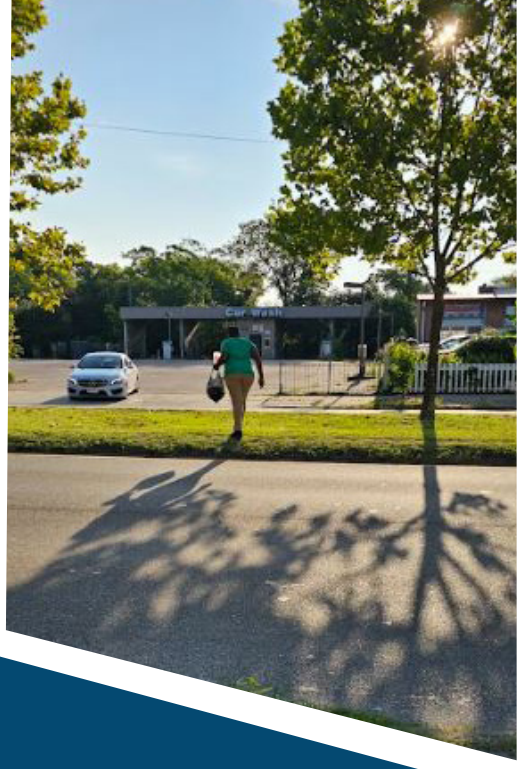
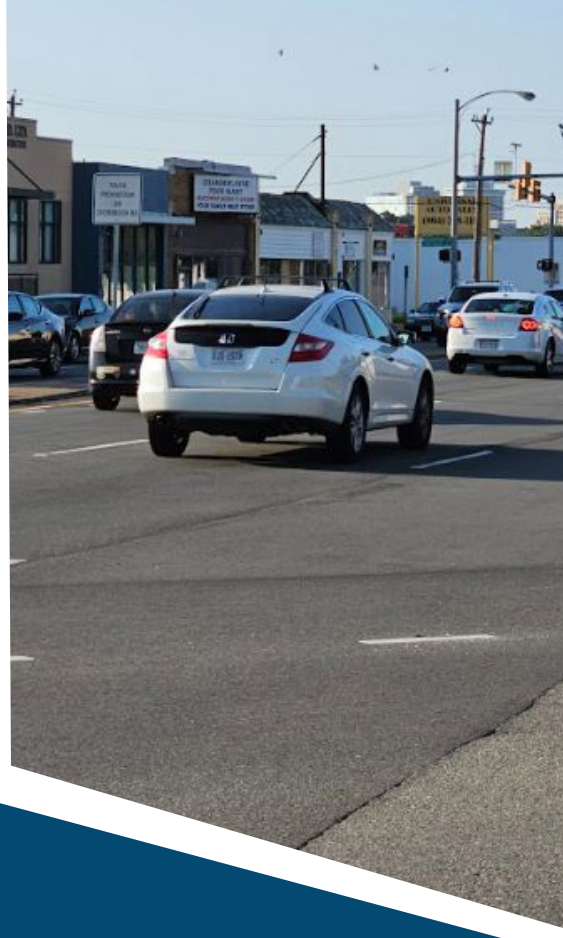




CHAMBERLAYNE AVENUE WALK ASSESSMENT

Brookland Park Boulevard to Mitchell Street Corridor Assessment Date: August 11, 2023

PREPARED BY:

PARTNERSHIP for SMARTER GROWTH

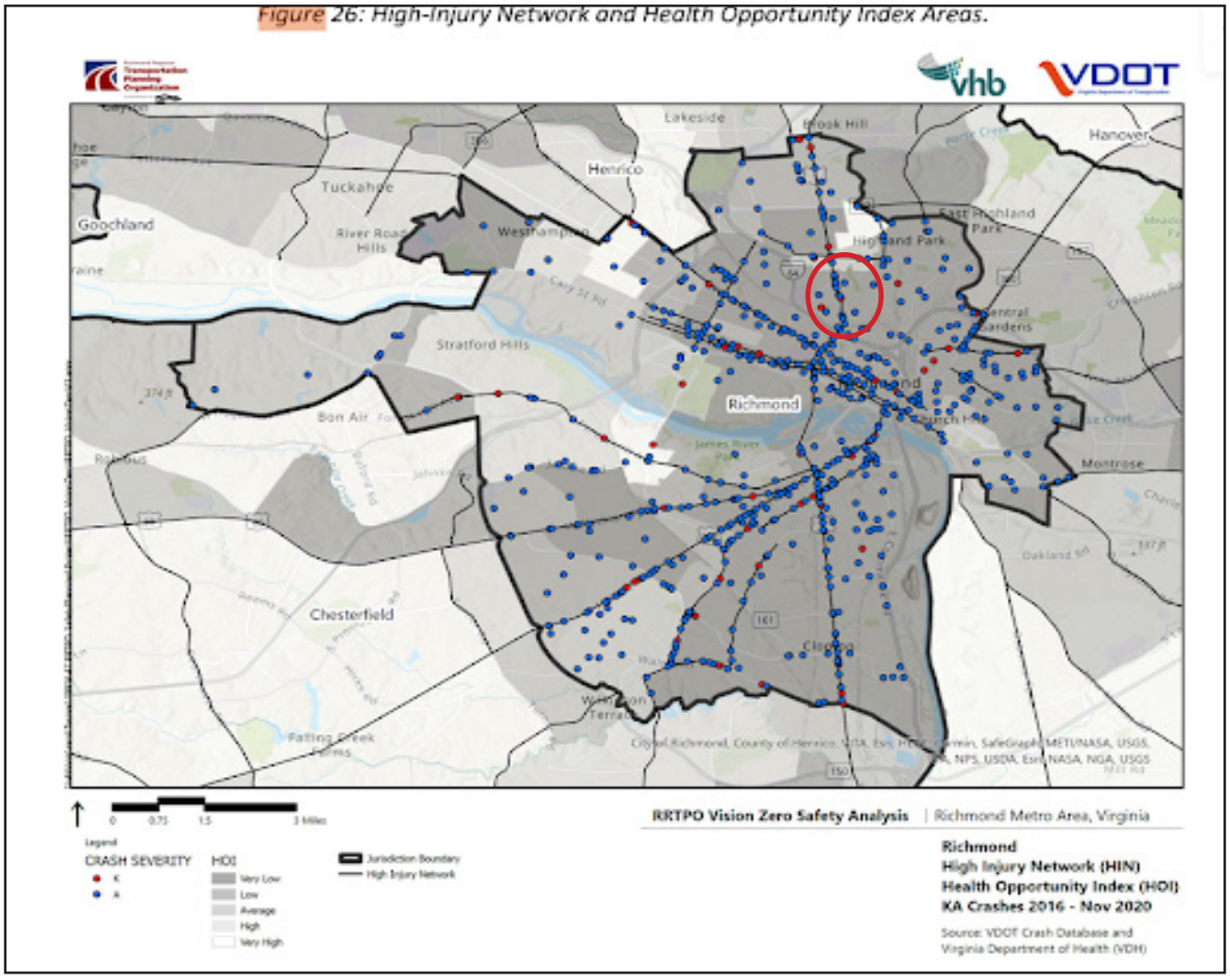
virginia interfaith power & light
www.vaipl.org

The Danger People Face Walking Along Chamberlayne Avenue

High-Risk Corridors/High Injury Network

Chamberlayne Avenue

The Chamberlayne Avenue corridor, situated in the northside of the City of Richmond, has consistently emerged as a critical point of concern for both pedestrian and cyclist safety. Acknowledged by both PlanRVA, the regional planning organization, and the Virginia Department of Transportation (VDOT), Chamberlayne Avenue has been designated as part of the High-Injury Network (HIN). This alarming classification is reinforced by distressing statistics: between 2016 and 2022, Chamberlayne Ave witnessed 4 fatalities and 19 crashes.



