



# THE PULSE CORRIDOR PLAN

JULY 2017



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This plan was prepared in cooperation with the United States Department of Transportation, Federal Highway Administration, Virginia Department of Transportation, and the Virginia Department of Rail and Public Transportation. This report also represents the collective work of state, regional and local representatives of the Richmond Regional Transportation Planning Organization (RRTPO) 2040 Metropolitan Transportation Plan Advisory Committee.

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## [ES] EXECUTIVE SUMMARY

The purpose of the Pulse Corridor Plan is to support a walkable urban environment around Pulse stations through the adoption of principles, goals, and recommendations.

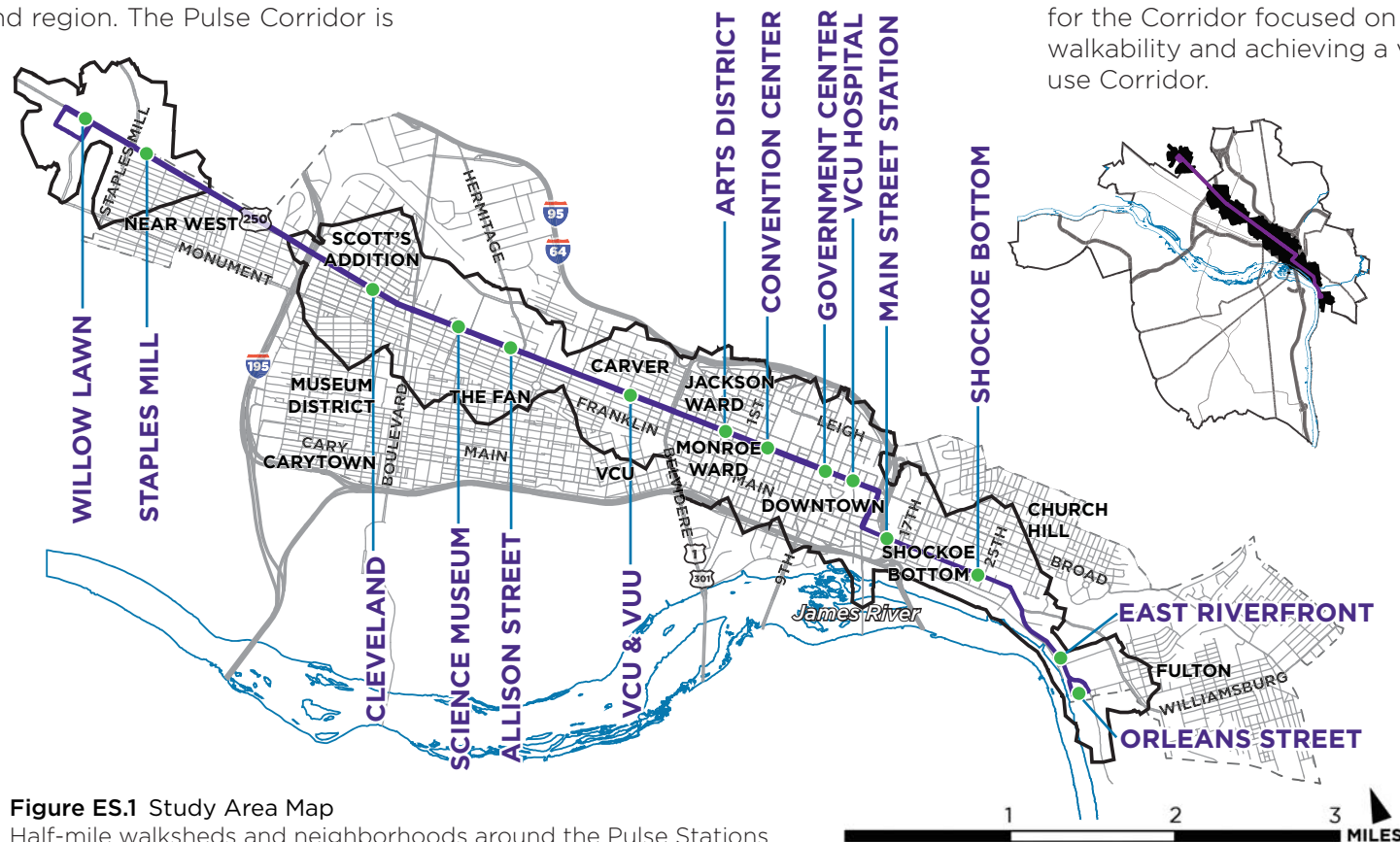
### STUDY AREA

The Pulse Corridor Plan study area (shown in Figure ES.1) includes the land near the 14 Pulse Bus Rapid Transit (BRT) stations, which will run from Rocketts Landing to Willow Lawn and travel through the center of the city and region. The Pulse Corridor is

notable for containing almost two-thirds of all jobs within the city of Richmond, nearly one quarter of the city's population, and for having over twice the ratio of 18-29 year-olds as a percentage of population as the city overall. Nearly two-thirds of all households along the Corridor own one car or fewer, yet surface parking represents 23% of all land within the half-mile walkshed.

### PROCESS

Starting in late 2015, the City of Richmond and Richmond Regional Planning District Commission developed the Pulse Corridor Plan with extensive public engagement that consisted of a city-wide public kick-off meeting, a charrette, outreach to civic associations, stakeholder groups, and other constituent groups, an online survey, and two city-wide draft plan review meetings. Overwhelmingly, the participants' visions for the Corridor focused on increased walkability and achieving a vibrant mixed-use Corridor.



**Figure ES.1 Study Area Map**  
Half-mile walksheds and neighborhoods around the Pulse Stations

## PLAN FRAMEWORK

### GOALS

Through the public and stakeholder meetings, the City established three goals for future development along the Pulse Corridor: to be **Compact & Mixed**, **Connected**, and **Thriving & Equitable** (please see Figure ES.2).

### CORRIDOR-WIDE RECOMMENDATIONS

The 35 Corridor-wide recommendations listed in Table ES.10 focus on land use, urban design, transportation, and implementation

tools that work in concert to meet the three Pulse Corridor Goals. The 71 station area recommendations listed in Table ES.11 highlight specific initiatives that should be pursued within the neighborhoods around the stations. A few Corridor-wide recommendations are outlined here.

