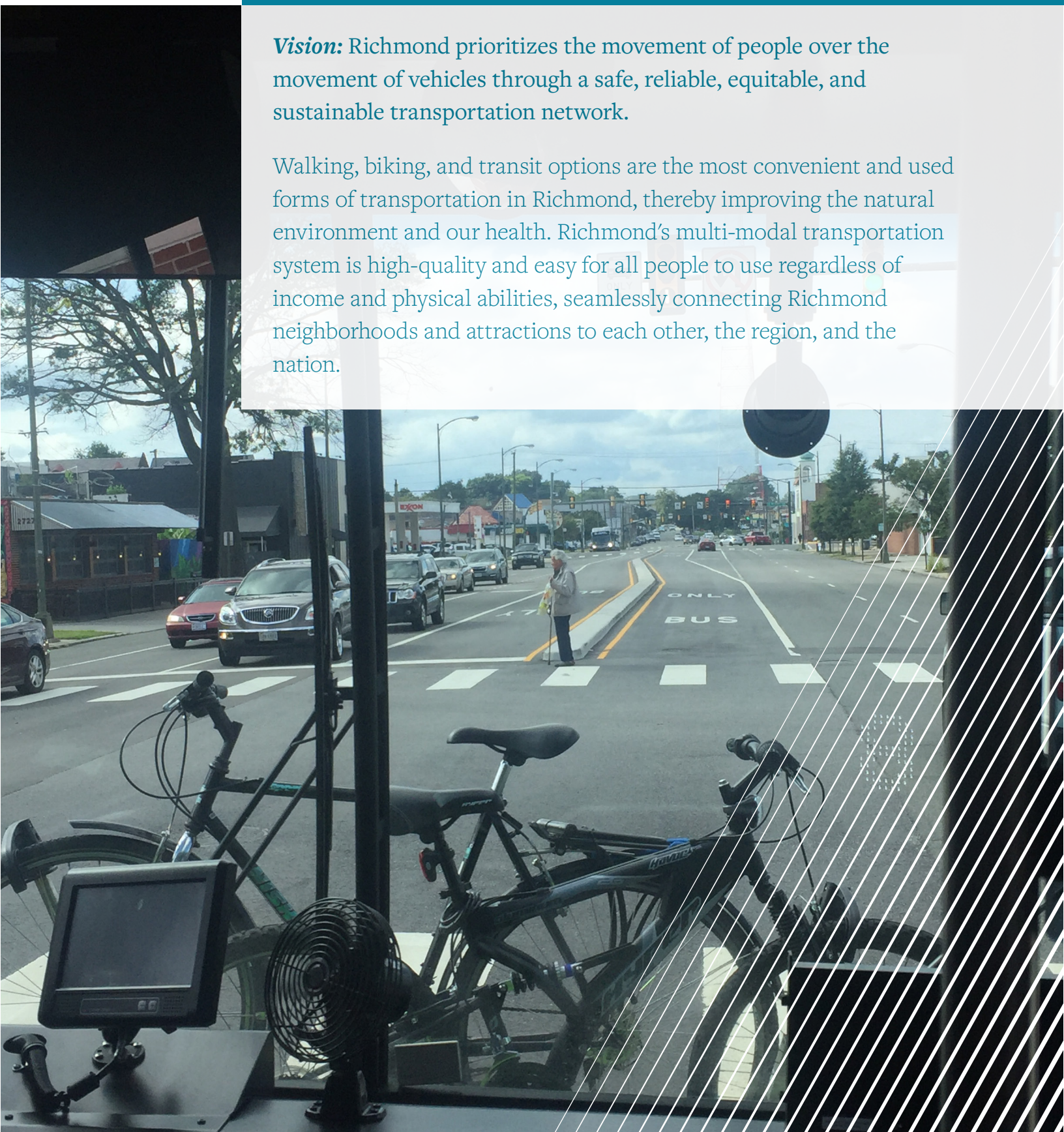
CHAPTER 3

Equitable Transportation

Vision: Richmond prioritizes the movement of people over the movement of vehicles through a safe, reliable, equitable, and sustainable transportation network.

Walking, biking, and transit options are the most convenient and used forms of transportation in Richmond, thereby improving the natural environment and our health. Richmond's multi-modal transportation system is high-quality and easy for all people to use regardless of income and physical abilities, seamlessly connecting Richmond neighborhoods and attractions to each other, the region, and the nation.



Goals, Objectives, and Strategies

Goal 6: Land Use and Transportation Planning

Align future land use and transportation planning to support a sustainable and resilient city.

Existing Context

Creating excellent places is paramount.
Historically, across the United States, transportation investments have prioritized the movement of people from one place to another as safely and quickly as possible, which has resulted in an exclusive focus on designing roads and less attention on designing excellent destinations. *Richmond 300* focuses on creating high-quality places with features and amenities. Goal 6 of *Richmond 300* is critical to ensuring transportation projects do not singularly focus on moving people expeditiously, but instead prioritize creating great places for people that are supported by well-designed transportation networks because, ultimately, the place matters more than how fast people got there.

In the planning and design of cities, far more attention must go toward serving the needs and aspirations of people and the creation of great places as opposed to expediting movement.

—Robert Cervero, et al., Beyond Mobility

Objective 6.1

Increase the number of residents and jobs at Nodes and along enhanced transit corridors in a land development pattern that prioritizes multi-modal transportation options.

a. Rezone the city in accordance with the Future Land Use Plan (see Goal 1).

b. Develop housing at all income levels in and near Nodes and along major corridors (see strategies Goal 14).

c. Support the retention, creation, and attraction of businesses in and near Nodes and major corridors (see strategies in Goal 11).

d. 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).

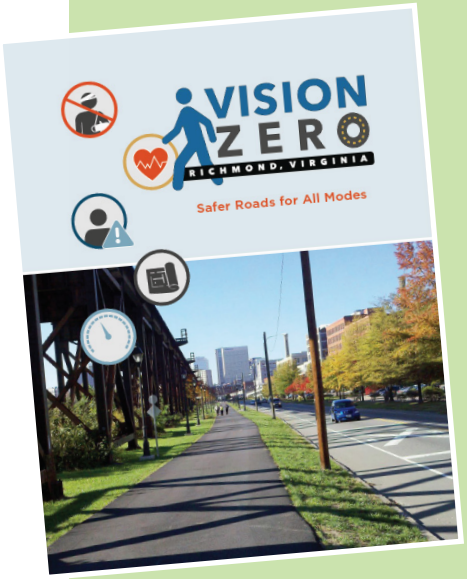
e. Update the Richmond Connects Plan, in collaboration with PDR, DED, HCD, DPW, GRTC, the Virginia Department of Transportation, PlanRVA, the Richmond Regional Transportation Planning Organization, and the general public, to include a specific project list to develop more multi-modal transportation options in a safe network tied to the Future Land Use Plan.

f. Develop a network of Great Streets with urban design and multi-modal access that creates beautiful and welcoming corridors throughout the city (see Goal 4).

The proposed transformation of N. Arthur Ashe Boulevard near the Diamond accommodates multiple modes of transportation, which in turn support a new series of urban neighborhoods.

Goal 7: Vision Zero

Systemically change the built environment to shift our safety culture and ensure that individuals are not killed or seriously injured on city streets.



Existing Context

Richmond is a Vision Zero city.
Vision Zero emerged in the 1990s in Sweden when the Swedes realized that traditional road safety techniques and programs were never going to significantly reduce or eliminate fatal crashes. The Swedes lobbied their government to implement sweeping reforms to improve the safety of transportation infrastructure to reduce deaths and injuries in traffic crashes to zero. In 2018, the City of Richmond released its Vision Zero Action Plan, which outlines a number of actions and strategies, such as addressing dangerous behavior, designing a safe transportation system for all road users, and developing education and awareness campaigns, to reduce traffic deaths and injuries to zero by 2030.