Further underscoring its dangerous reputation, the Pedestrian Safety Action Plan by VDOT has spotlighted a specific segment of Chamberlayne Ave, stretching from Mitchell Street to Brookland Park Boulevard. This stretch stands out in Virginia's records, earning a grim distinction of being among the state's top 0.1% priority corridors in terms of imminent danger to pedestrians.

Pedestrian Safety Action Plan
Red line = Top 0.1% statewide pedestrian priority corridors
Blue line = Top 1% statewide pedestrian priority corridors
Green line = Top 5% statewide pedestrian priority corridors
Colored dots = crashes
Green shaded area = different densities

Despite the “priority corridor” designation and some minor modifications to the area (including adding ADA access ramps at intersections) over the past few years, the findings of this assessment highlight the fact that there is an urgent need to address dangerous road design conditions along this corridor in order to improve safety for pedestrians, cyclists, and commuters accessing this area.

Equity Considerations

The demographic composition of the Chamberlayne Avenue corridor adds layers of complexity to the safety concerns. Insights from the 2020 American Community Survey[1] provide a snapshot of these demographics:

Economic Vulnerability: 20% of the corridor’s residents live below the poverty line. Such economic constraints may lead to limited access to private transportation, necessitating walking or biking as primary modes of commute. Additionally, areas with high poverty rates may suffer from inadequate pedestrian infrastructure, like sidewalks, crosswalks, or lighting, making it perilous for residents.

1 U.S. Census Bureau; American Community Survey, 2020 American Community Survey 1-Year Estimates, Table S1701 and Table DP05; using data.census.gov; <https://data.census.gov/cedsci/> (15 September 2023).

Racial Composition: The area is predominantly African American, with 63% of the population identifying as such. Historically, minority communities have faced disparities in urban planning and development. Underfunded infrastructure projects in these areas can result in less safe streets for pedestrians and cyclists.

Senior Residents: 22% of the population in this corridor is aged 60 or older. Older adults are more vulnerable in traffic incidents due to factors like reduced mobility, slower reaction times, and physical fragility. Their presence in a high-risk corridor amplifies concerns for their safety.

Residents with Disabilities: At 11%, a significant portion of the corridor's population has some form of disability. Depending on the nature and extent of the disability, individuals might face challenges in navigating streets, understanding traffic signals, or reacting promptly to sudden dangers.

The specific demographics of the Chamberlayne Avenue corridor heighten the risks associated with its existing infrastructure inadequacies. The convergence of economic vulnerabilities, age-related factors, and disability considerations make it imperative for local decision-makers to intervene with targeted and inclusive safety measures.

A Regional Issue

Arterial roads, like Chamberlayne Ave, are specifically designed for one primary purpose: to ferry traffic through urban and suburban areas as swiftly and efficiently as possible. Yet, this design philosophy, while promoting rapid vehicular movement, often sidelines the safety of pedestrians and cyclists. Consequently, these roads typically feature higher speed limits, wider lanes, and fewer pedestrian-friendly amenities, making them inherently perilous for those not traveling in vehicles.

This issue is not unique to Chamberlayne Ave or even to the Richmond region. In fact, the problem with arterial roads manifests starkly in communities across the nation. Dangerous road conditions, akin to those on Chamberlayne Ave, are seen throughout the region, but are particularly accentuated along its arterial routes.

Such roads, though accounting for only 15% of the nation's total lane miles, are responsible for a staggering 67% of pedestrian fatalities, as per data from StreetLightData.com. This underscores the fact that the design of arterial roads are largely at odds with pedestrian and cyclist safety.

If our overarching mission is to establish streets that are safe for every individual—whether they are behind the wheel, on foot, or riding a bicycle—our strategies and resources must be realigned. A prime area of focus should be a comprehensive reevaluation and revamping of arterial roads throughout the region, such as Chamberlayne Avenue. Efforts should be geared towards mitigating the inherent risks they pose to pedestrians and cyclists.