### COMPACT & MIXED RECOMMENDATIONS

Seven (7) recommendations focus on creating a built environment that has many land uses, is compact, and follows best practices in transit-oriented development (TOD) design.

### CONNECTED RECOMMENDATIONS

Sixteen (16) recommendations focus on improving the streetscape and enhancing pedestrian, bike, transit, and automobile connections throughout the Corridor.

### THRIVING & EQUITABLE RECOMMENDATIONS

Twelve (12) recommendations focus on ensuring new development is accessible to all Richmonders, preserving historic properties while accommodating new development, and continuing to attract businesses to the Pulse Corridor.

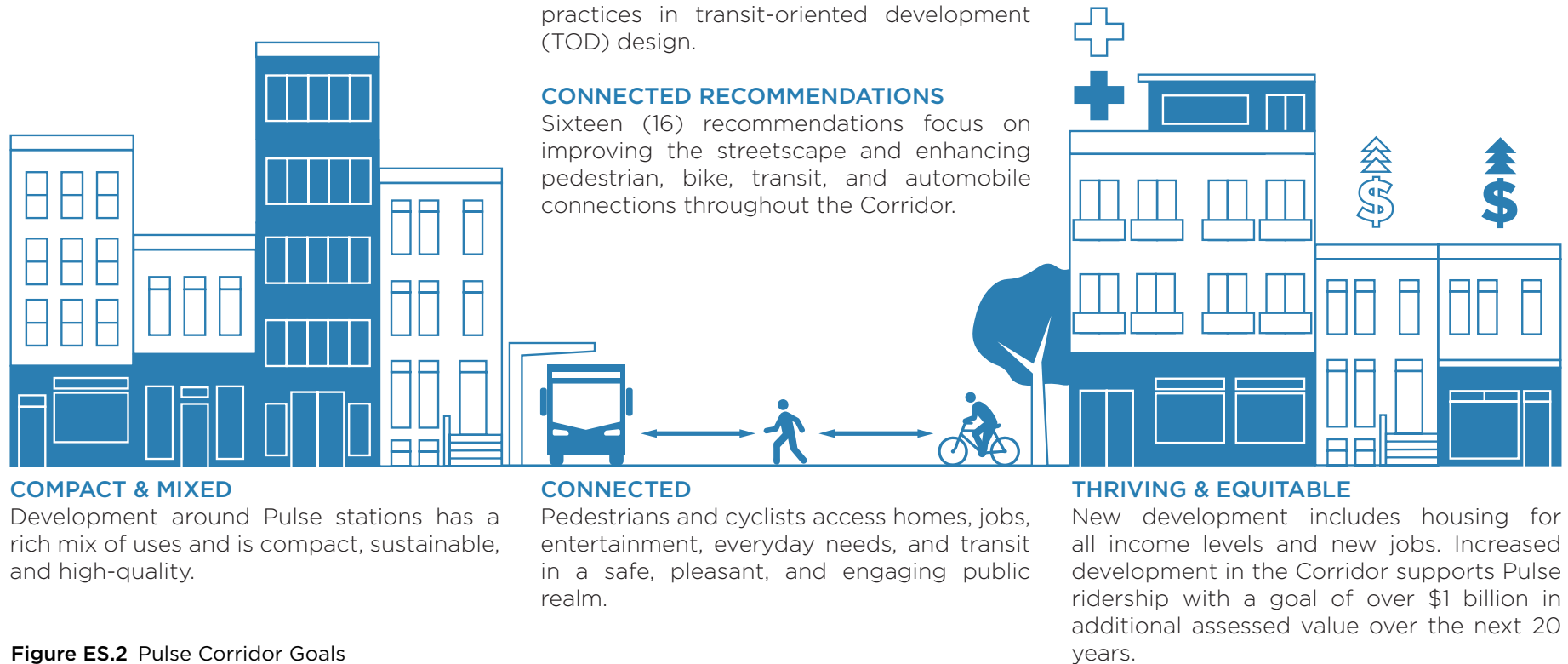


Figure ES.2 Pulse Corridor Goals

## PRINCIPLES

Development along the Corridor will seek to follow six guiding principles of TOD, as described below and shown in Figure ES.4. These principles are generally accepted as best practices in supporting TOD.

- **Mixed-Use** Housing, employment, and daily needs are near each station area. Mixed use can be vertical or horizontal within a neighborhood context.
- **Viable Transportation Options** Walking and biking to accomplish every day tasks is an option for people living and working near station areas.
- **Dense, Compact Development** New buildings are taller and larger in the Pulse Corridor to add housing and jobs to create a more walkable and vibrant area.
- **Historic Preservation** Retaining existing historic buildings is a priority. Smaller historic buildings add to a diversity of style and use along the Corridor.
- **Transit Access** Individuals have easy access to the Pulse and to the local transit network, enabling fewer or no car trips.
- **Connectivity** A well-connected street grid and transit network is the glue that leads to successful TOD.

**6 PRINCIPLES**  
Guide Richmond's  
transit-oriented  
future

**3 GOALS** Reach a highly walkable Corridor

**RECOMMENDATIONS & VISIONS** Outline steps to reach the goals:

- 35 Corridor-wide Recommendations
- 71 Station Area Recommendations
- 14 Station Area Vision Statements

