted the lack of destinations and services in Gilpin, which a reknitting of Gilpin with Jackson Ward would help address. The lack of bicycle connections from Downtown to Northside was also a Super Need identified by Communities of Concern.  This recommendation will improve connectivity in an area affected by neighborhood dissection (EF2) and with bike/pedestrian safety needs (EF6).	Community-driven process to reconnect the Jackson Ward neighborhood over I-95 through the design of a bridge over I-95 with connections for pedestrians and bicyclists.	Continue to work with residents to design, seek funding for, and implement a connection over I-95 to reconnect Jackson Ward and Gilpin neighborhoods.



13A: Forest Hill Avenue Pedestrian Safety Improvements - Dorchester Rd to Powhite Pkwy Support Score: 3.9 Cost: Very High (\$\$\$\$)

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
The data analysis revealed a Tier 1 equity-based pedestrian need along Forest Hill Avenue. There is no sidewalk along the south side of Forest Hill Avenue between Dorchester Road and the Powhite Parkway interchange. Public comments mentioned the lack of sidewalks and need for safer pedestrian facilities on Forest Hill Avenue.  This recommendation will add a pedestrian connection in an inner ring suburb (EF4). It will increase pedestrian safety and reduce the need for car ownership (EF5, EF6).	Potential improvements on Forest Hill Avenue from Dorchester Road to Powhite Parkway include:  • Installing new sidewalk along the south side, tying into the existing sidewalk on the north/ west side of the Powhite Parkway interchange  • Adding pedestrian crosswalks and pedestrian hybrid beacons, specific locations to be determined.	<ol> <li>Identify potential crosswalk locations. Evaluate the need for additional signage or other features at new crosswalks.</li> <li>Share the concepts with the community. Work with the community to finalize the crossing locations and treatments.</li> <li>Prepare engineering design plans. Identify and allocate funding.</li> </ol>



Support Score: 3.8

Cost: Very High (\$\$\$)

### 1E: North-South Bus Rapid Transit

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
Bringing the Pulse BRT service to Northside and Southside was a top public comment, including among Communities of Concern. It fulfills some Tier 1 equity-based transit needs. Some areas, including east of Chamberlayne Avenue, have high economic development needs, which this would also help to address.  This recommendation will improve connectivity in inner-ring suburb areas (EF4) and areas with high equity needs related to car-centric planning (EF5) and transit (EF7).	Work with GRTC to implement a new Pulse bus rapid transit (BRT) line that serves Northside and Southside. The locally preferred alternative from the GRTC North-South BRT Study is Chamberlayne Avenue, through Downtown to serve Gilpin, across the Manchester Bridge into Southside Richmond, along Hull Street, Belt Boulevard, and Midlothian Turnpike to Chesterfield Towne Center.	Work with GRTC to increase the frequency of GRTC Route 1A from 30-minutes to 15-minutes within the City of Richmond from Downtown to Spring Rock Green at Chippenham Parkway.  Support GRTC to determine the specific alignment through Downtown and conduct the NEPA study. Support efforts to seek funding for design and implementation.  This recommendation is related to Recommendation 1C.1 Chamberlayne Avenue Pedestrian Improvements. Elements of that recommendation may be relevant to this recommendation, and vice versa.



Support Score: 3.8

Cost: Very High (\$\$\$\$)

#### 11A: Southside Plaza Pedestrian Connections Across Railroad Tracks

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
The residential neighborhoods on the west side of the CSX tracks have poor connectivity to Southside Plaza. This is in an area with Tier 1 equity-based pedestrian and bicycle Needs. There is also a pocket of Tier 1 Transit need on the south side of Hull Street on the west side of the CSX tracks. This is an area critical for connectivity to the Southside Plaza bus transfer center. The CSX tracks are a barrier to connectivity. The data analysis shows areas west of the CSX tracks have Tier 1 Connectivity needs. There is also a Tier 1 Economic Development need in this area.  The Richmond 300 Master Plan identified providing a connection across the CSX tracks as a future connection in conjunction with a shared use path along the powerline right-of-way to connect to Southside Plaza.  This recommendation will improve pedestrian safety (EF6) and connect separated areas of the City (EF2).	Potential options for making these connections could include:  • Utilize Deloak Avenue right-of-way to connect to the Southwood Apartments property  • Convert Hull Street Road bridge to 2 lanes each direction with more space for pedestrian and bicyclists, with connections directly from Azalea Avenue  • Shared-use path in the powerline right-of-way, following the alignment proposed in Richmond 300  These improvements will need to be examined in more detail to determine feasibility. Some will be very high cost. They will be vetted with the community to determine which improvements get implemented.	<ol> <li>Examine feasibility and identify benefits and drawbacks of the potential improvements.</li> <li>Share drawings of the potential improvements and study findings with the community. Work with the community to finalize the improvements.</li> <li>Prepare the engineering design plans. Identify and allocate funding.</li> </ol>



Support Score: 3.8

Cost: High (\$\$\$)

#### 16A: Three Chopt Road Sidewalks

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
The data analysis revealed a Tier 1 equity-based pedestrian need along Three Chopt Road from Grove Avenue to Towana Road, then continuing along Towana Road to Campus Drive. This connects the Westhampton Neighborhood Node and destinations near Grove Avenue and York Road with the University of Richmond. Needing sidewalks along Three Chopt Road was a common public comment in this area.  This recommendation will improve pedestrian safety and access (EF6) and reduce need for car ownership (EF5).	Potential improvements could include:  Installing sidewalk with curb and gutter along Three Chopt Road from Towana Road to Grove Avenue  Utilizing old streetcar right-of-way that parallels Three Chopt Road to provide a pedestrian and bicycle facility  Installing sidewalk or other pedestrian facility along Towana Road to connect to University of Richmond campus	<ol> <li>Examine feasibility and identify benefits and drawbacks of the potential improvements.</li> <li>Share drawings of the potential improvements and study findings with the community. Work with the community to finalize the improvements.</li> <li>Prepare the engineering design plans. Identify and allocate funding.</li> </ol>



Support Score: 3.8

Cost: Moderate (\$\$)

#### 17A: Forest Hill Avenue Streetscape

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
The data analysis revealed <b>Tier 1 equity-based pedestrian and bicycle needs</b> along Forest Hill Avenue. This was also reflected in public comments.  This recommendation will improve safety in an area affected by car-centric planning (EF5) which has high equity needs for bike/pedestrian safety (EF6).	A streetscaping project to add curb and gutter, sidewalks, bike lanes, street lighting, landscaping, and drainage was completed on Forest Hill Avenue from East Junction Powhite Parkway to Hathaway Road in FY 2022.  This recommendation is to extend the streetscaping project west to the City line, and add pedestrian hybrid beacon crossings at Kenmore Road, Huguenot High School entrance, and Lansdale Road.  These improvements will need to be examined in more detail to determine feasibility. They will be vetted with the community to determine which improvements get implemented.	<ol> <li>Examine feasibility and identify benefits and drawbacks of the potential improvements.</li> <li>Share drawings of the potential improvements and study findings with the community. Work with the community to finalize the improvements.</li> <li>Prepare the engineering design plans. Identify and allocate funding.</li> </ol>



Support Score: 3.8

Cost: Moderate (\$\$)

### 17F: Huguenot Road Bikeway

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
The data analysis revealed a Tier 1 equity-based bicycle need on Huguenot Road. This need was echoed in public comments.	Potential improvements on Huguenot Road could include:  • Shared use path from the Huguenot Bridge through the Chippenham Parkway interchange  • Roadway conversion to repurpose one vehicle lane in each direction to a bicycle facility  • Improvements to the Chippenham Parkway interchange to provide pedestrian and bicycle facilities.  These improvements will need to be examined in more detail to determine feasibility. They will be vetted with the community to determine which improvements get implemented.	<ol> <li>Examine feasibility and identify benefits and drawbacks of the potential improvements.</li> <li>Share drawings of the potential improvements and study findings with the community. Work with the community to finalize the improvements.</li> <li>Prepare the engineering design plans. Identify and allocate funding.</li> </ol>



Support Score: N/A Cost: Low (\$)

#### 14L: Carytown Pedestrian Safety Improvements

What is the need? Why is this project a priority to make transportation more equitable?	What should be done?	What are the first steps?
Making Cary Street a pedestrian, bicycle, and transit-only street was the most common public comment during the Richmond Connects Phase 1 survey. Public input indicated strong support for closing Cary Street to car traffic due to perceived unsafe conditions for pedestrians and bicyclists. Cary Street east of Powhite Parkway is on the High Injury Street Network. The data analysis indicates a Tier 1 equity-based need for Safety/Security on Cary Street near Arthur Ashe Boulevard. Several pedestrians have been severely injured in crashes on Cary Street between Arthur Ashe Boulevard and Thompson St.  Strategy Recommendation 5.4 calls for piloting carfree, pedestrian- and bike-only streets. This could be one future option for Carytown to improve safety for users. But in the short term, other pedestrian safety enhancements could be made to Cary Street to address noted pedestrian safety concerns.	Potential pedestrian safety improvements could include:  • "Daylighting" intersections along Cary Street – This involves making pedestrians more visible and enhancing pedestrian crossings. It can include extending sidewalk corners with curb bump outs to slow down traffic, increase the visibility of pedestrians, and minimize crossing distances. It can also include removing the parking space closest to the crosswalk to further improve visibility.  • Installing "No Right on Red" signage at select intersections to protect pedestrians.  • Introduce Leading Pedestrian Intervals in the traffic signal timing to allow pedestrians time to initiate crossing to be more visible to drivers.  • Adding "transit islands" at the bus stops to prevent drivers from parking in front of the bus stops, and to slow down traffic.  • Installing raised crosswalks with rectangular rapid flashing beacons at intersections without traffic lights, including on Crenshaw Ave., Freeman Rd., Dooley Ave., McCloy St., or Colonial Ave.  • Replacing some street parking with parklets/ designated outdoor dining spaces for restaurants.	<ol> <li>Examine feasibility and identify benefits and drawbacks of the potential improvements.</li> <li>Share drawings of the potential improvements with the community. Work with the community to finalize the improvements.</li> <li>Prepare the engineering design plans. Identify and allocate funding.</li> </ol> LQC Options: Crosswalk improvements, traffic calming, parklet pilot, temporary transit islands installation demo.