Traffic deaths and injuries are a continuing problem.
The prevalence of traffic crashes is a health crisis. The top behaviors that lead to injury or death in crashes are not wearing a seatbelt, driving under the influence of alcohol and drugs, distracted driving, and speeding. People walking and biking are the most vulnerable users, 28% of pedestrians involved in traffic crashes are killed. From 2011 through 2016, there were a total of 22 deaths and 313 incapacitating injuries in Richmond involving pedestrians and cyclists, representing 1.9% and 27% of all crashes, respectively. Compare this to traffic crashes involving only vehicles, where during the same time frame there were 56 deaths (0.2% of all vehicle crashes), and 1,062 incapacitating crashes (3.7% of all vehicle crashes). This suggests that a pedestrian or cyclist involved in a crash is 9.8 times more likely to die and 7.4 times more likely to experience an incapacitating injury than a motorist involved in a crash with another motorist. Pedestrian and cyclist deaths rose to a 30-year high in 2018 nationally. While the objectives in Goal 7 of *Richmond 300* seek to ensure Vision Zero is upheld in Richmond, there are many objectives in other parts of this Plan that will help the City reach its Vision Zero goal, such as the objectives listed in Goal 6, Goal 8, Goal 9, and Goal 10. Figure 25 shows the locations of pedestrian- and bicycle-involved crashes from 2011 to 2016 in the City of Richmond.

Objective 7.1

Reduce all traffic-related deaths and serious injuries to zero by implementing the Vision Zero Action Plan.

a. Prioritize and implement safety treatments on the high-injury street network, especially those aimed to reduce speeding (per the Vision Zero Action Plan).

b. 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).

c. Conduct engineering surveys to determine the appropriate level of traffic control required for pedestrians to cross at intersections.

d. Expand the Safe Routes to Schools program to all schools and conduct formal audits.

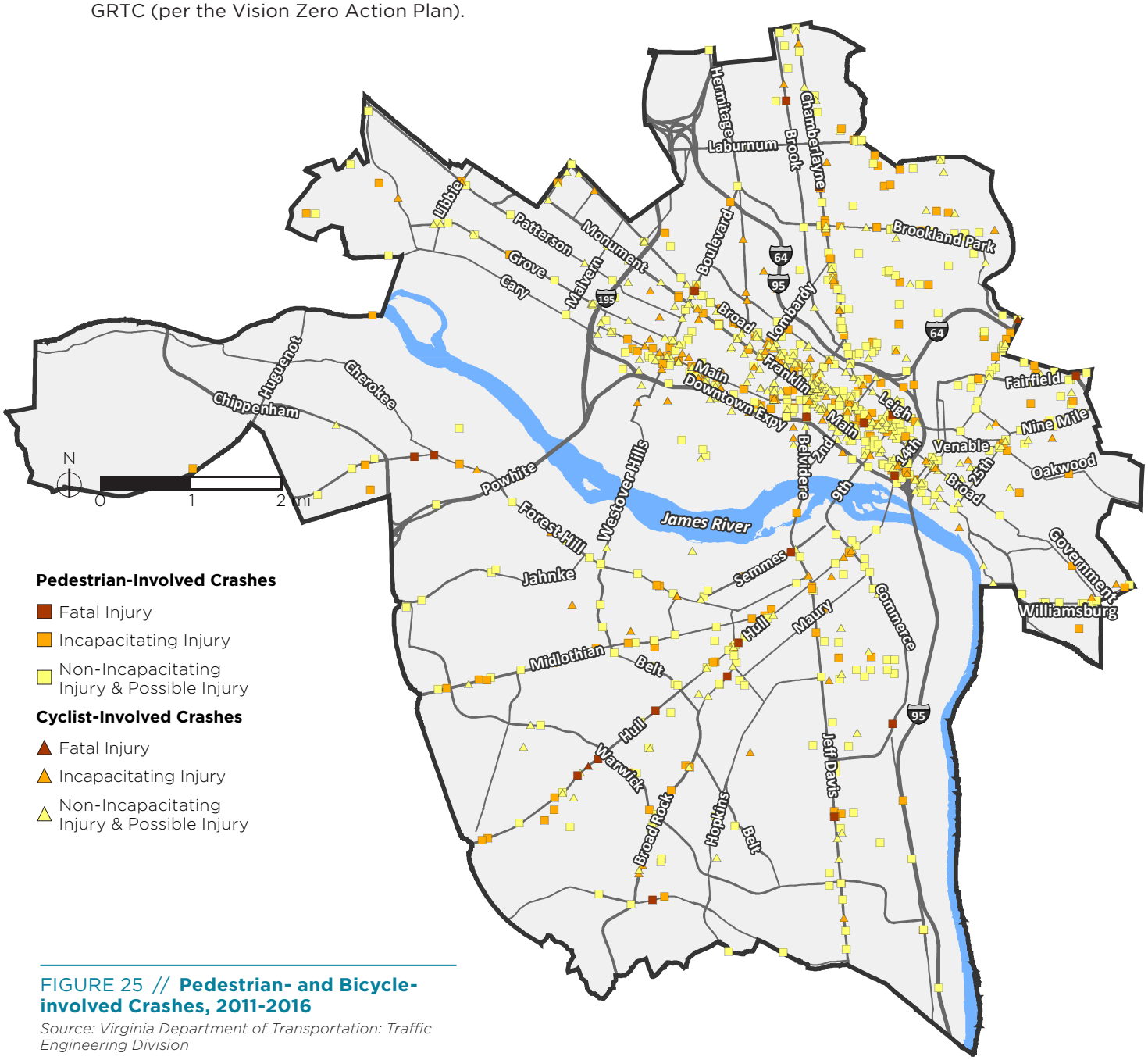


FIGURE 25 // **Pedestrian- and Bicycle-involved Crashes, 2011-2016**

Source: Virginia Department of Transportation: Traffic Engineering Division

Goal 8: Non-Car Network

Enhance walking, biking, and transit infrastructure to provide universal access to all users, prioritizing low-income areas and areas within the high-injury street network.

Existing Context

Richmond has an average Walk Score® of 51.
Walkable neighborhoods can help to make physical activity an inherent part of a resident's day and provide alternative transportation options to vehicles. Richmond's average Walk Score® is 51, or "somewhat walkable," with the most walkable areas being Downtown, Carytown, and VCU, as shown in Figure 26. Walk Score® uses the street grid and proximity to retail, amenities, and attractions to generate the score. Walk Score® does not factor in the quality of the pedestrian environment, as such there may be places in the Walk Score® map that have a high Walk Score® but do not have good pedestrian infrastructure. This goal, along with the High-Quality Places Goals and Thriving Environment Goals, seeks to create a better walkable urban environment throughout Richmond's neighborhoods to increase health equity and resiliency.

50 miles of sidewalk repaired or replaced in last 5 years.
DPW is responsible for maintaining the 836 miles of sidewalks throughout the city, as well as installing new segments of sidewalks where they are missing. Approximately 50 miles of sidewalk have been repaired or replaced from 2015 to 2019 through the Capital Improvement Program, which is funded through a combination of federal, state, and city funds. The City continues to fund sidewalk repair and installation and requires new developments to install sidewalks.

Richmond is investing in bike infrastructure.
During the 20th century, the transportation industry nationwide focused on transport by vehicles. For most of the 21st century, transportation professionals have been working on behalf of all modes, including biking and walking. In 2011, the City hired its first bicycle, pedestrian, and trails coordinator. In 2012, Bike Walk RVA, an advocacy program of the non-profit Sports Backers, dedicated to advocating for the growth of biking and walking in the region, was established. In 2015, DPW developed a Bike Master Plan for the city with extensive community engagement. By the end of 2020, there will be 50 miles of bike lanes in the city, of which about 16 miles are buffered or barrier-separated. An additional 20 miles of bike lanes are designed or under construction. The Virginia Capital Trail was completed in 2015, providing a 52-mile multi-use trail between Richmond and Williamsburg.