Figure ES.3 Plan Framework

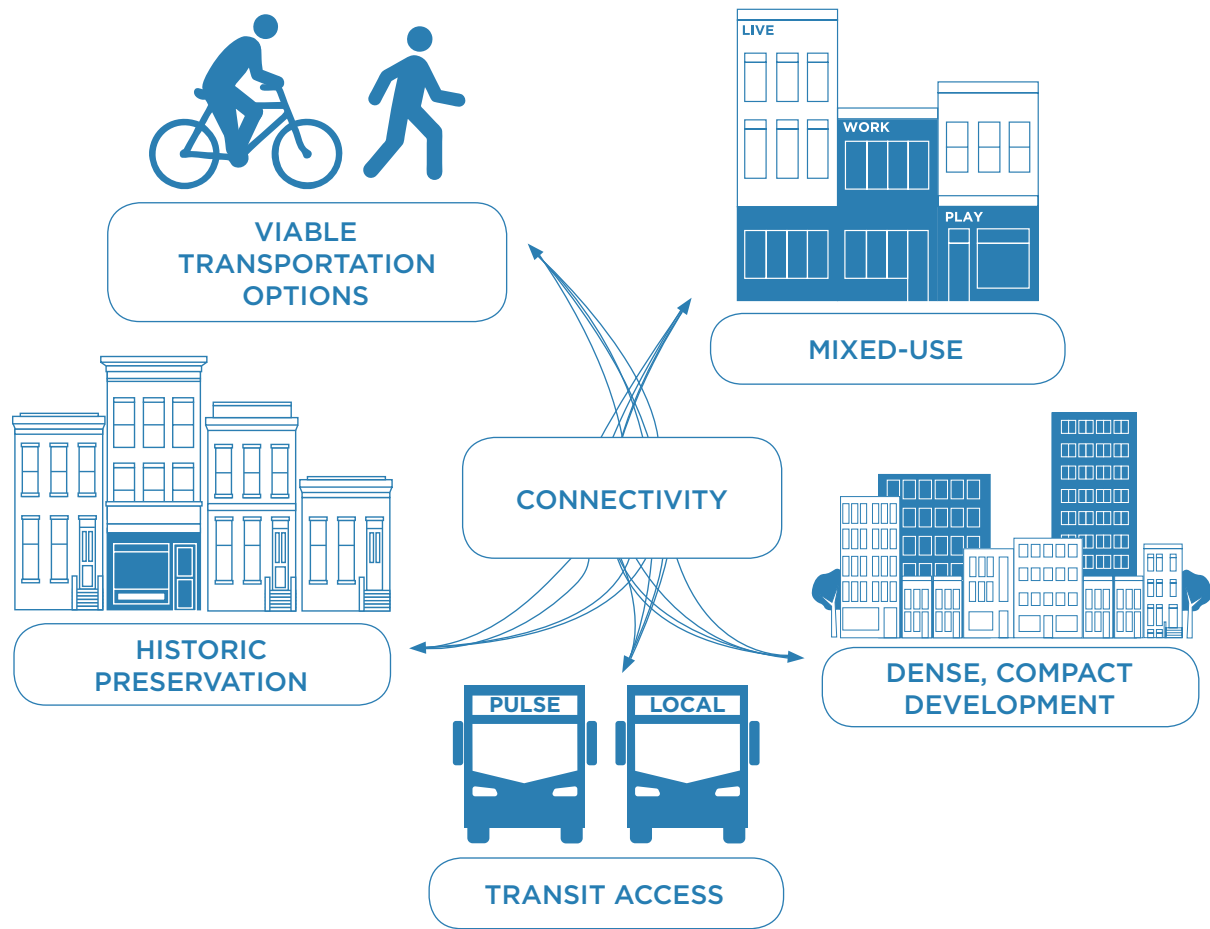


Figure ES.4 Pulse Corridor Principles



**CW.1 Create a Plan of Development overlay.** A Plan of Development overlay along the Corridor will outline form elements projects must incorporate into their site plan to meet TOD goals, as illustrated in Figure ES.5.

- **Hold the corner:** Buildings and spaces at intersections have active ground floors that wrap around the corner.
- **Entrances face the street:** Main entrances to businesses and residences front the street, fostering pedestrian activity.
- **Appropriate setbacks/stepbacks:** Commercial uses are closer to the street while residential uses are setback to foster privacy and to create a semi-public space. Stepbacks at upper stories create a means to honor existing form without overwhelming it.
- **Transparency:** Façade fenestration allows visibility to and from the street. This is especially important on the ground floor, where fenestration should occupy a higher percentage of the building face.
- **Façade articulation:** Long, monolithic façades should be broken up and made more human-scale by varying the streetwall plane, height, colors, and materials.
- **Screened parking/services:** Attractive landscaping pushed to the sidewalk help maintain a streetwall and mitigate the disruption caused by surface parking lots and utilitarian services.



**Hold the Corner**



**Appropriate Setbacks/Stepbacks**



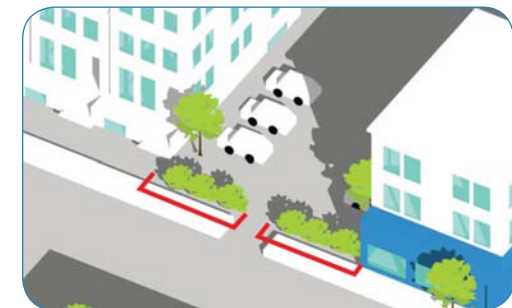
**Entrances Face the Street**



**Transparency**



**Façade Articulation**



**Screened Parking/Services**

**Figure ES.5 Plan of Development Overlay Form Elements**

Under the Plan of Development Overlay, developers must make considerations to each of the six elements in site plan design, which are key in creating an engaging pedestrian environment.

**CW.2 Rezone the Corridor to match the future land use map.** Priority station areas are Cleveland, Science Museum, Allison, Arts District, Main Street Station, and Orleans. (Future Land Use descriptions are detailed in Table ES.7.)