## PRIORITY SIDEWALK GAP PROJECTS

Map ID	Project Location	Approx. Length (ft)	Right-of- Way Needed	Ballpark Cost	
	Fulton Sidewalk Gap Projects				
1	Carlisle Ave from Government Road to Randall Ave	3,000	None	\$742,000	
2	Carlisle Ave from Union St to Fulton St	3,000	None	\$1,540,000	
3	Goddin St from Williamsburg Ave to Parker St	6,000	Major	\$8,646,000	
4	Fenton St from Bunn Ave to Kemp Ave	3,200	Minimal	\$1,592,500	
5	Central Ave from Newman Road to Williamsburg Road	4,000	Major	\$5,928,000	
6	Nelson Street from Waverly St to Parker St	2,600	None	\$651,000	
7	Randall Ave from Fenton St to Williamsburg Road	4,700	Minimal	\$2,358,500	
8	Rawlings St from Government Road to Kemp Ave	4,300	Minimal	\$3,202,500	
9	Waverly Ave from Williamsburg Road to Nelwood Drive	2,500	None	\$3,675,000	

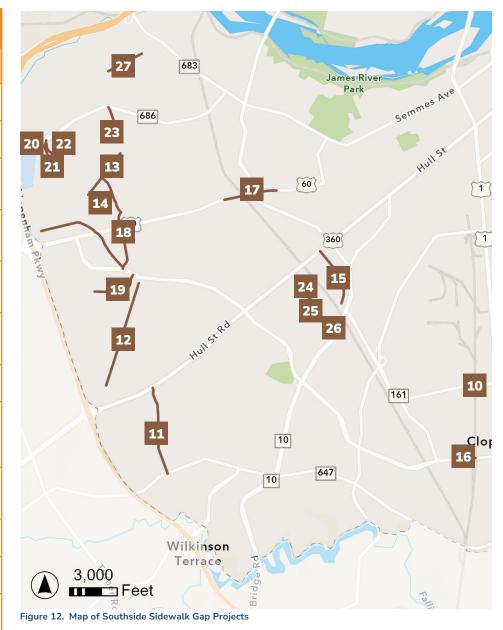


Figure 11. Map of Fulton Sidewalk Gap Projects



#### PRIORITY SIDEWALK GAP PROJECTS

Map ID	Project Location	Approx. Length (ft)	Right-of- Way Needed	Ballpark Cost
	Southside S	Sidewalk Ga <sub>l</sub>	o Projects	
10	Terminal Ave over CSX Tracks	1,900	None	\$1,440,000
11	Hey Road from Hull Street to Walmsley	8,800	Minimal	\$13,179,000
12	Whitehead Road from Elmbridge Road to Warwick Road	9,100	Major	\$13,605,000
13	Deter Road from Vaden Dr to German School Road	5,500	Minimal	\$8,301,000
14	Vevadel Dr from Deter Road to Beaufont Hills Ct	750	Minimal	\$730,000
15	Greystone Road from Hull Street Rd to Horner Ln	5,900	Minimal	\$8,805,000
16	Bells Rd from Industry Ave to CSX	2,300	Major	\$3,480,000
17	Midlothian Turnpike from Ferguson Rd to Richmond High School of the Arts	5,300	None	\$24,009,500
18	Lasalle Dr/Labrook Concourse from Deter Rd to Warwick Rd	10,300	Minimal/Major	\$15,402,000
19	Winter Rd from Warwick Rd to McDowell Rd	5,000	None	\$7,500,000
20	Marlowe Rd from Hioaks Rd to Jahnke Rd	1,600	Minimal	\$1,590,000
21	Empearl Dr from Marlowe Rd to Luton Ln	2,200	Minimal	\$3,291,000





#### PRIORITY SIDEWALK GAP PROJECTS

Map ID	Project Location	Approx. Length (ft)	Right-of- Way Needed	Ballpark Cost
22	Ashley Park from Marlowe Rd to where Tier 1 need segment ends	1,400	Street on private property	\$1,350,000
23	Glenway Dr from German School Rd to Blakemore Rd, Blakemore Rd from Glenway Dr to Jahnke Rd	3,300	Minimal	\$3,300,000
24	Clarkson Rd from Treehaven Dr to Kingswood St	1,600	Minimal	\$1,560,000
25	Kingswood St from Clarkson Rd to Kinsley Ave	1,300	Minimal	\$1,292,000
26	Kinsley Ave from Kingswood St to Broad Rock Boulevard	3,300	Major	\$4,986,000
27	Bliley Rd from Whitlone Dr to Old Willow Ct	2,416	Minimal	\$2,416,000

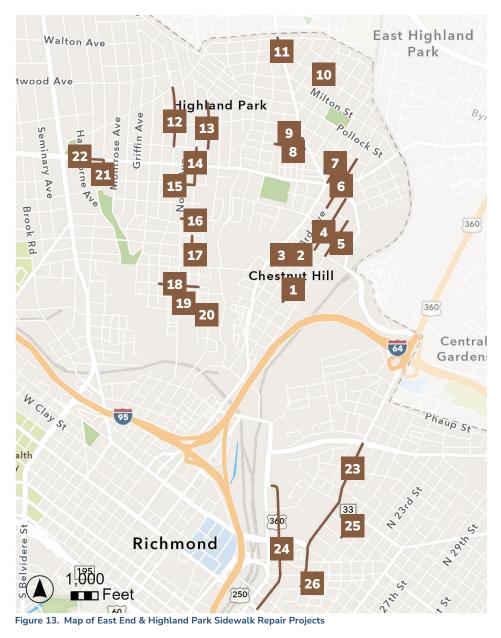






#### PRIORITY SIDEWALK REPAIR PROJECTS

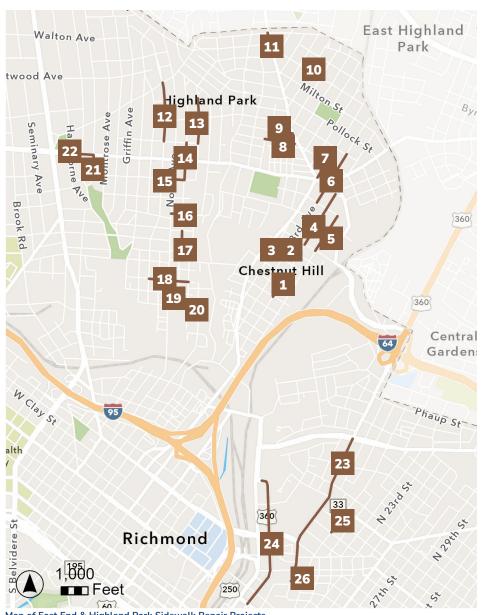
Map ID	Project Locations	Approx. length (ft)	Sidewalk Condition Score(s)	Ballpark Cost			
	Highland Park Sidewalk Repair Projects						
1	4th Avenue from Cypress St to Juniper St	1,500	13-15	\$146,000			
2	3rd Avenue from Myrtle St to Spruce St	350	8-15	\$35,600			
3	Spruce St from 3rd Ave to 2nd Ave	350	8-16	\$35,600			
4	4th Avenue from Brookland Park Boulevard to Magnolia St	2,800	0-16	\$283,000			
5	5th Avenue from Magnolia St to Custer St	1,500	8-15	\$154,500			
6	3rd Avenue from Burns St to Custer St	3,400	13-16	\$338,000			
7	2nd Avenue from Burns St to Brookland Park Boulevard	2,200	8-11	\$220,600			
8	Arnold Ave from Carolina Ave to Napoleon St	1,700	8	\$174,000			
9	Northside Ave from Meadowbridge Rd to Napoleon St	1,300	8	\$132,000			
10	Highland Street from Delaware Ave to Maryland Ave	350	8-21	\$34,200			
11	Meadowbridge Rd from Pensacola Ave to Patrick Ave	1,200	9-10	\$123,000			
12	Garland Ave from Crawford Ave to Ladies Mile Rd	1,800	8-17	\$178,000			
13	Lamb Ave from Crawford Ave to Meredith St	1,900	0-10	\$188,600			