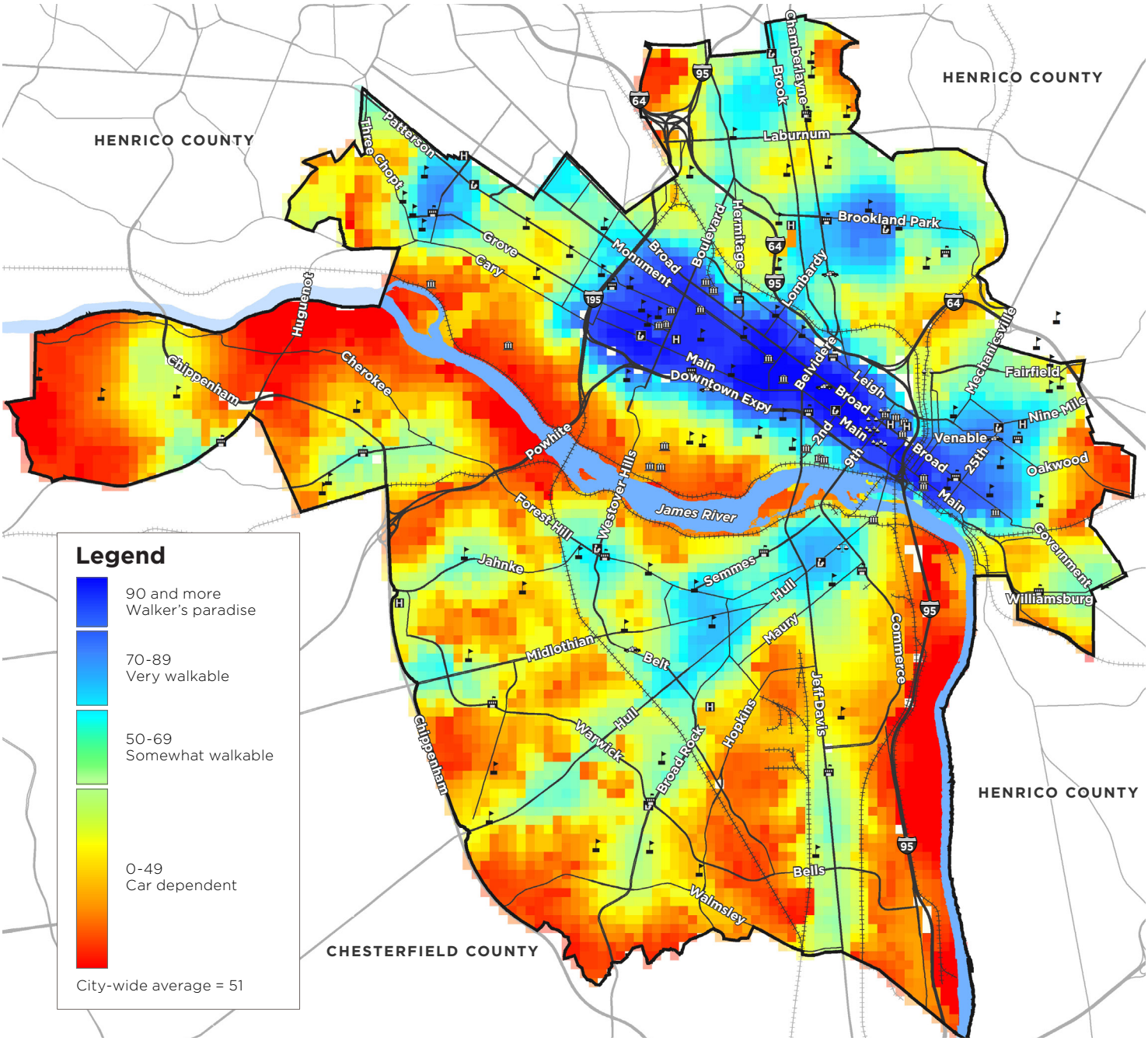


FIGURE 26 // **Walk Score® Map**
The Walk Score® Map is a tool for showing how close amenities such as businesses, parks, and schools are to a specific place in the city. The city-wide Walk Score® is 51, meaning that on average, the city is somewhat walkable with some errands accomplished on foot, but the majority of errands require a car. This map shows the divide in walkability between areas of Richmond that are north of the James River, which are generally walkable, and the south side of the James River, which are generally car dependent. The re-write of the Zoning Ordinance will seek to improve walkability by creating form requirements and allow more urban mixed-use districts.
Data source: Walk Score® (2016)

Bus ridership is increasing.
Bus ridership has increased since June 2018, when GRTC launched the Pulse BRT and new bus system routing tied to the Pulse, the first time since the 1960s that the bus system has been redesigned. In Fiscal Year 2019 (July 2018 to June 2019), bus ridership increased by 16% compared to FY 2018. Since the launch of the new system, GRTC has been investing in bus shelter improvements and expanding routes outside the city, such as the new routes to Short Pump in Henrico County and along Route 1 in Chesterfield County.

Inter-city train ridership is increasing.
In 2003, Main Street Station re-opened to passenger rail service (passenger rail service had stopped in 1975). The February 2020 ridership statistics from AMTRAK showed a 1.6% increase from FY2019 to FY2020 in on and offs at Main Street Station (compared to Staples Mill Station, which had an increase of 16.26% in the same time period). The difference in ons and offs between the two stations can primarily be attributed to the fact that Main Street Station receives fewer trains than Staples Mill Station, which is the terminus of the Northeast Regional Route that operates between Boston's South Station and Richmond's Staples Mill Station. In 2019, the Virginia Department of Rail and Public Transportation and the U.S. Department of Transportation's Federal Railroad Administration released a Record of Decision outlining the preferred alignment for high-speed rail from DC to Richmond. The preferred alignment calls for creating new high-speed rail stations in the Richmond region at Main Street Station in Richmond and at Staples Mill Station in Henrico.

The objectives listed under Goal 8 of *Richmond 300* seek to elevate the prominence of the non-car network and make walking, biking, and taking transit easier, safer, and generally an excellent experience.

Top: Pulse Bus Rapid Transit Stop
Middle: RVA Bike Share Station
Bottom: Bike/Walk Boulevard on Floyd Avenue

Objective 8.1

Improve pedestrian experience by increasing and improving sidewalks and improving pedestrian crossings and streetscapes, prioritizing low-income areas.

a. Conduct and maintain a sidewalk inventory.

b. Require developers to construct sidewalks and street trees as part of their development projects (see Goal 4), including single-family infill developments in neighborhoods.

c. Reduce the creation of driveways and car access curb cuts, especially if there is alley access to the parcel and/or multiple parcels can utilize the same car access curb cut to access their sites.

d. Construct ADA-compliant sidewalks and street crossing and retrofit existing sidewalks with ADA-compliant ramps, per federal requirements.

e. Improve street furniture, plant shade trees, and install pedestrian-level lights and other streetscape improvements (see Goal 4).

f. 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.

g. Implement strategies to increase connectivity of the street network (see Goal 9).

h. Implement traffic-calming measures to slow down traffic.

A new sidewalk in Church Hill includes ADA-compliant ramps at the intersection.

Objective 8.2

Increase the miles of greenways in an interconnected, regional network.

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 (see Future Connections Map for the network of greenways).

b. Coordinate greenway development with adjacent jurisdictions to develop a regional network.

c. Collaborate with freight rail companies to develop rails-to-trails projects and trails-next-to-rails projects.

Top: Canon Creek Greenway
Bottom: The Virginia Capital Trail

Objective 8.3

Expand and improve on-street networks and amenities serving bicyclists and other non-vehicle users, as shown in Figure 27.

a. Expand, improve, and maintain on-street bike networks as shown in the Future Connections Map, which amends the networks proposed in the Bike Master Plan and in the Pulse Corridor Plan; prioritize the creation of separated, buffered bike lanes.

b. Expand the users of bike lanes to include other non-vehicle users, such as scooters and electric bicycles.

c. Expand the bike sharing program to include more stations in a larger footprint adjacent to high-priority transit stops and other destinations (e.g., museums, parks, shopping districts).

d. Install amenities (e.g., shelters, benches, parking, maintenance tools, restrooms, bike parking, water fountains with bottle-refill stations) along enhanced transit routes and greenways (see Goal 12).

e. Revise the Zoning Ordinance to require bike parking for more uses.

f. Increase the number of bike racks on sidewalks and/or use the curb to provide on-street bike parking.