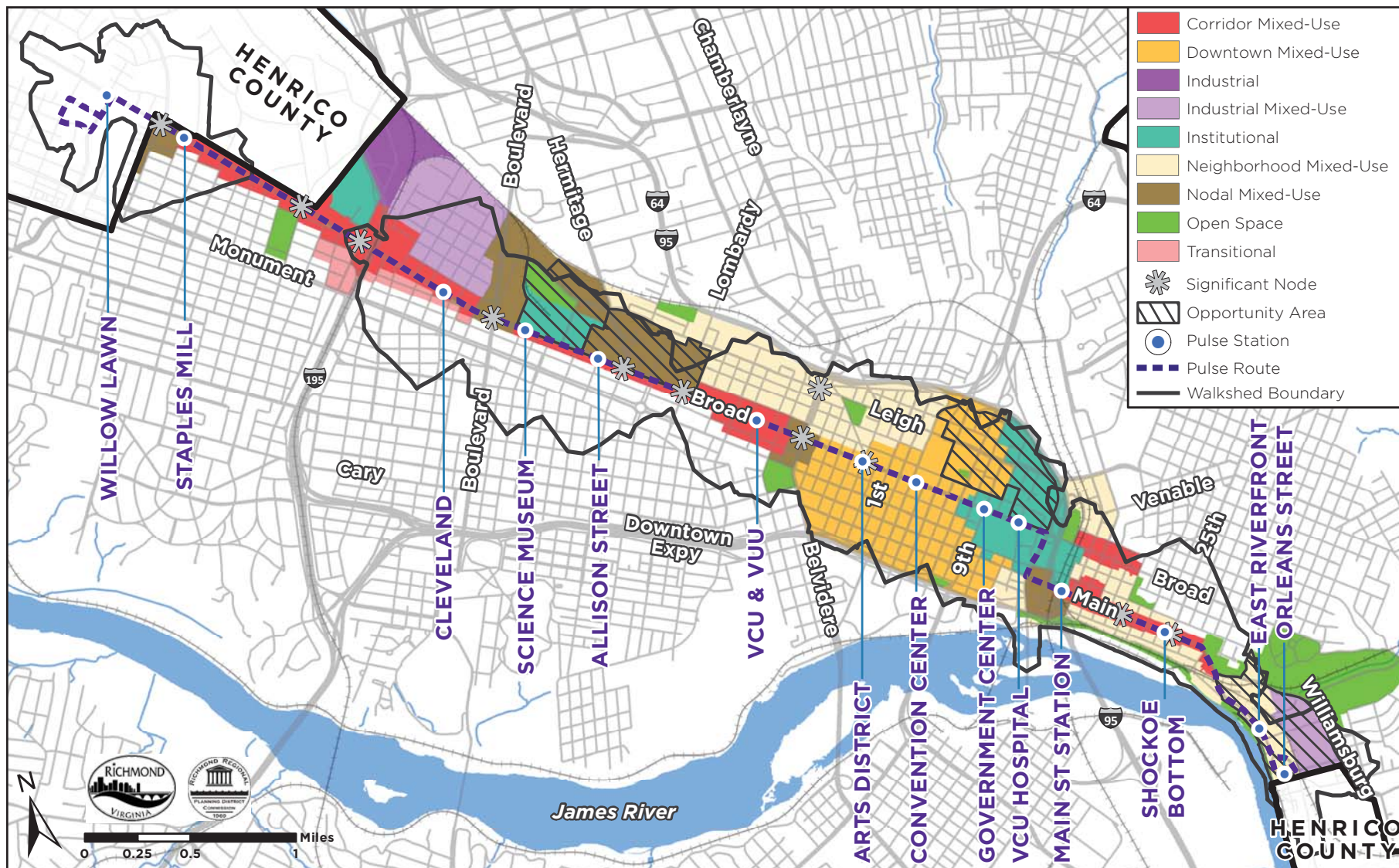


Figure ES.6 Future Land Use





## FUTURE LAND USE & ZONING




The Future Land Use categories below in Table ES.7 describe the general vision for an area and its land use. Multiple potential future zoning districts for each Future Land Use are listed because while these Future Land Use categories are broad enough to cover multiple areas along the Corridor, specific zoning districts will be proposed and vetted as part of a City-initiated rezoning process. A City-initiated rezoning process involves extensive public input to

evaluate and determine new zoning designations that align with adopted Future Land Use, but are also more precisely tailored to that area's existing context and community vision. Zoning designations stipulate what a property owner can legally build on their parcel and include height limits, setback requirements, and permitted uses, and sometimes form-based requirements, such as fenestration and entrance regulations. After the rezoning process and adoption, properties will have new zoning designations.




**Table ES.7** Future Land Use Categories

Land Use Category and Description	Details	Example Photograph
<b>Downtown Mixed-Use</b> <ul style="list-style-type: none"> <li>Central business district of the Richmond region features high-density development with office buildings, apartments, and a mix of complementary uses, including regional destinations.</li> <li>Higher-density pedestrian- and transit-oriented development encouraged on vacant or underutilized sites; new development should be urban in form and may be of larger scale than existing context.</li> <li>Active commercial ground floor uses required on street-oriented commercial frontages. Active ground floor uses and design required on priority street frontages.</li> <li>Driveway entrances required to be off alleys whenever possible; new driveways prohibited on street-oriented commercial and priority street frontages.</li> <li>Little to no setback of new development unless to create pedestrian-oriented amenities like plazas and outdoor dining.</li> <li>Surface parking prohibited as a principal use; when surface parking is provided as an accessory use, it should be located to the rear of buildings and screened by shade trees.</li> <li>Parking requirements are substantially less in these areas than other areas of the city and are largely eliminated.</li> </ul>	<b>Density/Size:</b> High density, buildings typically a minimum height of 5 stories. <b>Potential Future Zoning Districts:</b> B-4, RF-2. <b>Primary Uses:</b> Diverse mix of office, retail, personal service, multi-family residential, and cultural uses. <b>Secondary Uses:</b> Institutional and governmental uses, plazas, squares, pocket parks, and open space.	
<b>Nodal Mixed-Use</b> <ul style="list-style-type: none"> <li>Transit-oriented district located immediately adjacent to the Pulse BRT or other frequent transit service at key gateways and prominent places in the city in order to provide for significant, urban-form development in appropriate locations.</li> <li>Higher-density pedestrian- and transit-oriented development encouraged on vacant and underutilized sites; new development should be urban in form and may be of larger scale than existing context. It should directly engage with the prominence of Nodal Mixed-Use places and the public realm.</li> <li>Highly active street frontages and urban design features that encourage pedestrian activity required.</li> <li>Driveway entrances required to be off alleys whenever possible; new driveways prohibited on street-oriented commercial and priority street frontages.</li> <li>Little to no setback of new development unless to create pedestrian-oriented amenities like plazas and outdoor dining.</li> <li>Surface parking prohibited as a principal use; when surface parking is provided as an accessory use, it should be located to the rear of buildings and screened by shade trees.</li> <li>Parking requirements are reduced to allow more market-based parking strategies, including shared parking.</li> </ul>	<b>Density/Size:</b> High density, buildings typically a minimum height of 5 stories. <b>Potential Future Zoning Districts:</b> B-4, B-5, RF-1, RF-2, or a new district. <b>Primary Uses:</b> Office, retail, personal service, cultural, and multi-family residential. <b>Secondary Uses:</b> Institutional and governmental uses, plazas, squares, pocket parks, and open space.	