#### PRIORITY SIDEWALK REPAIR PROJECTS

Map ID	Project Locations	Approx. length (ft)	Sidewalk Condition Score(s)	Ballpark Cost
14	Barton Ave from Crawford Ave to Essex St	1,100	8-17	\$111,200
15	Essex St from Barton Ave to Garland Ave	1,100	8-15	\$106,000
16	Norwood Ave from Lamb Ave to North Ave	1,000	0-15	\$98,000
17	Barton Ave from Graham Rd to Lancaster Ave	600	8-15	\$60,000
18	Roberts St from Lamb Ave to Miller Ave	2,000	9-18	\$209,200
19	Poe St from Lamb Ave to North Ave	550	0-13	\$56,000
20	Lamb Ave from Minor St to Poe St	300	9-13	\$32,000
21	Moss Side Ave from Essex St to Brookland Park Boulevard	1,000	13-15	\$109,000
22	Brookland Park Boulevard from Hawthorne Ave to Moss Side Ave	1,200	8-16	\$118,000
	East End Sidewa	alk Repair Pr	ojects	
23	Mechanicsville Turnpike/ Mosby St from Fairfield Ave to Venable St	5,500	8-19	\$550,200
24	18th St from Balding St to Broad St	1,900	8-13	\$195,000
25	N 20th St from Q St to Fairmount Ave	800	9-14	\$78,700
26	Cedar St from Mosby St to 21st St	400	14	\$39,000



Map of East End & Highland Park Sidewalk Repair Projects



#### PRIORITY BUS STOP INFRASTRUCTURE PROJECTS

GRTC is actively working to identify and prioritize bus stops for installing shelters, benches, trash cans, and landing pads. These types of infrastructure are referred to as "essential transit infrastructure" or ETI. GRTC's Essential Transit Infrastructure Plan outlines GRTC's implementation goals and strategies for installing this infrastructure. One of these goals is for 50% of GRTC bus stops to have a shelter or seating by 2027. To meet this goal, GRTC will need to install 160 shelters and 225 benches over five years. GRTC developed a scoring system (i.e. "qualification rubric") that considers usage and equity to qualify stops for ETI placement over the next five years.

GRTC's ETI qualification rubric is spelled out in its ETI Plan document. The Richmond Connects team developed a "Richmond Connects Bus Stop Equity Need Index" that is intended to help GRTC prioritize which bus stops should receive shelters and benches first. This index is based on the equity-based Transit Investment Need Category (INC 2) score and heat vulnerability.

#### PRIORITIZING FOR IMPLEMENTATION

The City of Richmond is working with GRTC to prioritize the bus stops for shelter and bench installation to reflect the highest equity needs as identified in Richmond Connects.

#### **SHELTERS**

GRTC's ETI qualification rubric identifies 165 bus stops within the City of Richmond that meet the ridership and equity criteria to be "shelter eligible." Of these 165 bus stops, 133 do not already have a shelter. The Richmond Connects team calculated the Richmond Connects Bus Stop Equity Need Index for each these 133 bus stops. The results are presented in Figure 14.

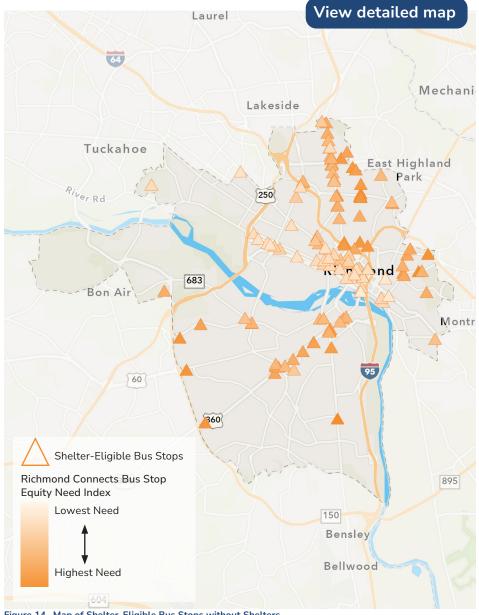


Figure 14. Map of Shelter-Eligible Bus Stops without Shelters



#### PRIORITY BUS STOP INFRASTRUCTURE PROJECTS

#### **BENCHES**

GRTC's ETI qualification rubric identifies 622 bus stops within the City of Richmond that meet the ridership and equity criteria to be "bench eligible." Of these 622 bus stops, 429 do not already have a bench. The Richmond Connects team calculated the Richmond Connects Bus Stop Equity Need Index for each these 429 bus stops. The results are presented in Figure 15.

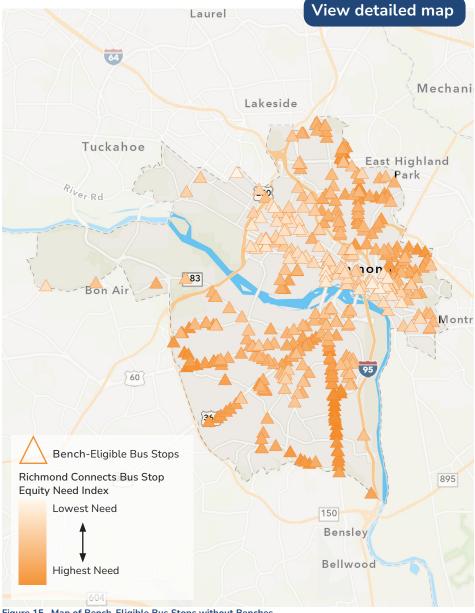


Figure 15. Map of Bench-Eligible Bus Stops without Benches



Map ID	Project Locations and Extents	Project Length (ft)	Pavement Condtion Score(s)	Ballpark Cost				
Dov	Downtown & Gilpin Pavement Maintenance Projects							
1	N 3rd St from Jackson St to N 5th St	800	Fair-Serious (17.96-57)	\$92,000				
2	N 2nd St from Broad St to Leigh St	1,300	Poor-Very Poor (37.33-47.84)	\$154,000				
3	N 10th St from Marshall St to Duval St Conn	1,600	Poor-Serious (24.16-47.69)	\$190,000				
4	Canal St from Jefferson St to 2nd St	1,300	Poor-Very Poor (40.24-46.49)	\$155,000				
5	5th St from Canal St to Grace St	1,600	Poor-Serious (24.99-43.05)	\$188,000				
6	4th St from Canal St to Grace St	1,600	Poor-Very Poor (34.44-42.49)	\$107,000				
7	5th St from Marshall St to Leigh St	900	Very Poor (40.15)	\$188,000				
8	6th St from Cary St to Franklin St	800	Very Poor (27.6-40.15)	\$94,000				
9	Duval St Conn from N 8th St to N 13th St	1,700	Very Poor- Serious (22.36- 39.32)	\$205,000				
10	Hill St/Hospital Street from St Peter St to N 5th St	2,600	Poor - serious (15.3-38.29)	\$311,000				
11	St Peter St from Charity St to Hill St	900	Very poor- Serious (13.51- 38.06)	\$110,000				
12	Hickory St from Calhoun St to Charity St	500	Very poor (35.91)	\$57,000				
13	St Paul St from Federal St to Hill St	600	Very Poor (28.82-31.34)	\$75,000				

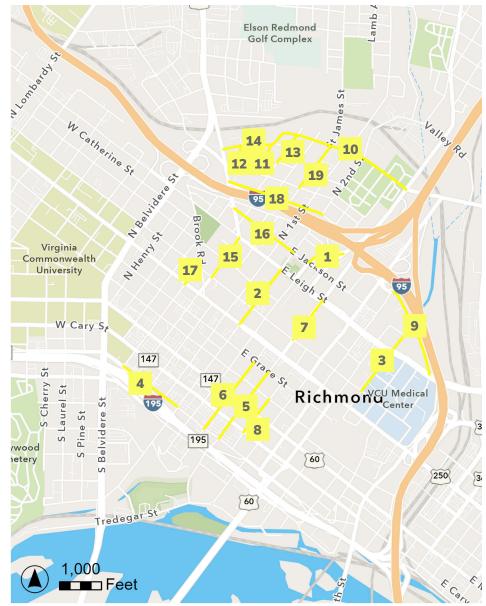
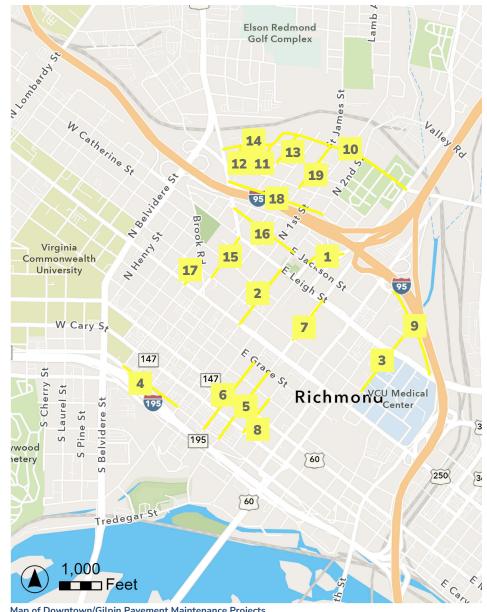