To this end, future improvements could include lowering speed limits, incorporating pedestrian refuge islands, adding protected bike lanes, enhancing crosswalk visibility, and improving lighting. Such changes, while preserving the arterial function of the roads, would greatly elevate safety standards, ensuring all road users can travel the city with reduced risk.

Pedestrian Safety Assessment

Process & Methods

On August 11, 2023, at 7:30 AM, 9 staff and volunteers with PSG and VAIPL conducted a pedestrian safety assessment along the Chamberlayne Avenue corridor between Brookland Park Boulevard and Mitchell Street (1.4 miles). We observed, experienced, and documented firsthand the experience of being a pedestrian along Chamberlayne Avenue..

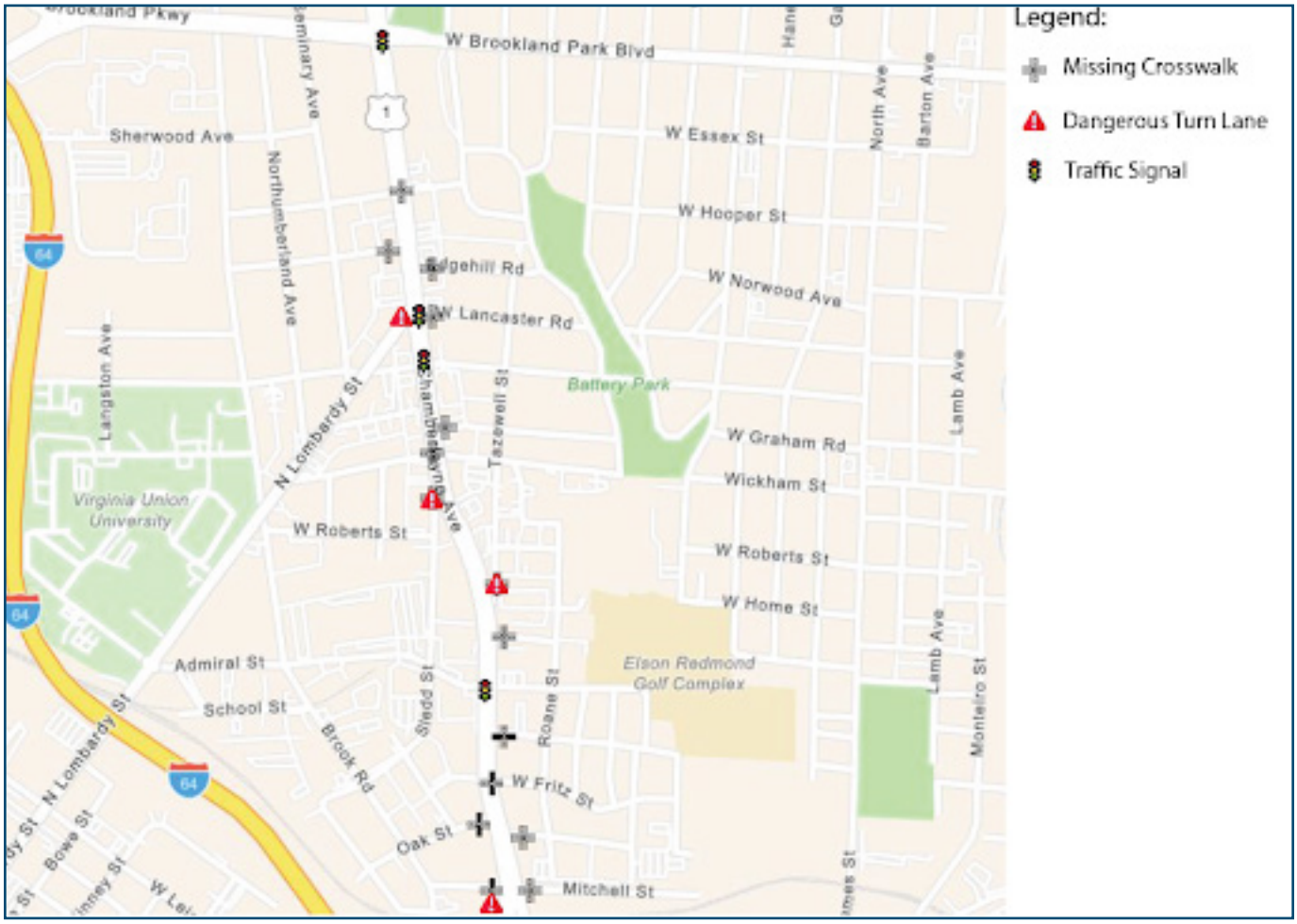
We conducted the assessment while participating in the Virginia Walkability Action Institute (VWAI). This project gave the team a valuable perspective of the conditions and challenges area residents, commuters, and business owners experience daily.