**Table ES.7** Future Land Use Categories (continued)

Land Use Category and Description	Details	Example Photograph
<p><b>Corridor Mixed-Use</b></p> <ul style="list-style-type: none"> <li>– Found along major, traditionally commercial corridors like Broad and E. Main Streets, and envisioned to provide for medium-density pedestrian- and transit-oriented infill development to fill “missing teeth” of the corridor fabric.</li> <li>– The building size, density, and zoning districts for these areas will vary depending on historic densities and neighborhood characteristics. New development should be in scale with existing context or respond to unique site characteristics and opportunities for redevelopment.</li> <li>– Active commercial uses required on principal street frontages. Ground floor residential uses should have street-oriented facades with setbacks, front yards, porches, and balconies where appropriate.</li> <li>– Driveway entrances required to be off alleys whenever possible; new driveways prohibited on street-oriented commercial and priority street frontages.</li> <li>– Parking lots and areas are located on the rear of buildings and require screening; shared parking requirements are encouraged to allow for commercial development while ensuring adequate residential parking.</li> </ul>	<p><b>Density/Size:</b> Medium density, buildings generally ranging from 2 to 10 stories with additional height where appropriate.</p> <p><b>Potential Future Zoning Districts:</b> UB-2, B-5, B-6, RF-1, or a new district.</p> <p><b>Primary Uses</b> Office, retail, personal service, cultural, and multi-family residential.</p> <p><b>Secondary Uses</b> Institutional and governmental uses, plazas, squares, pocket parks, and open space.</p>	
<p><b>Neighborhood Mixed-Use</b></p> <ul style="list-style-type: none"> <li>– Neighborhood Mixed-use areas are cohesive districts that provide a mix of uses, but with a larger amount of residential uses than other mixed-use districts. They are an urban, walkable environment with limited neighborhood-oriented uses incorporated along key commercial corridors and at corner sites.</li> <li>– The building size, density, and zoning districts for these areas will vary depending on historic densities and neighborhood characteristics. New development should be in scale with existing context.</li> <li>– Regardless of use, buildings should have street-oriented facades with windows and door openings along street frontages. Appropriate setbacks and open space should be provided for residential uses.</li> <li>– New driveway entrances prohibited on priority streets. Vehicular access to parcels should use alleys where possible.</li> <li>– Parking lots and parking areas should be located to the rear of street-facing buildings.</li> </ul>	<p><b>Density/Size:</b> Low to medium density, 2 to 8 stories, depending on neighborhood.</p> <p><b>Potential Future Zoning Districts:</b> R-7, R-8, R-63, B-5, B-6, B-7, RF-1, UB-2.</p> <p><b>Primary Uses:</b> Single-family and multi-family residential.</p> <p><b>Secondary Use:</b> Retail, office, personal service, cultural, institutional and governmental uses, plazas, squares, pocket parks, and open space.</p>	
<p><b>Transitional</b></p> <ul style="list-style-type: none"> <li>– Transitional areas provide a gradual transition between intense commercial areas and primarily single-family residential areas.</li> <li>– Landscaping, screening, setbacks, gradual transition of intensity or type of use, and other site design approaches should be used to create a transition.</li> <li>– The scale and type of uses will vary in order to transition to the adjacent residential neighborhood.</li> <li>– Regardless of use, buildings should have street-oriented facades with windows and door openings along street frontages.</li> <li>– New driveway entrances prohibited on primary streets and minimal driveway entrances allowed on secondary streets. Vehicular access to parcels should use alleys where possible.</li> <li>– Parking lots and parking areas should be located to the rear of street-facing buildings.</li> </ul>	<p><b>Density/Size:</b> Low to medium density, 2 to 4 stories.</p> <p><b>Potential Future Zoning Districts:</b> R-8, R-63, UB, UB-2, others as appropriate.</p> <p><b>Primary Uses:</b> Office and multi-family residential.</p> <p><b>Secondary Uses:</b> Retail, personal service, cultural, institutional and governmental uses, plazas, squares, and pocket parks.</p>	