Figure 16. Map of Downtown/Gilpin Pavement Maintenance Projects



Map ID	Project Locations and Extents	Project Length (ft)	Pavement Condtion Score(s)	Ballpark Cost
14	Calhoun St from Chamberlayne Ave to St Peter St	1,000	very poor- serious (15.7- 29.47)	\$115,000
15	Adams St from Marshall St to Leigh St	900	Very Poor (26.49-28.44)	\$110,000
16	Jackson St from Chamberlayne Pkwy to N 2nd St	1,400	Very Poor- Serious (16.05- 27.17)	\$169,000
17	Jefferson St from Broad St to Marshall St	400	Serious (25.28)	\$44,000
18	Baker St from Chamberlayne to N 2nd St	2,400	Serious (14.2- 23.77)	\$108,000
19	St. James St from Hill St to Federal St	1,300	Serious (25.26)	\$80,000







Map ID	Project Locations and Extents	Project Length (ft)	Pavement Condtion Score(s)	Ballpark Cost
20	Cedar St from Broad St to 27th St	4,100	Poor-Serious (48.49-10.88)	\$493,000
21	Williamsburg Ave from Main St to Nicholson St	3,000	Very Poor (40.38-27.22)	\$357,000
22	T Street from 21st St to 25th St	1,300	Serious-Failed (21.34-7.63)	\$158,000
23	Government Road from Broad St to Glenwood Ave	1,300	Serious (19.44)	\$151,000

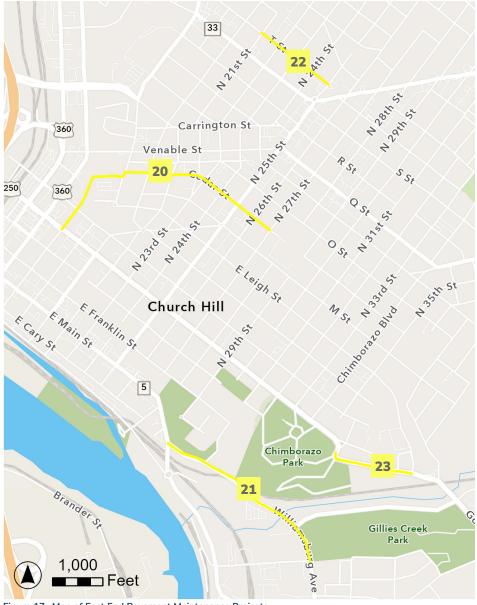
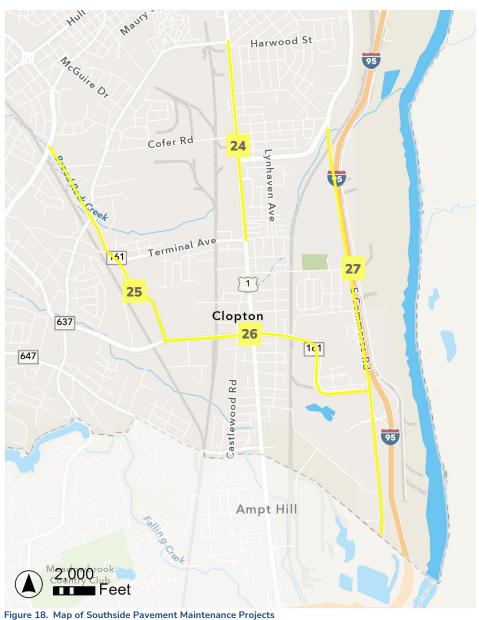


Figure 17. Map of East End Pavement Maintenance Projects



Map ID	Project Locations and Extents	Project Length (ft)	Pavement Condtion Score(s)	Ballpark Cost
24	Richmond Hwy from Hopkins Rd to Terminal Ave	7,700	Satisfactory- Very Poor (76.26-33.79)	\$921,000
25	Belt Boulevard from Broad Rock Boulevard to Bells Rd/ Warwick Rd	8,900	Satisfactory- Serious (73.11- 15.32)	\$1,063,000
26	Bells Road from Belt Boulevard to Commerce Road	9,700	Poor-Serious (14.9-46.32)	\$1,166,000
27	Commerce Road from Bellemeade Rd to Dupont Site Rd	15,800	Poor-Very Poor (12.78-43.14)	\$1,894,000





ID	Project Name	Equity Need	Description	Immediate Next Steps	Support Score
9B	Hull Street Streetscape - Mayo Bridge to 9th Street	Communities of Concern identified Hull Street at the Railroad Museum as a Super Need because of its constraints and need for pedestrian and bicycle improvements. Improves walkability in areas with high equity needs for pedestrian safety (EF6), transit reliability (EF7), and disparate climate impacts (EF8).	Pedestrian safety improvements along Hull Street between the Mayo Bridge and 9th Street. Street enhancements and objectives include defining Manchester through use of public art, landscaping, signage, and lighting; incorporating pedestrian safety infrastructure and pedestrian-activated crosswalks; evaluate new/reconfigured intersections at 1st and 2nd Streets; managing traffic speeds; and maintaining capacity.	Complete the Hull Street Streetscape project from Mayo Bridge to 9th Street.	4.8
11C	Southwood Parkway Sidewalks	The data analysis indicates this improvement will address Tier 1 equity-based needs in the Pedestrian, Connectivity, and Sustainability categories. Connects suburbs where communties of concern live (EF4, EF9). Increases pedestrian safety and reduces need for car ownership (EF5, EF6).	Construct sidewalks on Southwood Parkway from Hull Street to Clarkson Road.	Complete construction of the approved sidewalk design project.	4.2
12F	Hull Street Improvements Phase II - Hey Road to Brookhaven Drive	The data analysis indicates this project will address Tier 1 equity-based needs in the Bicycle, Pedestrian, Safety/Security, Connectivity, and Economic Development. Adds infrasture to previosuly redlined and separated communities (EF1, EF4, EF9). Improves pedestrian safety and reduces need for car ownership (EF5, EF6).	Seek remaining funding for and implement the Hull Street Improvements Phase II project (Chippenham Parkway to Hey Road). Modify the design to include more frequently spaced pedestrian crosswalks with pedestrian hybrid beacons. Incorporate native landscaping that retains water and provides food and shade, and considers permeable pavement into the design.	Implement project with identified and allocated funds. Fill remaining project funding gaps to bring the project to 100% completion.	3.7



ID	Project Name	Equity Need	Description	Immediate Next Steps	Support Score
6C	Shockoe Valley Street Improvements	The data analysis revealed Tier 1 equity-based needs for Pedestrian, Bicycle, and Safety/Security need categories.	Street improvements project in the vicinity of the Broad Street interchange with I-95. Improvements will be based on traffic analysis and could include roundabouts at 3 intersections on Venable Street and at Mosby and O Streets, and converting 18th Street and Oliver Hill from one-way to two-way traffic.	Implement project with identified and allocated funds. Fill remaining project funding gaps to bring the project to 100% completion.	3.7
9D	Mayo Bridges Pedestrian and Bicycle Facilities	Bridges feeling unsafe for walking and bicycling was identified as a Super Need. The data-based analysis revealed a Tier 1 equity-based need for bicycles on the Mayo Bridges.	Integrate pedestrian and bicycle facilities into the design of the Mayo Bridges rehabilitation project.	Continue to participate in VDOT- administered Mayo Bridges Rehabilitation project, and advocate for inclusion of desired pedestrian and bicycle facilities. Fill remaining project funding gaps to bring the project to 100% completion	3.7
15C	Arthur Ashe Boulevard Bridge Replacement	Data analysis reveals a Tier 1 Bicycle and Tier 1 Pedestrian need. Improves pedestrian and cyclist safety and access (EF6).	Design and construct the replacement bridge for Arthur Ashe Boulevard over the CSX railroad. Incorporate dedicated bicycle and pedestrian facilities into the bridge design.	Implement project with identified and allocated funds. Fill remaining project funding gaps to bring the project to 100% completion.  Work with engineers to incorporate desired bicycle and pedestrian infrastructure into design.	3.7



ID	Project Name	Equity Need	Description	Immediate Next Steps	Support Score
118	Hey Road Improvements	The data analysis indicates this improvement will address Tier 1 equity-based needs in the Pedestrian, Connectivity, and Sustainability categories. Public comments confirmed the need for sidewalks on Hey Road. Connects suburbs to City (EF4), Improves pedestrian safety and reduces need for car ownership (EF5, EF6). Also increases opportunities for communities of concern (EF9).	Implement the Hey Road Improvements CIP project, which will provide wider travel lanes, curb and gutter, sidewalk, utility relocations, and a closed drainage system from Walmsley Boulevard to Hull Street. In the design of this project, include native landscaping that retains water and provides food and shade.	Implement project with identified and allocated funds. Fill remaining project funding gaps to bring the project to 100% completion.	3.6
16D	Broad Street Streetscape with Pulse BRT Expansion	Public comments included a new BRT station at Malvern Avenue. Reduces car dependency in areas affected by car-centric planning (EF5).	Multimodal safety and operational improvements to the 0.5 mile stretch of Broad Street from Hamilton Street to Commonwealth Avenue. Improvements include two new Bus Rapid Transit (BRT) curbside stations, sidewalk and ADA accessible ramp improvements, pedestrian crossing improvements, access management, and other streetscape amenities.	Complete the Broad Street Streetscape Pulse BRT Expansion Phase I project using the already allocated funding.	3.5