Team Structure:
9 audit team members
3 members walked south on Chamberlayne along the east side of the street
2 members (with a videographer) walked south on Chamberlayne along the west side of the street
The videographer captured videos and still shots of the area, safety concerns, and support for final recommendations
2 members rode the #1 bus service along Chamberlayne from Brookland Park Blvd to Mitchell Street

This structure allowed the team to experience two different modes of travel and assess area conditions from various perspectives along the corridor.

While walking the designated route, participants used audit checklists prepared by consulting firm VHB (a contractor with the City of Richmond) and 8 80 Cities. The team will present this report, photos, and video, along with our recommendations to the City of Richmond, VHB, VWAI, and other interested partners to promote awareness of safety and design issues and encourage improvements along the corridor.

Key Observations & Findings



Along the corridor we noted a number of safety concerns for people walking, biking, and taking the bus. The team observed speeding cars, with the wide lanes encouraging drivers to go fast. There are multiple slip lanes, short turning lanes that allow drivers to make right-turns without slowing down, which create extremely dangerous conditions for pedestrians trying to cross the street. The corridor is missing many pedestrian crosswalks and signals, particularly on side streets as well as a general lack of pedestrian infrastructure. Overall, pedestrians and cyclists are not adequately provided for on Chamberlayne Ave.

Unsafe & Uncomfortable Sidewalks

While 98% of the focus area has sidewalks they are drastically inconsistent in quality, cleanliness, and accessibility,

Narrow Sidewalks

Most allow enough space for one (1) person to walk comfortably, however many portions of the sidewalk are too narrow for two people to walk side by side by side. Much of the sidewalks were relatively narrow for a city environment.

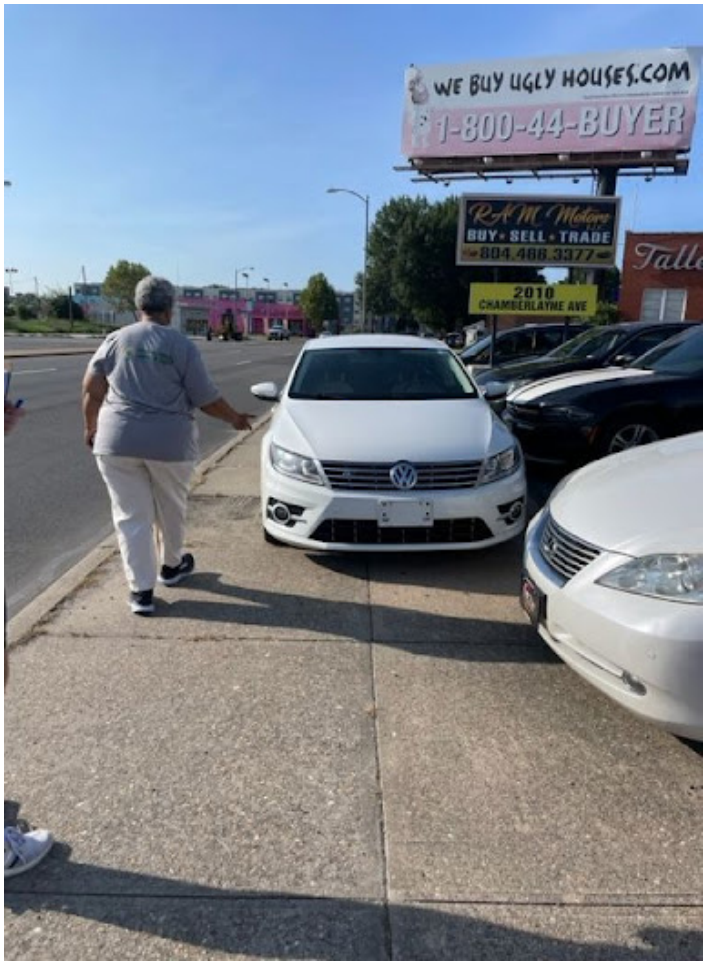
In many cases, the sidewalks have been narrowed due to vegetation overgrowth, and other areas are a result of cracking, breaks, concrete crumbling, and excess trash and debris in the walking space