**Table ES.7 Future Land Use Categories (continued)**

Land Use Category and Description	Details	Example Photograph
<p><b>Industrial Mixed-Use</b></p> <ul style="list-style-type: none"> <li>- <b>Industrial Mixed-use areas are traditionally industrial areas that are transitioning to mixed-use due to their proximity to growing neighborhoods, but still retain industrial uses.</b></li> <li>- Non-industrial use buildings should have street-oriented facades with windows and door openings along street frontages.</li> <li>- New light industrial uses are compatible with residential and office uses.</li> <li>- New driveway entrances prohibited on principal streets and minimal driveway entrances allowed on secondary streets. Vehicular access to parcels should use alleys where possible.</li> <li>- Parking lots and parking areas should be located to the rear of street-facing buildings.</li> <li>- Streetscape accommodates truck access but allows for multi-modal uses.</li> </ul>	<p><b>Density/Size:</b> Medium density, 3 to 8 stories,  <b>Potential Future Zoning Districts:</b> B-7, or a new district.  <b>Primary Uses:</b> Industrial, multi-family residential, office, retail, and personal service.  <b>Secondary Uses:</b> Cultural, institutional and governmental uses, plazas, squares, pocket parks, and open space.</p>	
<p><b>Industrial</b></p> <ul style="list-style-type: none"> <li>- <b>Industrial areas feature easy highway access, large parcels, and separation of residential areas, in order to allow light and heavy industrial uses.</b></li> </ul>	<p><b>Density/Size:</b> Low density, 1 to 3 stories.  <b>Potential Future Zoning Districts:</b> M-1, M-2.  <b>Primary Uses:</b> Industrial.  <b>Secondary Uses:</b> Office.</p>	
<p><b>Institutional</b></p> <ul style="list-style-type: none"> <li>- <b>Public and quasi-public entities, such as local, state, and federal government, hospitals, and universities.</b></li> <li>- Active commercial uses on ground floors are required on primary street frontages. Residential uses may be permitted on the ground floor in certain sections of the area. Regardless, ground floor residential units should still have street-oriented facades with setbacks, front yards, and balconies where appropriate.</li> <li>- New driveway entrances prohibited on primary streets and minimal driveway entrances allowed on secondary streets.</li> <li>- Ground floor parking prohibited on primary street frontages.</li> </ul>	<p><b>Density/Size:</b> Varies.  <b>Zoning Districts:</b> B-4, B-5, I.  <b>Primary Uses:</b> Institutional and governmental uses, community centers, libraries, museums, police and fire precincts, hospitals, and schools.  <b>Secondary Uses:</b> Retail, personal service, cultural, multi-family residential, plazas, squares, and pocket parks.</p>	
<p><b>Street-Oriented Commercial</b></p> <ul style="list-style-type: none"> <li>- Buildings on streets that are designated as Street-Oriented Commercial must have ground floor commercial uses, which activate the street edge and work toward creating a more walkable environment.</li> </ul>		
<p><b>Priority Streets</b></p> <ul style="list-style-type: none"> <li>- Streets to be identified which are significant to a given property and the larger neighborhood, where buildings are required to face and engage with the street and new driveway entrances are prohibited in order to foster the pedestrian environment.</li> </ul>		
<p><b>Opportunity Area</b></p> <ul style="list-style-type: none"> <li>- Large tracts of underdeveloped land along the Pulse Corridor that are ideal for redevelopment due to proximity of the Pulse Corridor as well as adjacency to stable neighborhoods. The opportunity areas along the Corridor require further study via a small area plan.</li> </ul>		
<p><b>Significant Nodes</b></p> <ul style="list-style-type: none"> <li>- Key intersections throughout the Pulse Corridor are identified as nodes. Nodes are locations where major roads intersect and the land uses around the node currently generate a significant activity or have the potential to develop into land uses that create vibrant centers.</li> </ul>		



## CONNECTED RECOMMENDATIONS

The 16 recommendations that focus on improving the streetscape and enhancing pedestrian, bike, transit, and automobile connections throughout the Corridor are summarized in Figure ES.8 and detailed in Table ES.10.

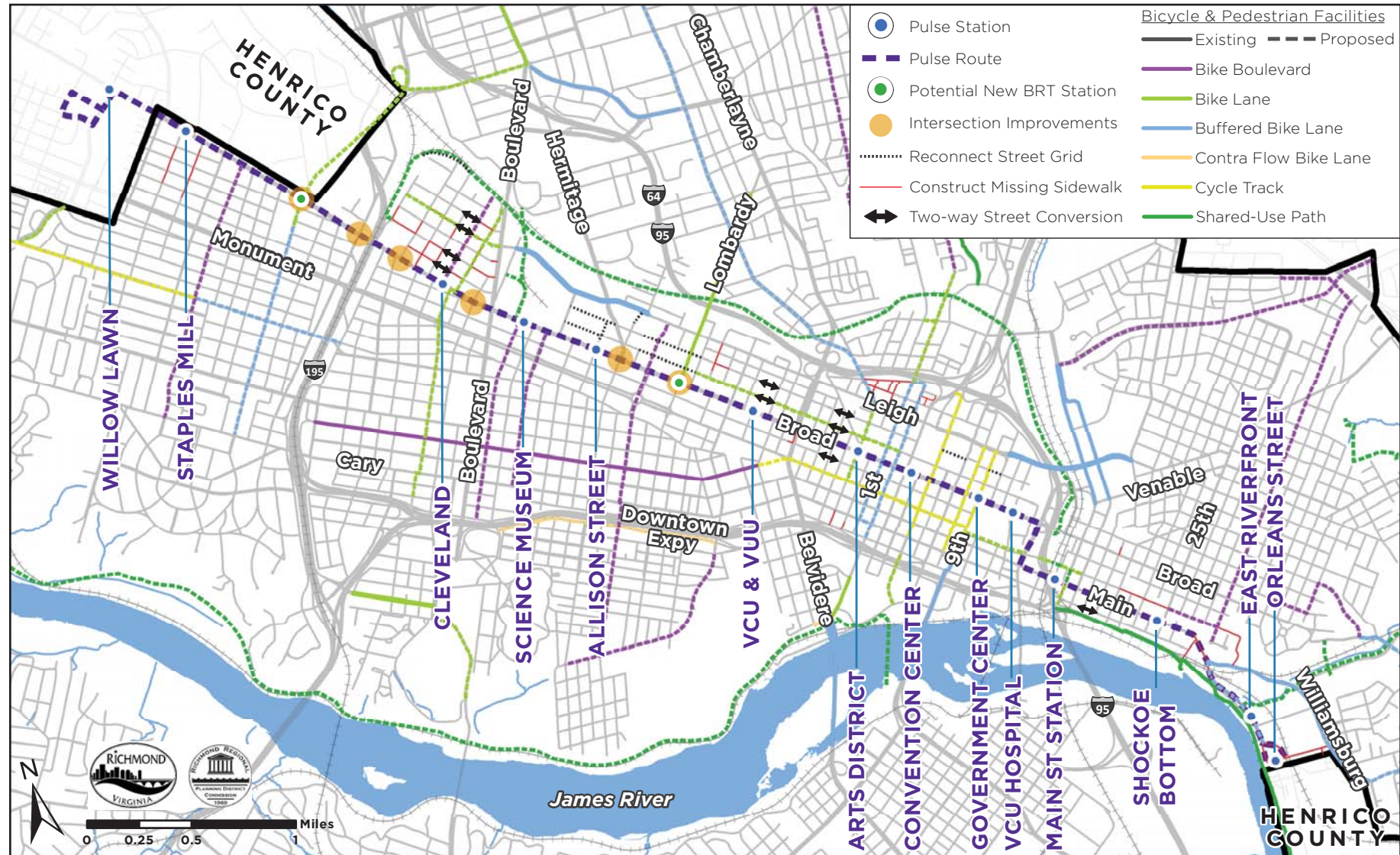


Figure ES.8 Future Connections



## CORRIDOR-WIDE RECOMMENDATION VISUALIZATION

Figure ES.9 depicts how some of these recommendations, utilizing sound urban design principles, create an environment that supports walkability and transit.