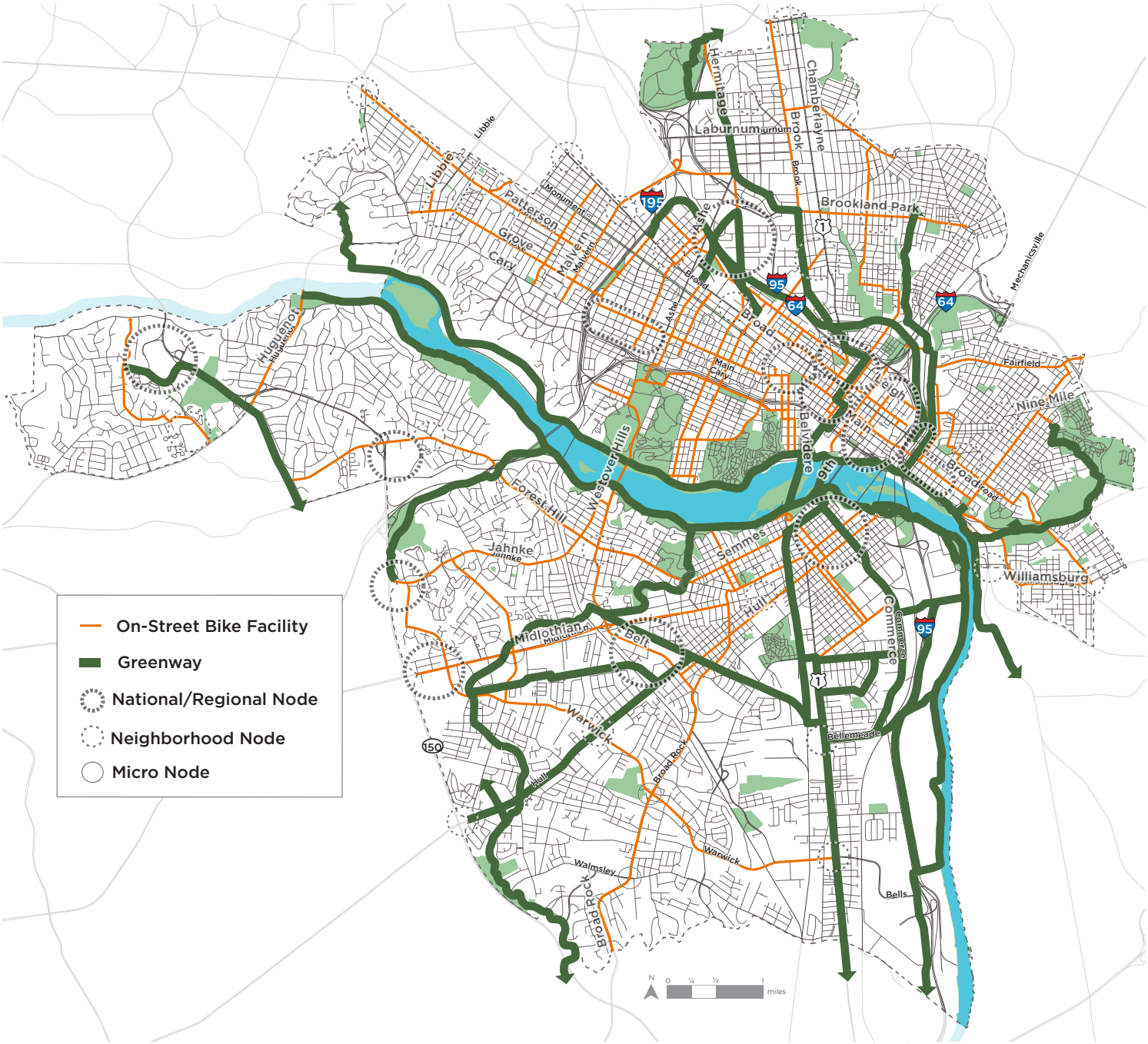


FIGURE 27 // **Greenways & On-Street Bike Facilities Map**

Objective 8.4

Increase transit service to serve existing and new riders so that 75% of residents live within a half mile of a transit line with service that comes every 15 minutes by 2040, as shown in Figure 28.

a. Increase high-frequency transit service to serve existing and new riders where the density of jobs and housing are high, and encourage higher density of jobs and housing where high-frequency transit services exists.

b. Improve and maintain priority transit stops with amenities such as shelters, benches, trash cans, and bike parking, focusing first on improving stops in low-income and low-car ownership areas.

c. With community input, develop a preferred alignment for a North-South BRT line through Manchester, either along Cowardin or along Hull Street, and then traveling down Midlothian, Hull, or Route 1.

d. Create frequent service transit stops to the Riverfront and airport with additional lines, if needed.

e. Extend service hours along all routes, prioritizing routes that serve under-served and poorly connected communities.

f. Ask GRTC to review the productivity of the transit network at least every 3 years.

g. Evaluate creating an infill BRT station at or near Malvern/W. Broad and Lombardy/W. Broad.

h. Coordinate seamless transit service with the surrounding localities.

i. Ask GRTC to conduct annual customer satisfaction surveys.

j. Working with GRTC, evaluate the need for transfer centers at critical points of the bus system and if a transfer center is needed, design the center so it supports walkable urban design.