Cracked and Uneven Sidewalks

Some sections have cracked, broken, and uneven pavement, creating a trip/fall hazard for pedestrians, cyclists, and pedestrians with disabilities
The narrowed sidewalks can force pedestrians to either walk in the street or on the grass, making it difficult to safely travel along the corridor

Unmaintained Pedestrian Areas

All areas along this corridor are obstructed by overgrowth, debris, and trash
Overgrown grassy areas
Broken glass and other debris hidden in grassy areas are a safety hazard.
Debris creates trip/fall hazard



Unmaintained Pedestrian Areas

All areas along this corridor are obstructed by overgrowth, debris, and trash

- Overgrown grassy areas
- Broken glass and other debris hidden in grassy areas are a safety hazard.
- Debris creates trip/fall hazard
- Overhanging trees
- Overhanging tree branches impede access to sidewalks
- Limited access to convenient trash receptacles
- Excess litter obstructs sidewalks and grassy areas
- Increases fall/trip hazards

Driveways

Particularly between Brookland Park Boulevard and Lombardy Street, there are an excessive number of unmarked post-construction driveways, presumably due to the area evolving into a primarily business-zoned and car-oriented area. These entrances:

- Increases the probability of driver/pedestrian collisions
- Results in misaligned, cracked, and uneven sidewalks
- Decreases safe walking spaces for pedestrians and cyclists
- Cars parked in driveways obstruct sidewalks and force pedestrians into unsafe conditions See Figure x.

Lacks Tree or Structure Shaded areas

Approximately 80% of the corridor is devoid of shade. Areas from Lombardy to Mitchell offer little shade or shelter for pedestrians.

Limited Seating

Other than at four (4) out of many GRTC bus stops, the area has no seating or benches for pedestrians

Speeding Violations Contribute to Safety Concerns

Traffic appeared to consistently exceed the posted 35 mph speed limit. Conditions worsened south of School Street, when the number of vehicle travel lanes increased from two to three in each direction.
Drivers turning into and out of business driveways paid little to no attention to people walking on the sidewalk.

Intersections & Crossings

Dangerous Street Design

Pedestrians were forced to run and speed walk across six (6) lanes of traffic to reach the “safety” of the other side of the street. Of the fifteen (15) intersections in the study area, just four (4) intersections (Brookland Park Blvd, Lombardy St, Overbrook Rd, School St) have pedestrian signals.

The significant distance between traffic signals along the corridor makes them inconvenient for persons walking and cycling in the area. For example, a pedestrian leaving the Richmond Coin Laundry (located at the corner of Hammond Avenue and Chamberlayne Avenue), walking north on Chamberlayne will walk over 1100 ft before reaching either an intersection or the pedestrian signal at Brookland Park Boulevard.

Accessibility

While intersections have ADA curb cuts, for the most part the intersections and sidewalks would be challenging to navigate in a wheelchair. Some sections of the corridor have incomplete ADA ramps at intersections, forcing those disabled to have to travel in the traffic lane.

The design of some intersections makes it more dangerous for pedestrians to cross. At Chamberlayne Ave and Sledd St there is no clear way for people to cross and there is an ADA ramp on one side but no ramp on the other side, making it impossible for wheelchair bound pedestrians to cross safely. The slip-turn right lane also encourages drivers to speed through this intersection.