**Small-scale infill** Parking requirements removed for small-scale projects (CW.5).

**Restricted primary uses** Surface parking lots prohibited as a primary use (CW.4).

**Open Space** Buildings include open space which can be patios, porches, balconies, rooftops, pocket parks, or changes to site layout (CW.7).

**Form Regulation** Developers within the POD Overlay must follow the six form requirements to ensure high-quality TOD (CW.1).

**Affordable Housing Bonus** Additional height is allowed if a certain percentage of the units are affordable (CW.27).

**Figure ES.9** TOD Recommendation Diagram

**Table ES.10 Corridor-wide [CW] Recommendations**

<b>Compact &amp; Mixed</b>	
CW.1	Create a Plan of Development overlay. A Plan of Development overlay along the Corridor will outline form elements projects must incorporate into their site plan to meet TOD goals.
CW.2	Rezone the Corridor to match the future land use map. Priority station areas are Cleveland, Science Museum, Allison, Arts District, Main Street Station, and Orleans.
CW.3	Create a new mixed-use zoning district that allows mid-rise buildings, up to 12 stories in building height.
CW.4	Encourage underground and wrapped parking decks. Incentivize underground parking, require wrapping of structured parking, discourage the development of new surface parking lots along the Corridor, and encourage redevelopment of existing surface lots as new infill sites.
CW.5	Encourage contextual small-scale infill development. Remove parking requirements for smaller-scale projects as a way to reduce barriers to entry and diversity of housing choices.
CW.6	Update the map of Street-Oriented Commercial and Priority Streets along the Pulse Corridor to incorporate into the Zoning Ordinance.
CW.7	Improve existing parks and establish new open space. Improve existing parks and identify opportunities for new park space through the use of City-owned land and incentives for privately-created public open space.
<b>Connected</b>	
CW.8	Improve streetscape amenities. To create a safe, engaging pedestrian experience, provide consistent streetscape amenities where they do not already exist.
CW.9	Provide wider sidewalks and streetscape. Focus on areas where high-density redevelopment is occurring, through road diets, or setbacks of new development.
CW.10	Improve intersections to better accommodate pedestrians and cyclists. Utilize context-sensitive solutions and designing to complete street standards.
CW.11	Install sidewalks. Construct sidewalks where missing in the neighborhoods along the Corridor and repair and improve existing sidewalks. Widen sidewalks based on changes in land use and redevelopment and minimize redevelopment that reduces sidewalk widths. Follow ADA guidelines to provide universal access.
CW.12	Plant trees. Fill empty tree wells along the Corridor and at station areas. Require developers to plant trees in their setbacks and in tree wells adjacent to their developments. Encourage property owners to take advantage of the City's "Adopt a Tree" program. Amend appropriate buffers in the Zoning Ordinance to require trees.
CW.13	Integrate public art. Focus on key points and gateways along the Corridor, such as I-195/Broad, Broad/Belvidere, and Orleans/CSX Railroad.
CW.14	Improve lighting. Install pedestrian-scale and -oriented lighting throughout the Corridor.
CW.15	Underground overhead utilities. Bury utility lines along Broad Street and E. Main Street.
CW.16	Align local GRTC bus routes with the Pulse in order to support existing and future development as indicated in the recommendations outlined in the Richmond Transit Network Plan. Allow easy transfers and improve the pedestrian experience at key transit locations.
CW.17	Improve bicycle infrastructure throughout the Corridor. Install key projects referenced on the Future Connections Map and work towards more protected bicycle infrastructure in consultation with the Bike Master Plan while balancing the needs of travel lanes, on-street parking, and bicycle infrastructure within a limited right-of-way. Co-locate bike-share stations near the Pulse station areas.
CW.18	Encourage car-sharing programs. These programs can reduce the need to own an automobile for residents and employees along the Corridor and provide flexibility of travel.
CW.19	Create streetscape design guidelines from Belvidere Street to the City/County line to beautify W. Broad Street through additional screening standards, underground utilities, etc.
CW.20	Encourage reduced automobile parking in exchange for dedicated car-share spots, sponsoring a bike-share station and/or providing additional bike parking.
CW.21	Prioritize alley improvements. Create better access to parking and loading via alleys, reducing the need for driveway entrances along the Corridor.

**Table ES.10** Corridor-wide [CW] Recommendations (continued)

CW.22	Manage on-street parking as a key resource in redevelopment. Ensure on-street parking regulations are appropriate to surrounding land use context, parking pressures, and ensuring adequate parking and loading. Study possible reforms to the residential permit parking program to manage neighborhood parking and avoid spillover. Study areas to add to regulated on-street parking, or paid on-street parking, to determine the best course of action.
CW.23	Preserve the gridded street network. Given the importance of the street grid to Richmond's urban environment, in terms of both connectivity and neighborhood cohesion, every effort should be made to preserve the grid, including alleys, as the city develops.
<b>Thriving &amp; Equitable</b>	
CW.24	Explore affordable housing as an element of any redevelopment of City-owned land along the Corridor.
CW.25	Direct investments of City Affordable Housing Trust Fund to property along the Corridor.
CW.26	Foster a stronger relationship with the State Affordable Housing Trust Fund.
CW.27	Award bonuses for affordable housing. Award added building height and reduce parking requirements in exchange for the inclusion of affordable housing in projects. Update the City's affordable dwelling unit bonus provisions to include mixed-use districts envisioned in the Future Land Use plan.
CW.28	Preserve historic structures. In addition to providing a historical context and commemorating significant historic events, historic structures provide housing and commercial space choice, and a diversity of building type and style.
CW.29	Support new dense, vibrant developments in order to preserve existing historic buildings while increasing vitality at the street and neighborhood levels.
CW.30	Explore creating a transfer of development rights program to capture zoning value of historic structures without demolishing them.
CW.31	Create new business improvement districts (BIDs) along the Corridor.
CW.32	Attract new businesses to Station Areas. Direct new or expanding businesses to locations along the Corridor by creating a customized incentive program to support small business, expanding the Façade Improvement Program, and leveraging other existing programs such as C.A.R.E.
CW.33	Incentivize transit-oriented development. Investigate strategies such as a tax increment finance district, a technology zone, and other incentives to support enhanced job creation opportunities along the Corridor.
CW.34	Investigate the revision of the City's tax abatement program to target properties along the Pulse Corridor to maximize the benefit to the City.
CW.35	Create and adopt an affordable housing strategy for the Pulse Corridor. In developing that strategy, conduct an inventory of housing stock and affordability along the Corridor, and set affordable housing goals.