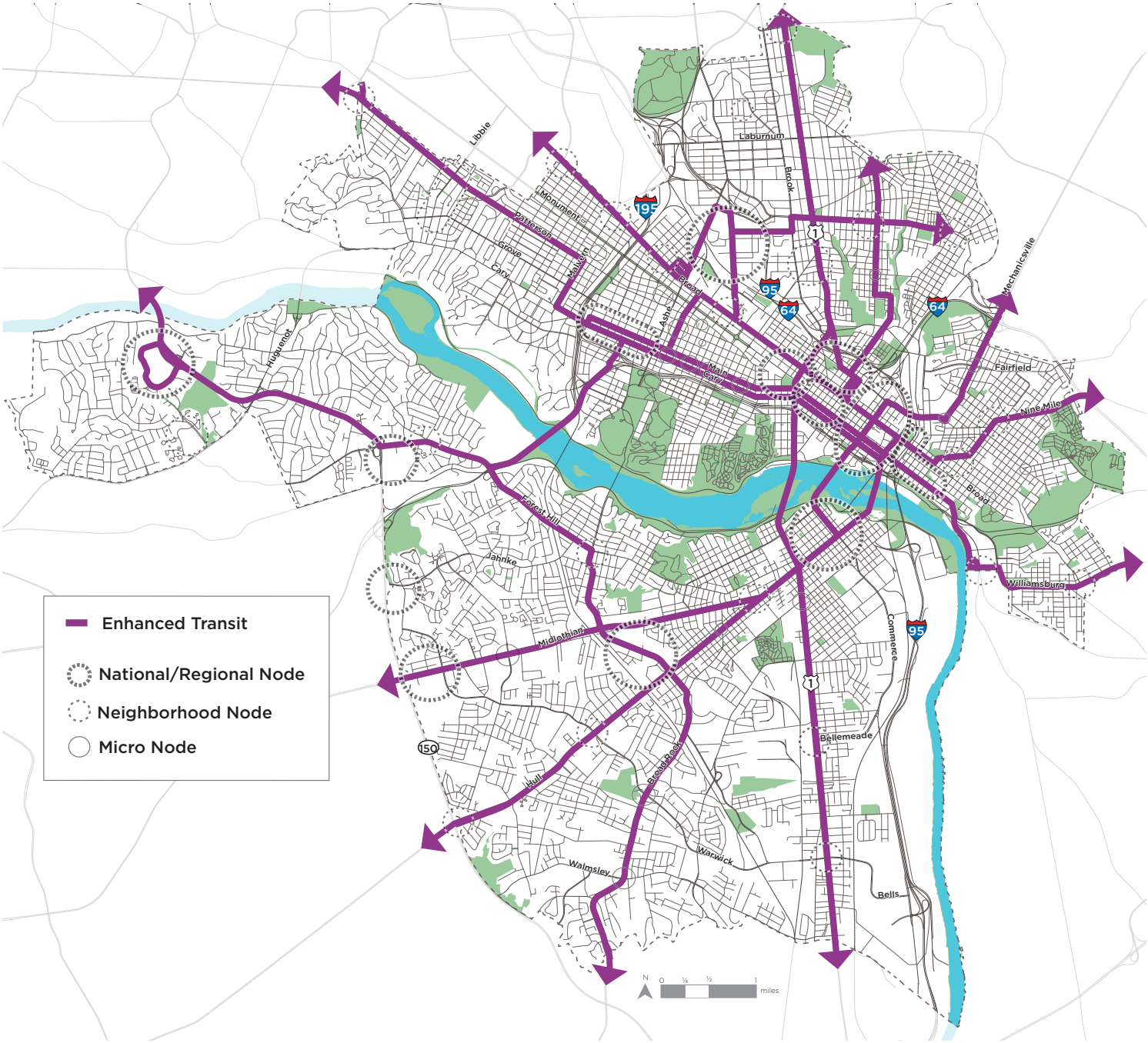


FIGURE 28 // **Enhanced Transit Map**

Objective 8.5

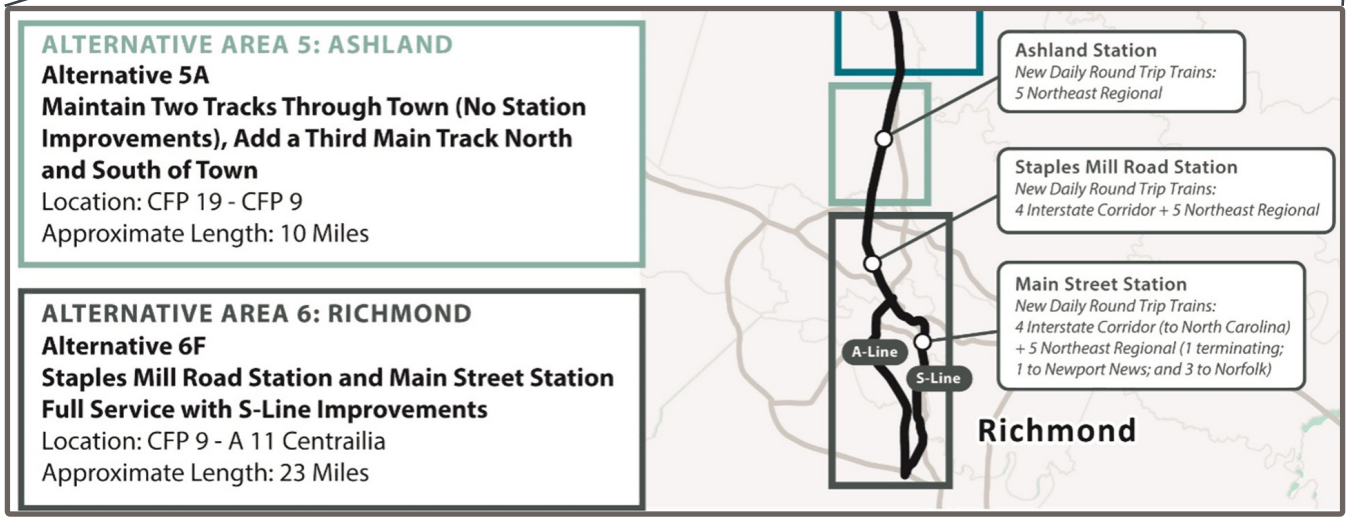
Increase the number of intercity travel options connecting the Richmond region to other regions and cities.

a. Expand and maintain passenger rail service to Main Street Station, including exploring the creation of regional rail service to Charlottesville.

b. Implement the Washington, D.C. and Richmond Southeast High Speed Rail project and other high-speed rail projects to Raleigh and Hampton Roads, and eliminate at-grade crossings.

c. Continue to offer regional bus service and ensure multi-modal options are available near regional bus stations to included better transit connections with amenities.

d. Expand transit service to Richmond International Airport.



The preferred alignment for the DC to Richmond High Speed Rail Project

Source: DC to Richmond Southeast High Speed Rail Record of Decision, U.S. Dept. of Transportation Federal Railroad Administration, Virginia Department of Rail and Public Transportation, September 2019

Objective 8.6

Increase the number of employers implementing Transportation Demand Management (TDM) strategies to shift individuals from single-occupancy vehicles to biking, walking, and transit for daily tasks (see Table 3 for the mode split in 2000 and 2018).

a. Develop and maintain a database of employers with TDM plans.

b. Develop a menu of tools to incentivize employers to offer TDM plans and determine which incentives and/or requirements to implement, including reduced parking requirements; increased transit, carpool, vanpool, and bicycle amenities; showers and lockers for bike commuters; and tax abatements.

c. Advertise and promote TDM benefits.

d. Explore tax breaks for individuals who participate in a TDM program.

e. Expand the City's TDM program.

f. Leverage technology to share travel time by all modes of transportation with users.

g. Expand the current Congestion Mitigation and Air Quality (CMAQ) city employee trip reduction program to other employers in the city.

74.5%

of working Richmonders drove alone to work in 2018 (compared to 72.2 in 2000)

TABLE 3 // **Means of Transportation to Work for Workers 16 Years and Over, 2000 and 2018**

Source: U.S. Census Bureau: 2000 Census,, 2018 ACS 1-Year Estimates

	2000 Census		2018 1-Year ACS		% change from 2000-2018
	Number	Percent	Number	Percent	
Drove Alone	62,743	72.2%	83,742	74.5%	3%
Carpooled	11,165	12.8%	10,001	8.9%	-30%
Public Transit	7,354	8.5%	7,441	6.6%	-22%
Bicycle	969	1.1%	3,734	3.3%	202%
Walked	3,941	4.5%	5,160	4.6%	2%
Other means	729	0.8%	2,303	2.0%	156%

Goal 9: Streets, Bridges & Connections

Build and improve streets and bridges to expand connectivity for all users.

Existing Context

Building and improving Richmond's street network and bridges is critical to connect our neighborhoods to one another and provide multiple routes for pedestrians, cyclists, and transit moving around the city.

The design of streets and bridges greatly affects their functionality and ability to support other land use goals. Seemingly inconsequential items, such as the width of the planting strip along the street and the burying of power lines, have rippling effects on many of the goals outlined in this plan. If a planting strip is too narrow, street trees cannot survive and thrive and therefore are unable to serve critical functions like providing shade and natural habitats, cooling areas during Richmond's heatwaves, and retaining rain water during Richmond's intense rain storms. Burying power lines not only makes a street more aesthetically pleasing but also increases Richmond's resiliency.

The older parts of Richmond that were built before cars became prevalent, such as the Fan, Spring Hill, and Bellevue, have gridded street networks.

Newer parts of Richmond, such as the 1970 Chesterfield annexation which was built to rural and post-WWII suburban design standards, have culdesacs that funnel all traffic to major roads. The objectives in Goal 9 of *Richmond 300* seek to better connect our city using roads that provide access to all Richmonders.

Complete Street Illustration
Streets for everyone designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders while also incorporating stormwater infrastructure.

Objective 9.1

Improve streets for all users by aligning future land use categories with Complete Streets recommendations, prioritizing low-income areas and areas within the high-injury network.

a. In the update to Richmond Connects, include develop complete street recommendations to improve access for all users on the street typologies shown in Figure 29.