Pedestrian Interview

On our walk audit we talked to Veronica, a wheelchair-bound pedestrian. She expressed great concern over the condition of the sidewalks, the lack of sidewalk accessibility for her on the northernmost streets along the corridor, excessive speeding by commuters, buses, and law enforcement and her fear of crossing the intersections due to speeding, as well as a lack of crosswalks and pedestrian signals.

Slip-Turns Lanes

These lanes allow drivers to make fast right turns and drivers often overlook yield signs and pedestrians. Three slip-turns exist for right turns along the focus corridor, at N. Lombardy Street, Tazewell Street, and Mitchell Street.

The Tazewell and Mitchell Street slip-lanes are unmarked. Unmarked Intersections are common along the study corridor.

Traffic Signals

Most traffic signals required pedestrians to wait too long before crossing. When crossing “with the light” is possible, the time allotted does not support a safe crossing for slower or disabled pedestrians.

Pedestrian signals at both the N. Lombardy Street and Overbrook Road intersections are out of sync with the traffic signal. Pedestrians are forced to wait 1.5 cycles of the traffic signal before attempting to cross safely.

Dangerous & Uncomfortable Bus Stops

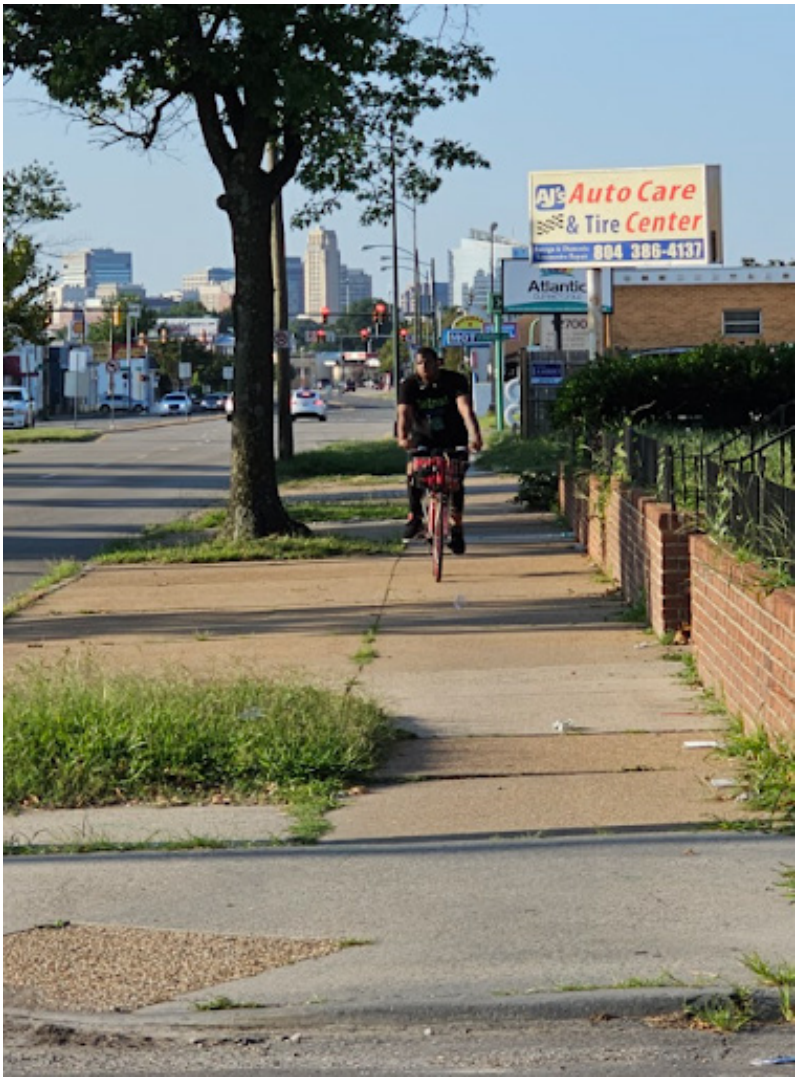
Of the fifteen (15) bus stops in the study area, only four have a bench. All bench stops are located on the west side of the street at Hammond Ave, Edgehill Rd, Mitchell St, and School St.