ID	Project Name	Equity Need	Description	Immediate Next Steps	Support Score
15B	Clay Street Streetscape Improvements	Clay Street in Scotts Addition has Tier 1 Pedestrian and Tier 1 Bicycle needs. Calms traffic in an area affected by car-centric planning (EF5).	Convert and improve the typical section of Clay Street from a two-lane, one-way street to a two-lane, two-way street along the 0.5 mile stretch between Arthur Ashe Boulevard and Belleville Street by providing a 10' travel lane in each direction, a 6' bike lane along the eastbound side of the corridor, and a parking lane on both sides of the corridor between Sheppard Street and Roseneath Road. This project will further improve multimodal safety and operations by providing traffic calming and access management through curb bump-outs and removing redundant entrances to parcels, and by providing bike, ped, and transit access improvements and crossing accommodations at two intersections and at two bus stops.	Implement project with identified and allocated funds. Fill remaining project funding gaps to bring the project to 100% completion.	3.4
6F	Gillies Creek Greenway	The data analysis reveals this connection would link to the Tier 1 need Virginia Capital Trail, enhancing connectivity in an area of high densities of Communities of Concern. Invests in green bike/pedestrian infrastructure in a previously redlined area negatively impacted by urban renewal (EF1, EF2) with equity needs related to bike/ pedestrian safety (EF6). Located in an area with densely populated communities of concern (EF9).	Implement the Gillies Creek Greenway - a shared use path along Gillie Creek connecting Oakwood Cemetery to Gillies Creek Park and the Virginia Capital Trail - with funds already allocated.	Implement the portions of the Greenway with funds already allocated. Fill remaining project funding gaps to bring the project to 100% completion. Identify funding to design and construct remaining portions	3.2



ID	Project Name	Equity Need	Description	Immediate Next Steps	Support Score
5J	Oliver Hill Way Bike Lanes	The data analysis revealed a Tier 1 equity-based Bicycle need on Oliver Hill Way. Creates bicycle facility in an area with high equity needs for bike safety (EF6). Located in an area with densely populated communities of concern (EF9) with disparate climate impacts (EF8).	Finish designing and building the bicycle facility on Oliver Hill Way from Hospital Street to Grace Street	Implement project with identified and allocated funds. Fill remaining project funding gaps to bring the project to 100% completion.	3.2
14H.1	Franklin Street Cycle Track - Lombardy Street to Belvidere Street	Extending the existing Franklin Street cycle track was a top public comment. Creates bicycle facility in areas with bike/pedestrian safety needs (EF6) affected by car-centric planning (EF5). Located in areas with densely populated communities of concern (EF9).	Design and implement protected bike lanes on Franklin Street from Belvidere Street to Lombardy Street.	Complete design and fill funding gaps to ensure 100% project completion.	3.2
14G	Allen Avenue Bike-Walk Street	The data analysis indicates this project will address a Tier 1 equity-based need in the Bicycle and Safety/Security categories. Creates an active transportation corridor in previously redlined areas (EF1) impacted by neighborhood dissection (EF2) and urban renewal (EF3). Located in areas with densely populated communities of concern (EF9) with disparate climate impacts (EF8).	Implement the Allen Avenue bike-walk street that has already been designed from Colorado Avenue to Leigh Street	Implement project with identified and allocated funds. Fill remaining project funding gaps to bring the project to 100% completion.	3.0
14J	State Route 161 Bicycle Infrastructure	The data analysis reveals this project addresses a Tier 1 equity-based need in the Pedestrian and Connectivity categories, and it was a top public comment. Creates bicycle facility in areas with bike/pedestrian safety needs (EF6) affected by car-centric planning (EF5).	Create separated bike infrastructure on State Route 161 (Westover Hills Boulevard / 49th Street from James River Branch Trail to Boulevard Bridge; Park Drive from the Boulevard Bridge to Blanton Avenue and from Blanton Avenue to French Street).	Implement project with identified and allocated funds. Fill remaining project funding gaps to bring the project to 100% completion.	2.9



ID	Project Name	Equity Need	Description	Immediate Next Steps	Support Score
11	Fall Line Trail	The Fall Line Trail was one of the most repeated public comments. It will provide connectivity in some areas with Tier 1 pedestrian and bicycle needs. Creates active transportation corridor in areas with high equity needs related to car-centric planning (EF5), bike/pedestrian safety (EF6), and disparate climate impacts (EF8).	Create a connected path for walking and cycling from Ashland to Petersburg. Several portions of the trail are in various phases of design and implementation.	Continue to design and implement the Fall Line Trail to provide a continuous connected path for walking and bicycling throughout the entire City of Richmond, connecting Ashland to Petersburg. Continue to pursue dedicated shared use paths over on-street bike lanes, and consider alternate or parallel alignments including Hermitage through the Diamond District.	2.6
11H	Hull Street Shared Use Path - Arizona Drive to James River Branch Trail	The data analysis indicates this project will address Tier 1 equity-based needs in the Bicycle, Pedestrian, Safety/Security, Connectivity, and Economic Development. Adds infrastructure to previously redlined areas (EF1, EF9), connects inner ring suburbs (EF4), improves pedestrian safety and reduces need for car ownership (EF5, EF6).	Implement the Hull Street Shared Use Path Improvements project that will provide a shared use path and sidewalk along Hull Street between Arizona Drive and the James River Branch Trail.	Implement project with identified and allocated funds. Fill remaining project funding gaps to bring the project to 100% completion.	2.6
3L	Rowen Avenue/ N 5th Street/ N 3rd Street Bike Lanes	The data analysis revealed a Tier 1 need on 5th Street north of I-95. Communities of Concern consistently voiced a need for a bicycle connection from downtown to Northside. This was identified as a Super Need. Creates an active transportation corridor, improving connectivity in an area affected by neighborhood dissection (EF2) and with bike safety needs (EF6).	Build the bike lanes on 3rd Street in Downtown and the separated bike lanes on N 5th St/Rowen Ave from Trigg Street to Jackson Street that have already been designed.	Implement project with identified and allocated funds. Fill remaining project funding gaps to bring the project to 100% completion.	2.5
111	James River Branch Trail	The data analysis indicates this project will address Tier 1 equity-based needs in the Bicycle, Pedestrian, Connectivity, and Economic Development. Improves safety for pedestrians and cyclists and reduces need for car ownership (EF5, EF6). Adds green space and connects communities of concern to it (EF8, EF9, EF10).	Implement the James River Branch Trail, which will create a new shared-use path along unused rail right-of-way from 49th Street to Hopkins Road.	Implement project with identified and allocated funds. Fill remaining project funding gaps to bring the project to 100% completion.	1.6



ID	Project Title	Equity Need	Description	Immediate Next Steps
C1	Cary Street Safety Curb Extensions	Tier 1 INC 5 (Safety/Security) - several Tier 1 areas along Cary Street between Belvidere and Boulevard. Tier 1 INC 1b (Pedestrian) - Some sections of Cary Street between Belvidere and Boulevard have Tier 1 need segments.	Provide funding for the installation of pedestrian safety intersection curb extensions at stop controlled intersections on West Cary Street between Belvidere Street and Arthur Ashe Boulevard.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
C2	Forest Hill Avenue Pedestrian Safety Improvements - 41st & 43rd Streets	Tier 1 INC 5 (Safety/Security) need at Forest Hill Avenue at 43rd Street.	Reduce pedestrian crossing distances along this urban arterial utilizing traffic calming measures on Forest Hill Avenue at 41st Street and 43rd Street, gaining greater pedestrian stopping/yielding compliance by motorists, and resolving vehicle conflicts to improve traffic flow.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
C3	Hull Street at 29th Street Pedestrian Hybrid Beacon	"Missing sidewalks and speeding along Hull Street" is a Super Need, which reflects a general feeling of being unsafe from a pedestrian perspective.	Install a pedestrian hybrid beacon traffic signal device on US Route 360 (Hull Street) at 29th Street to provide a place for people of all ages and abilities to safely cross the street.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
C4	Main Street Safety Curb Extensions	Tier 1 INC 1b (Pedestrian) and INC 5 (Safety/Security) needs	Install pedestrian safety intersection curb extensions at stop controlled intersections on West Main Street between Belvidere Street and Arthur Ashe Boulevard. The landscaped curb extensions will minimize the crossing distance and exposure to pedestrians on two main corridors connecting the Virginia Commonwealth University area and the Museum District.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.