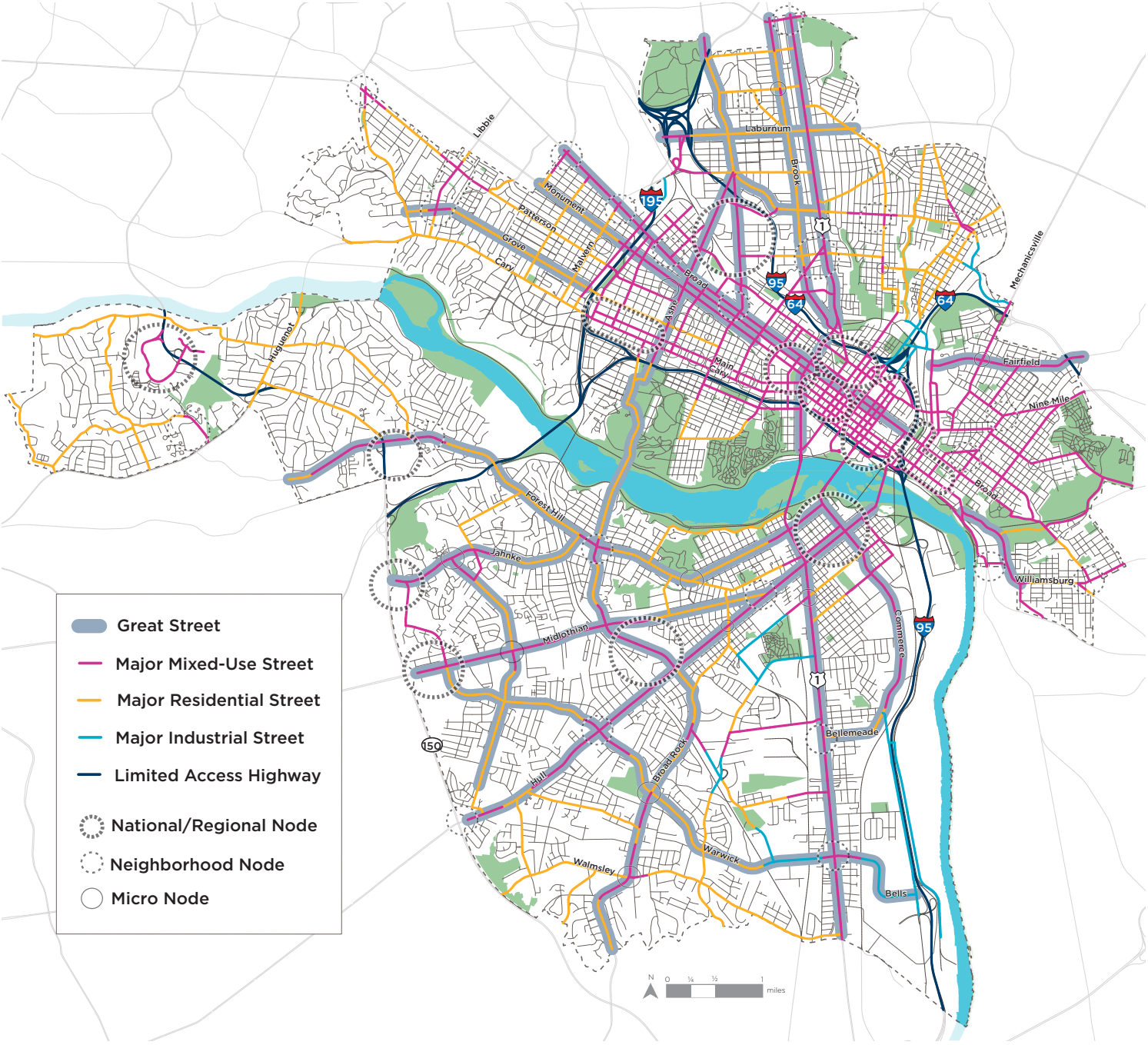
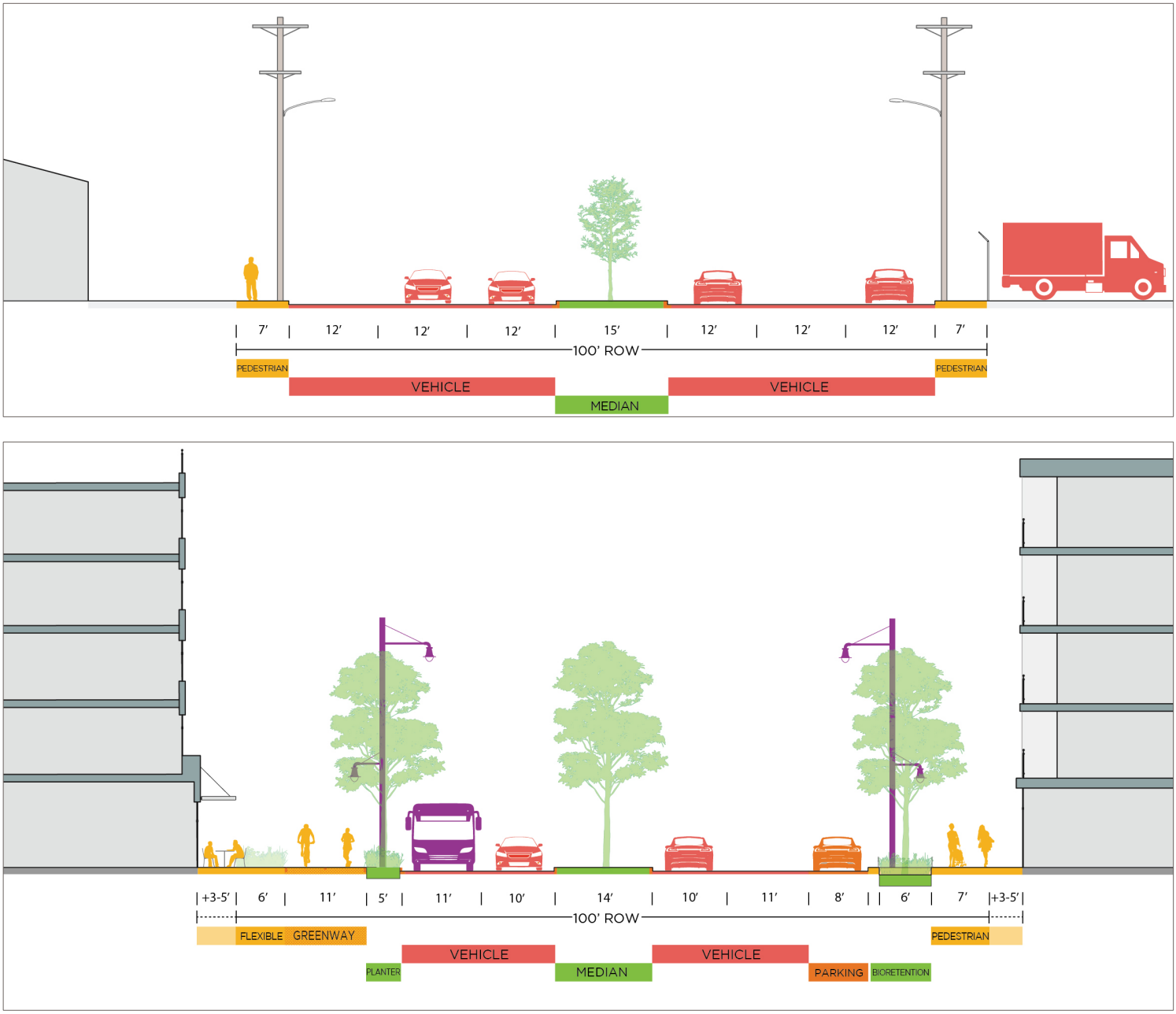


FIGURE 29 // **Great Streets and Street Typologies Map**



Commerce Road Potential Street Section Transformation
The existing street section [top] has more travel lanes than is necessary for the amount of vehicles that travel on Commerce Road. The street can be transformed [bottom] into a Great Street with various elements such as outdoor seating, sidewalk trees, pedestrian-level lighting, on-street parking, enhanced transit, car lanes, median trees, and a wide greenway (the Fall Line Trail).