None of the bus stops include shelter from rain and sun for commuters. Of the fifteen (15) bus stops, fewer than five (5) provide trash receptacles for commuters. Stops without a trash receptacle had more litter and debris surrounding the bus stop wait area.

No Safe Biking Options

We saw several cyclists riding on the sidewalks. Without road markings specific to cyclists or protected bike lanes, cyclists may not feel safe traveling with the high speed traffic.

We saw no bike infrastructure in the study area. Post-assessment debrief revealed audit participants felt that the corridor was unsafe for cyclists



Mobility & Safety Improvement Recommendations

Reduce Speeds

- Conduct a road diet to limit the number of travel lanes, as well as adjusting lane width, speed limits, and signal times.
- The proposed north/south Bus Rapid Transit (BRT) extension shows the northern BRT section on Chamberlayne Ave. The design process for BRT on Chamberlayne Ave should include bike and pedestrian safety improvements, and priority projects should be completed as quickly as possible.
- Signal times should be timed to keep cars from being able to go over the speed limit.
- Utilize physical infrastructure changes like those displayed in NACTO materials to keep drivers from speeding and reckless driving along the corridor.
- Redesign Chamberlayne using target speed, the speed intended for drivers to go, rather than operating speed.
- Add speed monitoring devices along Chamberlayne Ave.

Install More Marked Crosswalks & Make Crossings Safer

- Provide additional signalized crossing options for pedestrians on Chamberlayne Ave.
- Add high-visibility crosswalks across all side streets and driveways along and across Chamberlayne Ave.
- Provide leading pedestrian intervals and more time for pedestrians to cross Chamberlayne Ave.
- Add pedestrian refuge islands at all pedestrian crossings on Chamberlayne Ave.

Complete and Maintain Sidewalks

- Complete installing ADA ramps at every intersection so that people of all abilities can safely cross Chamberlayne Ave.
- Prioritize connectivity of sidewalks and infill sidewalks when missing.
- Set up a maintenance audit and review of broken and overgrown sidewalks and plan/timeframe for fixing them.
- Provide better enforcement for keeping private property (e.g. cars) from blocking the public right of way on sidewalks throughout the corridor.

Add Shelters, Shade, Benches, & Bike Infrastructure

- Install more pedestrian-scale infrastructure along Chamberlayne Ave, including:
- Street trees for shade
- Benches
- Shelters, especially at bus stops
- Pedestrian-scale lighting
- Bike parking
- Roads running parallel to Chamberlayne Avenue and interconnected roads such as Lombardy Avenue have be reconstructed to include cycling infrastructure (i.e., protected lanes and road markings)

Conclusion

The Chamberlayne Ave corridor is known by State and City officials to be a dangerous place for people to walk, cycle, or wait for the bus. This major arterial with its wide lanes, limited stop signs and overall lack of pedestrian safety measures will only continue to prioritize cars and put pedestrians in danger unless something is changed.

The Chamberlayne Ave corridor is home to a diverse population, with many of the residents there relying on methods other than cars to get to work, take their kids to school, and access the businesses along the road. This corridor has already been the site of numerous pedestrian fatalities and injuries, yet nothing has been improved and residents are forced to endure these unsafe conditions trying to get around in their community.

Through this project and report, our team hopes to encourage City, Regional, and State leaders to act now rather than wait to improve street safety for all users of the road! Short-term solutions can be applied to immediately improve the safety and experience of being on the road while waiting to determine long-term fixes, such as creating a Bus Only and bike lanes when BRT is installed along Chamberlayne Ave. This corridor can be an example of how to improve and redesign a major road to be more walkable, bike-friendly, and provide safe and easy access to transit, that other dangerous arterials in the region can use as an example on how to fix safety issues.