ID	Project Title	Equity Need	Description	Immediate Next Steps
C5	Richmond Highway Phase II Improvements	Tier 1 INC 1b (Pedestrian) and INC 5 (Safety/Security) needs	Multi-modal safety and operations improvements along the 0.4-mile stretch of Richmond Highway between Maury Street and Hull Street by providing dedicated left-turn lanes for adjoining streets in both directions at its intersections with Decatur Street and Maury Street, adding pedestrian signal control accommodations and crossing improvements at Decatur, Stockton, and Maury, filling in missing sidewalks for Americans with Disabilities (ADA) compliance, consolidating/ eliminating unnecessary driveway entrances, and providing bike, pedestrian & transit access improvements along the corridor.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
C6	Richmond Signal System Phase IV	Addresses non-mappable needs including pedestrian detection, crosswalk timing, new technology for pedestrians with disabilities, etc.	Integrate intersections with traffic control signals to the City's traffic management software. The project provides installation of new system networks, servers, computers, conduits, fiber optic cable, wireless communication, traffic monitoring cameras and traffic signal controllers, cabinets, and other traffic signal equipment such as transit signal priority and emergency vehicle preemption	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
С7	Riverfront/ Orleans BRT Streetscape Improvements	Addresses Super Need: Fill in missing sidewalks and fix broken sidewalks (all throughout East End)	Streetscape improvements around the East Riverfront and Orleans BRT Stations, a project area bound by Virginia Capital Trail to the west, Carlisle Avenue to the east, Broad Street to the north, and Hatcher Street to the south. The Complete Streets process will be used to add streetscape improvements including a combo of new sidewalks and sidewalk widening for a consistent sidewalk width, ADA-compliant curb ramps, crosswalks, and pedestrian scale lighting.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.



ID	Project Title	Equity Need	Description	Immediate Next Steps
C8	Scott's Addition BRT Streetscape Improvements	Tier 1 INC 1b (Pedestrian) need	Streetscape improvements to the half mile walkshed around the Scott's Addition BRT Stations, bound by Hamilton Street to the west, N. Arthur Ashe Boulevard to the east, Patton Avenue to the north, and Stuart Avenue to the south. The Complete Streets Process will be used to address traffic pattern concerns and add streetscape improvements including new sidewalks, crosswalks, push buttons, ramps, and pedestrian scale lighting.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
C9	Scott's Addition Green Space	Tier 1 INC 1a (Bicycle) and INC 1b (Pedestrian) needs	Construct a pedestrian/bike trail in the Scott's Addition neighborhood. The proposed trail would be located on City property along a portion of Patton Avenue, south of the CSX rail line between Roseneath Road and North Boulevard. This trail will provide for the addition of green space for use residents and visitors to a rapidly developing neighborhood.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
C10	Shockoe Bottom BRT Streetscape Improvements	Top public comment. Recommendation 8A. Tier 1 INC 5 (Safety/Security) need is present between Cary St and Main St.	Pedestrian safety and accessibility improvements to the Shockoe Bottom BRT stations, bound by 17th Street to the west, 30th Street to the east, M Street to the north, and the Virginia Capital Trail to the south. Improvements include: pedestrian scale lighting, brick sidewalk construction, curb ramps and crosswalks, installing an RRFB on Dock Street at 25th Street and Pear Street, installing a PHB crossing west of Pear, new sidewalk, improved signing and striping at rail crossings along Dock and Pear, and clearing the 27th Street stairs at Main Street to provide access to Church Hill.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
C11	Centralized Transit Signal Priority and Emergency Vehicle Preemption	Addresses non-mappable needs including poor tranist service reliability, strategy to address this with technology solutions	Integrate the City's traffic signal system with the Region's Automated Vehicle Location (AVL) systems to improve safety operations and travel speeds for transit vehicles, emergency vehicles, and other City-operated vehicles equipped with AVL.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.



ID	Project Title	Equity Need	Description	Immediate Next Steps
C12	Highland Grove/ Dove Street Redevelopment	Fill in missing sidewalks and fix broken sidewalks all throughout Northside is a Super Need. There is a Tier 1 need for INC 1b (Pedestrian) on Dove Street from 1st Ave to Lamb Ave. There is a Tier 1 need for INC 8 (Econ Dev) just east of here in Chestnut Hill.	Infrastructure improvements supporting the Richmond Redevelopment and Housing Authority (RRHA)'s development of the former Dove Street Redevelopment Area, which included construction of 139 residential units. The project includes planning, design, and improvements to right-of-way, streets, sidewalks, landscaping, streetscape and ornamental lighting, water and sewer and connection fees, and other utilities that will be designed and constructed by RRHA and approved by the City of Richmond.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
C13	Jefferson Avenue Improvements	There are Tier 1 INC 1a and INC 1b segments leading up to Jefferson Ave on Marshall St and 21st St. Green infrastructure on this project addresses some non-mappable sustainability needs (as a practice for including green infrastructure for these types of projects).	Improvements to the Jefferson Avenue corridor, reconstructing a portion of the 1/3-mile corridor to include traffic calming, pedestrian and bicycle infrastructure, and green infrastructure.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.



ID	Project Title	Equity Need	Description	Immediate Next Steps
C14	Laburnum Median Improvements	Speeding on Laburnum Avenue is a Super Need. There is a Tier 1 INC 1b (Pedestrian) need on Laburnum between Hermitage and MacArthur Ave.	Paving and infrastructure improvements to Laburnum Avenue focused on narrowing the median on Laburnum between Brook Road and Hermitage to allow for the expansion of parking lanes. Narrowing the median to provide parking lanes that people feel more comfortable parking in could be a traffic calming measure.	Revisit the project design to address public comments.  Explore and test LQC options for other traffic calming techniques to address speeding on Laburnum Avenue without narrowing the median.  Consider reallocating funds from this project to the redesign of the intersection of Laburnum Avenue and Hermitage Road.
	Public comments voiced opposition to the Laburnum Median Improvements project for several reasons:  Parking lane will likely not be utilized, which would not have the intended traffic calming effect  Parked cars would limit sight distance for vehicles turning onto Laburnum  Removal of mature trees in the median would give the appearance of more space and encourage faster speeds  The median is a pedestrian refuge. Narrowing the median would reduce the width of this refuge.  Don't remove green space and trees from a historic neighborhood and boulevard  Instead of adding parking, use reclaimed space for a bike lane  Public comments referenced a survey of residents in Bellevue, Ginter Park, Rosedale, and Hermitage Road that found 75% of residents do not approof this project and want the funds to be reallocated to the intersection of Laburnum Ave and Hermitage Road, bump-outs, and/or bike lanes.			
C15	Nicholson Street Streetscape	"Fill in missing sidewalks and fix broken sidewalks all throughout East End" is a Super Need.	Pedestrian safety improvements along Nicholson Street between Williamsburg Avenue and East Main Street. Street enhancements along Nicholson Street include: sidewalks, landscaping, lighting, street side parking and intersection and pedestrian safety improvements at Williamsburg Avenue.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.



ID	Project Title	Equity Need	Description	Immediate Next Steps
C16	Richmond Fiber Optic Network System	Addresses strategies including technology to meet non-mappable needs.	Implement a city-owned fiber optic network. This fiber optic network system project will create a city-wide fiber optic cable infrastructure that can be used to advance many technology initiatives. A fiber optic network for internal City use is an essential next step in technological data needed for government service. Fiber optics offers unlimited capacity, long life, and superior resilience to downtime. In addition to supporting City buildings, the system will be used to support fire station alerting, cameras, next generation 9-1-1, and the next generation radio system.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
C17	Semmes Avenue, Forest Hill Avenue and Dundee Avenue Pedestrian Safety and Operational Enhancements	"Crossing the street feels unsafe on Semmes Avenue" is a Super Need.	Provide funding for pedestrian safety and operational improvements within the existing school zone at the intersection of Semmes Avenue, Forest Hill Avenue, and Dundee Avenue. This project includes two phases. Phase I is the construction of a new traffic control signal that relies on Phase II scope of reconnecting traffic from westbound Forest Hill Avenue to northbound 34th Street.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
C18	Street Lighting - General	Enhances safety/security in high need areas. Need for better lighting is a non-mappable need, and was a high-priority strategy in the Phase 4 focus group discussion.	Provide funding for installation of new street lights at various locations based on requests of citizens, the Police Department, and the Department of Public Works Traffic Engineering Division. This project also provides for an upgrade to the electric distribution system, upgrades to four electric sub-stations, and ancillary electric work required due to CIP projects undertaken by other departments within the City of Richmond.	Continue to implement and fund this project with allocated funding. Install lighting with pedestrianscaled and dark sky compliant lighting. Fill funding gaps to ensure 100% project completion.