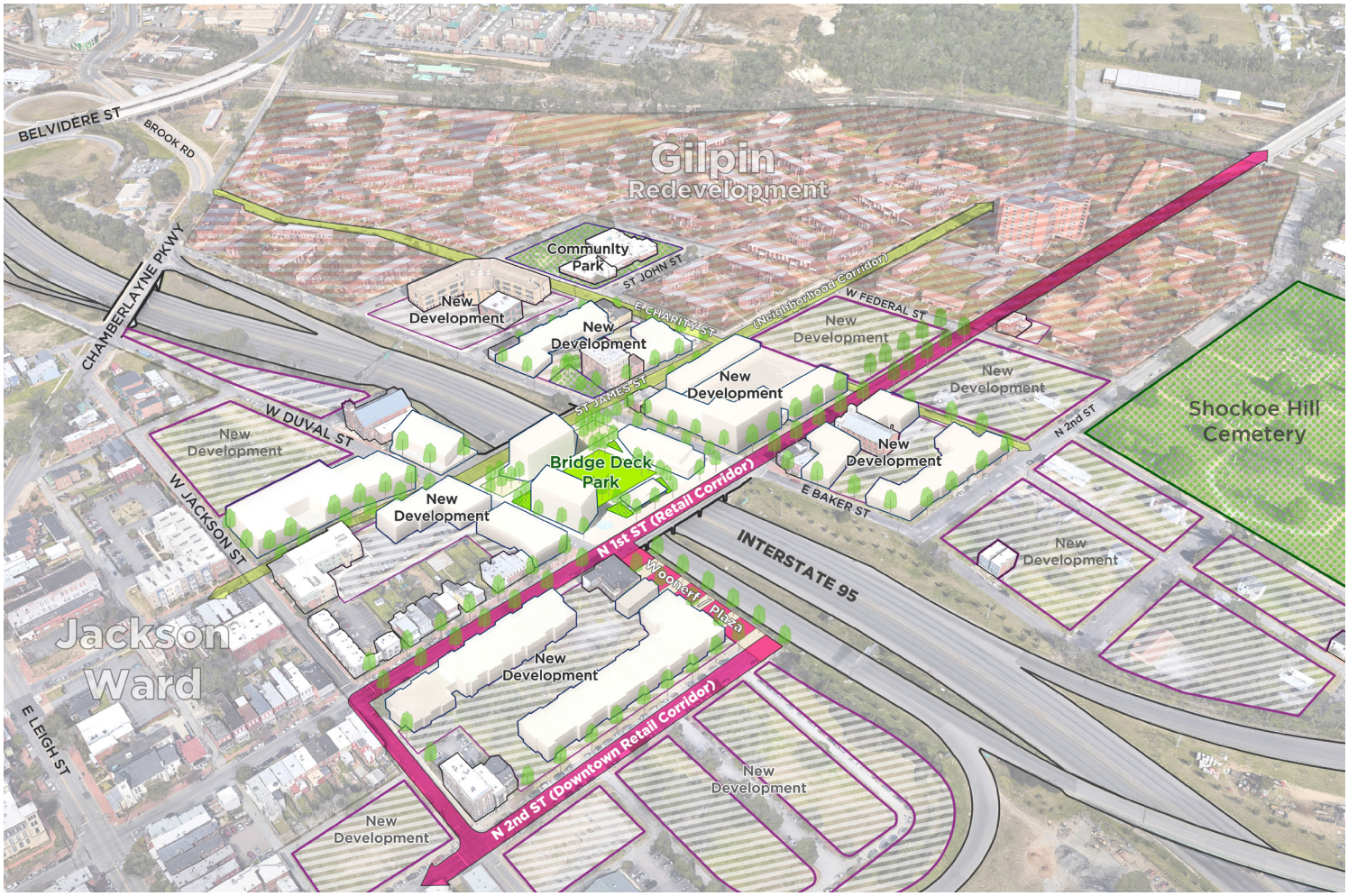
Objective 9.2

Improve and create bridges to strive for a high level of reliability, access, and safety, as shown in Figure 30.

a. Develop and implement a plan to rehabilitate and repair city bridges so that less than 10% of bridges are rated as structurally deficient and all bridges have been substantially renovated and maintained.
   - Implement the projects outlined in the I-95/I-64 Overlap Study, ensuring that neighborhoods do not lose access to I-95/I-64, and that changes to ramp alignment do not place significant traffic burdens on neighborhoods or remove significant redevelopment potential.
   - Develop and implement a plan for rehabilitating the Mayo Bridge, Lee Bridge, and the Nickel Bridge that adds accommodations for pedestrians, bicycles, and transit.
   - Improve pedestrian crossing experiences on all bridges over barriers (e.g., James River, the Downtown Expressway, I-195, I-95/I-64, rail lines); pedestrian improvements should include not only sidewalks, but also shading and plantings that improve the walking experience.

b. Develop and implement a plan for building bridges that connect Norfolk Street to Hamilton Street and connect W. Leigh Street to the Diamond Site.

c. Explore capping highways to re-establish connections between disconnected areas, focusing first on the Downtown Expressway between 2nd and 7th, and I-95/I-64 at Jackson Ward.



By capping the highway with streets, parks, and buildings, Jackson Ward will once again be one neighborhood.

Proposed new bridges connect areas near Scott's Addition and the Diamond that are severed by railroads and highways: a bridge connects Norfolk Street to Hamilton Street, a pedestrian bridge connects Mactavish to Rosedale [left], and a landscaped landmark bridge connects Leigh Street to the crescent park.

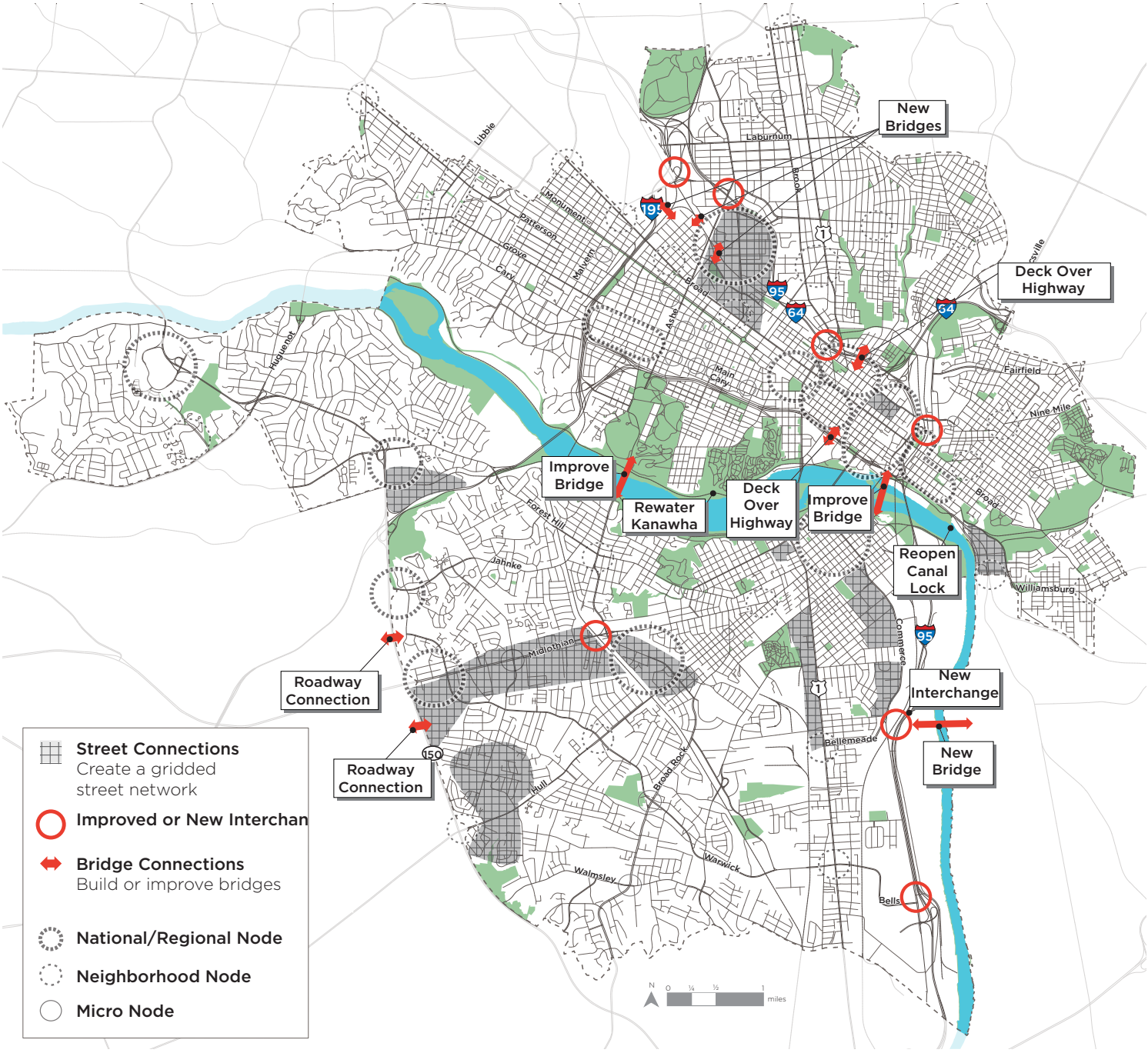


FIGURE 30 // **Connections, Interchanges, and Bridges Map**

Objective 9.3

Increase the miles of alleyways and improve existing alleyways to manage circulation.

a. Maintain and improve existing alleyways.

b. Encourage homeowners and developers to utilize and upgrade existing alleyways in their development site plans or create new alleyways as part of redevelopment efforts.

c. Expand the green alleyway program.

d. Create new alleyways.

e. Seek funding to maintain alleys via two potential methods: 1) lobby the General Assembly to change the funding structure of roadways to include funding maintenance of alleyways, and/or 2) pass an ordinance to assess fees to maintain alleyways.

Objective 9.4

Strengthen the street network by preventing superblocks and encouraging gridded street networks and two-way streets.

a. Update the subdivision ordinance to require new large developments to tie into existing streets and prohibit culdesacs to support the creation a gridded street network.

b. Seek to reduce culdesacs by connecting roads where possible; where roadway connections are not possible, seek to provide bike and pedestrian connections at a minimum to establish greater connectivity.

c. Where feasible, convert one-way streets to two-way streets in consultation with the City's Transportation Engineers, evaluating balancing the needs of various uses—sidewalks, on-street parking, bicycle infrastructure, and transit access.

Objective 9.5

Improve 80% of street pavement to a condition index of good or better.

a. Maintain the pavement condition inventory.

b. Develop and implement a plan to maintain roadways and also seek to reduce urban heat by investigating pavement options that reflect light (see Goal 17).

Alleyways serve critical functions in the city's street network by assisting with circulation and providing a location of back-of-house functions such as trash pick-up.

Objective 9.6

Implement parking strategies that effectively manage supply and demand of parking, as identified in the Parking Study Report, as shown in Figure 31, and improve the physical appearance of parking.

a. Discourage the creation of new surface parking lots along pedestrian-oriented and transit-accessible corridors (see Goal 4).

b. Develop parking lot and parking garage screening standards to safely and beautifully screen unsightly parking facilities from the street.

c. Standardize on-street parking by clearly marking no parking zones per current ordinance at intersections, curb cuts, and fire hydrants (see Parking Study).

d. Develop multi-use on-street parking programs that accommodate residents, visitors, customers, and employees at appropriate time intervals (see Parking Study).

e. Amend parking requirements in the Zoning Ordinance (see Parking Study).

f. Expand on-street fee-for-use parking to more parts of the city to encourage turn over (see Parking Study).

g. Periodically evaluate on-street fee-for-use parking to ensure time frames and fees are still appropriate (see Parking Study).

h. Universally enforce on-street parking regulations (see Parking Study).

i. Encourage property owners to consider shared parking spaces (see Parking Study).

j. Improve pedestrian infrastructure so pedestrians feel safe and comfortable walking from their parking spot to their destination (see Parking Study).

k. Develop strategic parking assets where feasible (see Parking Study).

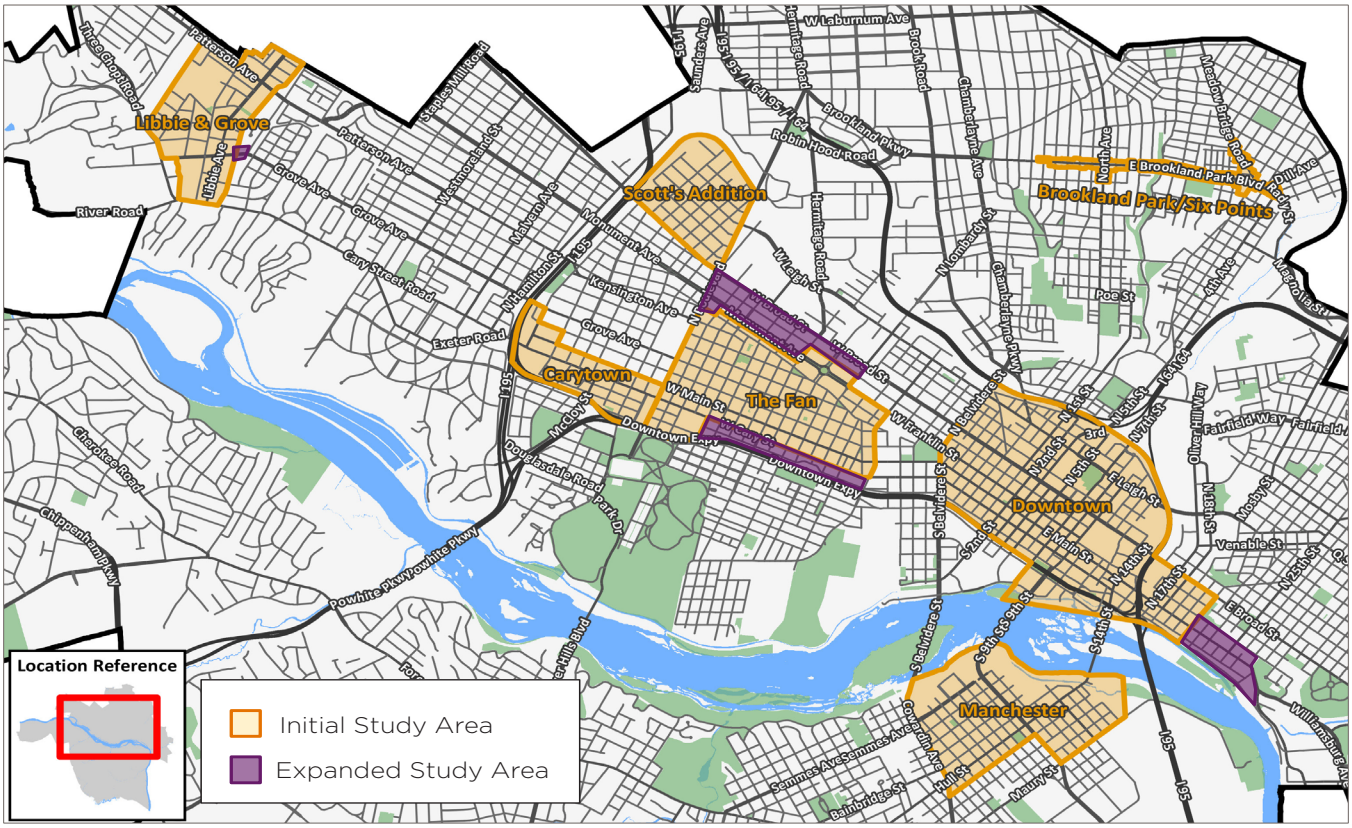


FIGURE 31 // **Parking Study Areas**
In 2018 and 2019, *Richmond 300* hosted three rounds of meetings for each of these seven study areas to discuss existing conditions analysis and develop parking recommendations for each area. These recommendations are listed in Objective 9.6 and outlined in the Parking Study Report (available in *Richmond 300* Supporting Materials). Although the Parking Study focused on these areas, the recommendations are intended to be transferable to other areas of the city.

Goal 10: Emerging Transportation Technologies

Incorporate emerging technology into the transportation network in ways that seek to reduce single-occupancy vehicle use and reduce greenhouse gas emissions.

Existing Context

The transportation landscape is changing.
Ridesharing, bikesharing, autonomous vehicles, and other transportation innovations are changing how people move around cities. The exact effect of transportation innovations is not entirely known, but preliminarily, DPW is seeing an increase in demand for "curb space," meaning many different users are seeking to use the side of the road for various activities: Uber/Lyft loading zones, parking lanes, bike lanes, travel lanes, bus lanes, truck loading, valet parking stations, and more. There is limited curbside; therefore, stakeholders will need to weigh the various demands on this shared space and determine the best use and best price based upon demand on any given street. The objectives of Goal 10 of *Richmond 300* seek to make the City more nimble in responding to the changing transportation environment.

Objective 10.1

Expand and maintain the Richmond Signal System for better managed and safer transportation options.

a. Continue to implement technology that prioritizes traffic signal timing for walking, biking, and transit.

b. Capture and share movement data within the city to help people make transportation decisions.

c. Consider the deployment of Intelligent Transportation Systems (ITS).

d. Collaborate with other jurisdictions to create regional ITS.

e. Leverage new and existing technologies to accommodate individuals with visual impairments.

Objective 10.2

Develop programs to manage new mobility and emerging shared transportation technologies.

a. Develop a new mobility policy to manage relationships with transportation network companies (TNCs) and other emerging programs.

b. Charge a fee for autonomous vehicles (AVs) and TNCs that drive without paying passengers.

c. Require AVs and TNCs to share data with the City to help shape future policy.

d. 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.

e. Prioritize improvements to public transit, bike, and pedestrian infrastructure over the accommodation of AVs.

f. Create a policy to encourage car-sharing programs to locate in Richmond to help reduce car ownership rates.

g. Request that the General Assembly develop legislation outlining requirements for AVs, including making sure AVs can recognize people walking, biking, and of different skin tones.

Objective 10.3

Utilize technology to manage and monetize the curb to reduce vehicle miles traveled related to circling the block.

a. Inventory curb management data and evaluate curb use and then consider equitable pricing models to ensure space availability.

b. Create permitting process for existing and new mobility services, slow-moving vehicles (e.g., scooters, Segways, electric bicycles), and other users (commercial vehicles in loading zones) to access the curb.

c. Create a real-time, demand-based, on-street pricing program that guides vehicles to empty spots.

Objective 10.4

Increase the number of low-emission vehicles.

a. Support the expansion of the electric charging network for vehicles and bicycles on privately owned land.

b. Seek opportunities to install electric charging stations on publicly owned land, balancing the needs of pedestrians, cyclists, and transit users.

c. Shift the City's vehicle fleet to modes of transportation that are zero-emission, such as electric vehicles and electric bicycles.