ID	Project Title	Equity Need	Description	Immediate Next Steps
C19	Street Lighting - LED Conversion	Enhances safety/security in high need areas. Need for better lighting is a non-mappable need, and was a high-priority strategy in the Phase 4 focus group discussion. Converting street lights to LED was supported.	Provide funding for street lighting projects including the installation of LED street lights based on a transition to newer lighting technology, and conversion of current street lighting to LED street lights.	Continue to implement and fund this project with allocated funding. Install lighting with pedestrianscaled and dark sky compliant lighting. Fill funding gaps to ensure 100% project completion.
C20	Westhampton Area Improvements - Phase III	There is a Tier 1 INC 5 (Safety/Security) need on Patterson between Westview Ave and Seneca Road. There is a Tier 1 INC 3 (Freight) need on both Grove and Patterson streets.	Install streetscape amenities along the Grove Avenue and Patterson Avenue corridors. The project includes installation of sidewalk, handicap ramps, and streetlights and pavement markings, and street furniture. The project will be completed in three phases. Phase I was completed in 2018 on Patterson Avenue from Libbie Avenue to Granite Avenue. Phase II was completed in 2022 on Patterson Avenue from Granite Avenue to Seneca Road. Phase III is on North side of Patterson Avenue from Granite Avenue to Seneca Road.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
C21	Deepwater Terminal Road Connector to Goodes Street	Deepwater Terminal Road has a Tier 1 INC 3 (Freight) need	Design and construction to extend Deepwater Terminal Road 0.69 miles north to Goodes Street. The project will consist of a two-lane roadway with shoulders and drainage ditches.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
C22	Hull Street Improvements Phase I - Hey Road to Warwick Road	Super Need and Tier 1 INC 1b (Pedestrian) need	Road improvements including a raised median, turn lanes, curbs, gutters, bike lanes, a new sidewalk/shared use path on the north side of Hull Street and new sidewalks on the south side of Hull Street, street lighting and an underground drainage system.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
C23	Jahnke Road Improvements Blakemore Road to Forest Hill Avenue	Fulfills tier 1 need in INC1A, INC1B, INC6, public comments	Installation of a median with left turn lanes, curbs, gutters, sidewalks, shared-use paths, and an underground drainage system. The roadway will remain two travel lanes with landscaping. The existing traffic signals will be upgraded.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.



ID	Project Title	Equity Need	Description	Immediate Next Steps
C24	Maury Street Streetscape	Super Need in Southside: "Fill in missing sidewalks and fix broken sidewalks. Drivers do not stop for pedestrians in crosswalks. Lack of lighting at night." Maury Street from Commerce Road to 4th St is a Tier 1 INC 3 (Freight) need. There is a Tier 1 bicycle need segment on 7th street leading to Maury Street	This 0.25 mile corridor will bring complete street and operational/safety improvements to Maury Street from the planned and funded I-95 Roundabout Interchange Project gateway feature to Commerce Road, a major principal arterial, for better access to the Richmond Marine Terminal land uses. Location: Maury Street from 4th Street to Commerce Road	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
C25	Richmond Highway Improvements	Super Need throughout Southside.	Improvement of the intersection at Hopkins Road and Richmond (formerly Jefferson Davis) Highway. The scope will focus on the re-alignment of the intersection, a new traffic signal and improved pedestrian accommodations. Location: Richmond Highway from Chesterman Avenue to Decatur Street	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
C26	Route 5 Relocation/ Williamsburg Road Intersection Improvement	Super Need throughout East End	Design, right-of-way acquisition, and construction to improve the intersection at East Main Street and Williamsburg Avenue with new sidewalks, landscaping and signal. Location: Williamsburg Road @ E. Main Street	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
C27	Science Museum BRT Shared Use Path	Tier 1 INC 1a (bicycle) and INC 1b (pedestrian) needs	Development of a paved bicycle and pedestrian connection and shared-use path. Location: Broad Street at Robinson Street, to Terminal Place, to Leigh Street, and to Altamont Avenue in Scott's Addition.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
C28	Capital Trail/Canal Walk Connector to Brown's Island - Phase 1	There is a Tier 1 INC 1a (Bicycle) need across both Manchester and Mayo bridges, and a Super Need of "bridges feel unsafe for walking and bicycling." This project works toward the unmappable need of Richmond being too car-centric overall. It would enhance the connectivity of the network of Richmond's off-road trails.	Improvements to the Virginia Capital Trail connection to the Tyler T. Potterfield Memorial Bridge located on Brown's Island, via the Canal Walk in downtown Richmond. Improvements include construction of an ADA-accessible ramp from the south side of the Canal Walk up to street grade at Virginia Street and E. Byrd Street; a barrier-separated bike lane extending along E. Byrd Street to the City floodwall, and a short segment of paved path accessing the walkway along Haxall Point.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.



ID	Project Title	Equity Need	Description	Immediate Next Steps
C29	Cherokee Road Roadside Safety Improvements	There is a Tier 1 INC 1A (Bicycle Need) along Cherokee Road. A paved shoulder will provide more space for bicyclists, however, it could also encourage higher speeds, and does not provide a dedicated facility for bicyclists.	Construct a six foot wide paved shoulder on the north side of Cherokee Road between North Huguenot Road and Forest Hill Avenue. Additionally, the project will improve safety and drainage for the Cherokee Road corridor by adding swales on each side of the roadway.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
C31	Belvidere Street Gateway - Phase IV	There is a Tier 1 INC 1b segment on Belvidere to the north.	Improves pedestrian access and safety along Belvidere Street at the intersections with Rowe Street, Idlewood Avenue, and Spring Street.	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
C32	Biotech Research Park Roadway Improvements	There is a small Tier 1 INC 1b (Pedestrian) need segment on Jackson St between 5th St and Navy Hill Dr. N	Street, traffic, and streetscape improvements related to the Biotechnology Research Park. Location: 800 E Leigh Street	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
C33	Mary Munford Elementary School Pedestrian Safety Improvements	Small Tier 1 INC 1b (Pedestrian) need segment at school entrance.	Installation of school flasher assemblies on both Cary Street and Grove Avenue, and a stamped asphalt crosswalk at the intersection of Grove Avenue and Commonwealth Avenue. Location: Cary Street, Westmoreland Street, Grove Avenue, Commonwealth Avenue	Continue to implement and fund this project with allocated funding. Fill funding gaps to ensure 100% project completion.
G1	Western Pulse Extension	Extending frequent reliable BRT westward will improve overall access to jobs, including higherpaying jobs systemwide. Improving access to higher paying jobs outside of Richmond city limits was a common theme in discussions with Communities of Concern.	Extend the Pulse BRT westward along Broad Street from its current terminus at Willow Lawn to Short Pump.	Continue to work with GRTC and PlanRVA to study and pursue funding for the Pulse extension to Short Pump.



ID	Project Title	Equity Need	Description	Immediate Next Steps
G2	GRTC Dedicated Lanes Study	Making GRTC bus service more reliable was a common theme in discussions with Communities of Concern. Investments like bus-only lanes, transit signal priority, and queue jumps are infrastructure investments that can improve bus service reliability.	GRTC is conducting a study to identify locations for bus priority treatments to improve on-time performance and reliability system wide. In addition, feasible segments of the existing Pulse BRT route will be identified to convert to peak or all-day dedicated bus only lanes in order to achieve and maintain greater than 50% dedicated lanes on the Pulse corridor.	Support GRTC to identify locations for and implement bus priority treatments to improve on-time performance and reliability.
G3	Downtown Transfer Center	Improving the existing GRTC bus system and having comfortable, safe spaces to wait for transfers were common theme in discussions with Communities of Concern.	Work with GRTC to identify a permanent location for the Downtown Transfer Center that is accessible to the high frequency Pulse BRT and a focal point of the Downtown.	Continue to work with GRTC to advance discussions about a permanent, highly visible, centralized location for the Downtown Transfer Center, and seek funding opportunities.



Project ID	Project Name	Support Score	What is the Need? Why is this Project a Priority to make transportation more equitable?	What should be done?	What are the first Action Steps?	Cost
8A	Dock Street Pedestrian Improvements	3.6	The data analysis indicates a Tier 1 equity-based Safety/ Security need on Dock Street. A common theme in the public comments was crossing Dock Street feels unsafe for pedestrians because of lack of crosswalks and cars going too fast.  This recommendation will invest in previously redlined area (EF1) and improves walkability in areas with equity needs related to bike/ pedestrian safety (EF6) and disparate climate impacts (EF8). It is located in area with densely populated communities of concern (EF9).	Design and implement raised intersections, and curb ramp improvements to slow vehicle speeds on Dock Street from 18th St to Pear St and provide more frequent and safe pedestrian crossings to access the Virginia Capital Trail. Speed tables have already been installed.	Develop engineering design plans. Implement.	Moderate (\$\$)
12H	GRTC Route 1A (Midlothian Turnpike) Improvements	3.5	More frequent bus service along Midlothian Turnpike and extending bus service to Chesterfield Towne Center was a common need identified in public comments, including from Communities of Concern, especially for better job access. This will improve connections for previously redlined areas and widespread communities (EF1, EF4), reduce the need for car ownership, and increase opportunities for financial mobility (EF5, EF7, EF9).	Increase the frequency of bus service along Midlothian Turnpike from Downtown Richmond to Stonebridge to every 15 minutes, and make permanent the bus route extension from Stonebridge to Chesterfield Towne Center.	Work with GRTC to identify needed resources to increase frequency on GRTC Route 1A that runs along Midlothian Turnpike. Support GRTC to find permanent funding sources for service to Chesterfield Towne Center.	Moderate (\$\$)



Project ID	Project Name	Support Score	What is the Need? Why is this Project a Priority to make transportation more equitable?	What should be done?	What are the first Action Steps?	Cost
5E	Mechanicsville Turnpike Bus Route	3.4	The data analysis revealed a Tier 1 equity-based Economic Development need in the Fairfield, Eastview, Brauers, and Whitcomb areas.  Mechanicsville Turnpike is one of five corridors in the 2017 Greater RVA Transit Vision Plan planned for BRT. Bus Rapid Transit in this corridor would provide an economic investment in the area and provide better transit access to these areas that have high densities of Communities of Concern. This would improve reliability for areas with high equity needs related to transit (EF7). It is located in areas densely populated with Communities of Concern (EF9).	Create a Bus Rapid Transit (BRT) route along Mechanicsville Turnpike from the Pulse downtown to Mechanicsville and beyond I-295 (vicinity of Walnut Grove).	Support GRTC to begin new bus route along Mechanicsville Turnpike to Laburnum Ave by 2028.  PDR and Office of Community Wealthbuilding to begin an economic development initiative in Fairfield to address Tier 1 Economic Development needs.	Moderate (\$\$)



Project ID	Project Name	Support Score	What is the Need? Why is this Project a Priority to make transportation more equitable?	What should be done?	What are the first Action Steps?	Cost
10J	Richmond Highway Transit Improvements	3.4	The data analysis revealed Tier 1 equity-based transit needs along Richmond Highway, especially south of Cofer Road, including in the Route 1/Bellemeade and Route 1/Bells Road Nodes. Public comments indicated buses do not run frequently enough along US Route 1 in these areas. Infrequent bus service along Richmond Highway was identified as a Super Need among Communities of Concern. This will improve transportation access (EF7), increase chances for economic growth/personal financial mobility (EF1, EF9), connect suburbs, and mitigate necessity of owning a car (EF4, EF5).	Increase bus frequencies along US Route 1 (Richmond Hwy) (GRTC Bus Route 3B/3C) to from every 30 minutes to every 15-20 minutes.	Implement Microtransit service in the Broad Rock/ Cherry Gardens/ Richmond Highway zone to improve transit accessibility along US Route 1. Work with GRTC to increase GRTC Route 3B frequency from 30 minutes to 15-20 minutes.	Moderate (\$\$)
1)	Brook Road Bike Lanes Protection	3.4	Cars parking in bike lanes was a common issue identified throughout the Richmond Connects process. This recommendation will improve bike safety in areas impacted by car-centric planning (EF5), with high equity needs related to bike/pedestrian safety (EF6), and with disparate climate impacts (EF8).	Install fixed bollards and curbed median between bike lanes and parking lanes. Median could include green infrastructure with stormwater management features. Apply the bollards and curbed median along Brook Road, and if successful, this treatment could be replicated on streets with similar configurations, such as Malvern Avenue.	Prepare engineering design plans. Identify and allocate funding. Brook Road could be a first test case for implementing Strategy 1A.1: Bike Lane Barriers.  LQC implementation could include placing bike racks or corrals in select parking spaces.	Low (\$)



Project ID	Project Name	Support Score	What is the Need? Why is this Project a Priority to make transportation more equitable?	What should be done?	What are the first Action Steps?	Cost
1G	GRTC Route 14 Increased Frequency	3.4	The data analysis revealed Tier 1 equity-based transit needs along Hermitage Road. Several public comments noted it takes too many transfers to get to this area by transit. This recommendation will improve transit reliability for areas with high equity needs related to car-centric planning (EF5) and transit (EF7).	Increase frequency on GRTC Route 14 (Hermitage/East Main) from 30 minutes to 15 minutes, and provide same level of service after 7 pm.	Work with GRTC to increase frequency on Route 14 to 15 minutes.	Moderate (\$\$)
14H.2	Monument Avenue Bike Lanes	3.2	Extending the existing Franklin Street cycle track was a top public comment. Monument Avenue is a Tier 1 equity-based Bicycle need.	Design and implement protected bike lanes or shared use path(s) on or along Monument Avenue from Lombardy Street/Stuart Circle to Arthur Ashe Boulevard, and eventually to Henrico County line. Include crosswalks and evaluate feasibility of curb extensions to increase visibility of pedestrians and pedestrians' sight distance of oncoming vehicles. Extend bike lanes on Lombardy Street south from Broad Street to Monument Avenue.	Present potential design to community for input and feedback. Finalize design. Identify and allocate funding and/or implement with repaving if possible.	Moderate (\$\$)



Project ID	Project Name	Support Score	What is the Need? Why is this Project a Priority to make transportation more equitable?	What should be done?	What are the first Action Steps?	Cost
16E	Willow Lawn Park-and- Ride	3.1	Having a park-and-ride near the Willow Lawn BRT station was a top public comment. This recommendation will help reduce car dependency in an area affected by carcentric planning (EF5).	Identify a location for a park-and- ride near the Willow Lawn Pulse Bus Rapid Transit terminus. This recommendation may also be relevant to the Rocketts Landing end of line BRT station too.	Support Henrico County in efforts to identify and implement parkand-ride at Willow Lawn. City of Richmond Dept. of Planning & Development Review to conduct a study of potential opportunities, risks, and benefits of acquiring land within City limits for parkand-ride to serve Willow Lawn BRT station.	Moderate (\$\$)
2E	Link: On-Demand Microtransit	3.1	Microtransit extends the reach of the transit system, improving transit accessibility especially in areas with the highest equity-based transit needs, but where land use densities are not high enough to justify fixed route transit service. It also complements fixed route transit service by making a connection between low density neighborhoods and transit stops, especially valuable for seniors and persons with limited mobility who cannot walk long distances to access the bus stop. This creates on-demand transit options for areas impacted by carcentric planning (EF5) and with high equity needs for bike/pedestrian safety (EF6), and transit reliability (EF7). Focused in densely populated areas of communities of concern (EF9).	Create a new Microtransit program where riders can request ondemand shared rides to or from GRTC bus stops or other activity centers in high equity-need areas.	Implement the microtransit zones as outlined in the Richmond Microtransit study. Implement Mobility Hubs as described in the Richmond Microtransit study.	Moderate (\$\$)



Project ID	Project Name	Support Score	What is the Need? Why is this Project a Priority to make transportation more equitable?	What should be done?	What are the first Action Steps?	Cost
16B	York Road Sidewalks	2.7	The 1-block segment of York Road from Three Chopt Road to Somerset Avenue connects to a Tier 1 Pedestrian need segment. This project is included because it is a short segment of sidewalk construction.	Design and implement new sidewalk construction to fill in sidewalk gaps on York Road from Three Chopt Road to Somerset Avenue.	Develop engineering design plans. Seek funding.	Low (\$)
16H	Malvern Avenue Sight Distance Evaluation	N/A	Public comments noted concerns about sight distance with the configuration of bicycle lanes between parking lanes and the curb. This configuration can present sight distance issues for drivers seeing pedestrians trying to cross the street, and for drivers in driveways seeing oncoming traffic.	Measure sight distance from driveways along Malvern Avenue with bike lane and parking lane configuration, collect vehicle speed data, evaluate sight distance deficiencies and speeding issues, and work with neighborhood to develop solutions, which could include removing a few individual parking spots at select locations to address sight distance concerns.	Identify locations for data collection. Collect sight distance and vehicle speed data.	Low (\$)



# **APPENDIX B:** List of Acronyms

# LIST OF ACRONYMS

ADA: Americans With Disabilities Act

BIPOC: Black, Indigenous, or Person of Color

**BRT:** Bus Rapid Transit

**CAO:** Chief Administrative Officer

CDL: Commercial Driver's License

**COR:** City of Richmond

**CVTA:** Central Virginia Transportation Authority

**DED:** City of Richmond Department of Economic Development

**DIT:** City of Richmond Department of Information Technology

**DMV:** Virginia Department of Motor Vehicles

**DPU:** City of Richmond Department of Public Utilities

**DPW:** City of Richmond Department of Public Works

**DRPT:** Virginia Department of Rail and Public Transportation

**EV:** Flectric Vehicle

**DSS:** City of Richmond Department of Social Services

**GRTC:** Greater Richmond Transit Company

**HCD:** City of Richmond Housing & Community Development

**HSIP:** Highway Safety Improvement Program

**LQC:** Lighter, Quicker, Cheaper

**OETM:** City of Richmond Office of Equitable Transportation & Mobility

**OCWB:** City of Richmond Office of Community Wealth Building

**OSC:** City of Richmond Office of Strategic Communications

**OOS:** City of Richmond Office of Sustainability

PCRF: City of Richmond Parks, Recreation, and Community Facilities

PDR: City of Richmond Planning and Development Review

PHB: Pedestrian Hybrid Beacon

PlanRVA: Richmond region's Metropolitan Planning Organization

PROWAG: Public Right-of-Way Accessibility Guidelines

**RPD:** Richmond Police Department

**RPS:** Richmond Public Schools

**RRHA:** Richmond Redevelopment and Housing Authority

SRTS: Safe Routes to School

**SS4A:** Safe Streets and Roads for All (grant program)

**TOD:** Transit-Oriented Development

**UDA:** Urban Development Area

**VCU:** Virginia Commonwealth University

**VDOT:** Virginia Department of Transportation