**Table ES.11 Station Area [SA] Recommendations**

Staples Mill and Malvern	<b>Compact &amp; Mixed</b>
	SA.1 Rezone areas along W. Broad Street between I-195 and Staples Mill to less auto-oriented districts with specific form requirements that align with the Future Land Use Map. Promote adequate screening and landscaping of all surface parking areas.
	SA.2 Invite major land owners in this area to discuss their plans for future development and how they will meet Corridor goals and lead to infill development.
	SA.3 Create a green space on City-owned land at Fitzhugh Avenue, Kent Road, and W. Broad Street.
	<b>Connected</b>
	SA.4 Install sidewalks on Chantilly Street and Blacker Street.
	SA.5 Prioritize the segment of W. Broad Street from I-195 to Staples Mill Road for streetscape improvements as funding becomes available.
	SA.6 Install public art and attractive, unique infrastructure at the I-195 overpass making it a gateway to the city and improving the pedestrian environment.
	SA.7 Improve crossing conditions across W. Broad Street between Staples Mills Road and Westmoreland Place.
Cleveland	<b>Thriving &amp; Equitable</b>
	SA.8 Coordinate with Henrico County to meet Corridor goals at the Staples Mill station.
	<b>Compact &amp; Mixed</b>
	SA.9 Rezone Scott's Addition to districts that align with the Future Land Use Map.
	SA.10 Develop a small area plan for the Boulevard/W. Broad Street "Nodal Mixed-Use" area.
	SA.11 Create a green space at Cutshaw Avenue and Broad Street that relates to the nearby Pulse station with shade and seating.
	SA.12 Develop and prioritize establishment of a park and open space plan for Scott's Addition.
	SA.13 Explore methods to incentivize private development to create public open space in Scott's Addition.
	<b>Connected</b>
	SA.14 As development occurs, add sidewalks in Scott's Addition where missing.
	SA.15 Install streetlights and pedestrian lights throughout Scott's Addition as needed to encourage a safe complete streets environment.
	SA.16 Complete a multi-use path across the northern edge of the neighborhood. Conduct a feasibility review for continuing the path under Boulevard.
	SA.17 Plant trees throughout Scott's Addition. Require tree planting in public right-of-way by private developers. Require developers to incorporate trees in screening of parking areas.
Cleveland	SA.18 Prioritize the segment of W. Broad Street from Boulevard to I-195 for streetscape improvements.
	SA.19 Complete a comprehensive, complete streets transportation and circulation plan for Scott's Addition that addresses two-way street conversions, truck routing, bicycle facilities, lighting, and other needs.
	<b>Thriving &amp; Equitable</b>
Cleveland	SA.20 Maintain a balance of uses as the neighborhood develops by drawing small-scale, neighborhood-compatible industrial and "maker" spaces to the neighborhood.

**Table ES.11 Station Area [SA] Recommendations (continued)**

Science Museum and Allison	<b>Compact &amp; Mixed</b>
	SA.21 Rezone the areas around the Science Museum of Virginia and Allison Street stations to districts that align with the Future Land Use Map, working closely with neighborhood groups to ensure that future zoning districts are sensitive to the context of the neighborhood. Neighboring civic associations express a strong preference that new development along the south side of W. Broad Street be limited in height, promotes the preservation of historic building stock, and provides adequate buffers to the residential neighborhoods to the south.
	SA.22 Work with Sauer Properties to develop an urban form master plan. Take advantage of the large concentration of single-owner redevelopment properties north of W. Broad Street and work together towards a high-density, urban form.
	SA.23 Re-establish the streetwall on W. Broad Street. Encourage new development to build to the street.
	<b>Connected</b>
	SA.24 Introduce a rectangular street grid north of W. Broad Street using complete streets guidelines. Continue Clay Street from DMV Drive to Lombardy Street, Marshall Street from DMV Drive to Bowe Street, Meadow Street from Clay Street to Leigh Street, and Allison Street to Clay Street as redevelopment occurs.
	SA.25 Improve north-south crossings of Broad Street for pedestrians and cyclists in the general vicinity of Hermitage and Lombardy Streets.
	SA.26 Explore the creation of an east-west bike route between Belvidere Street and Boulevard.
	SA.27 Improve intersection at Stuart Circle to accommodate cyclists.
	SA.28 Prioritize the segment of W. Broad Street from Lombardy Street to Boulevard for streetscape improvements.
VCU & VUU	<b>Thriving &amp; Equitable</b>
	SA.29 Work with the Commonwealth to retain state employees and improve existing development, including looking at opportunities for repurposing large amounts of surface parking at the DMV Headquarters.
	<b>Compact &amp; Mixed</b>
	SA.30 Rezone the area around the VCU & VUU Station to districts that align with the Future Land Use Map.
	<b>Connected</b>
Arts District	SA.31 Reconnect the street grid as redevelopment occurs.
	<b>Thriving &amp; Equitable</b>
	SA.32 Form a TOD committee between VCU, the City, and the broader community. Collaborate with VCU through regular meetings to discuss, plan, and implement a unified vision for the station area.
	<b>Compact &amp; Mixed</b>
	SA.33 Rezone Monroe Ward to districts that align with the Future Land Use Map.
	SA.34 Encourage and support the redevelopment of surface parking lots into uses that support transit.
	SA.35 Develop a public and green space plan for Monroe Ward.
	SA.36 Fully implement the Abner Clay Park plan: Beautify and activate this park in accordance with community needs and desires. Add active uses to attract residents and Pulse BRT riders into this nearby asset. Orient any new development to the park.
	<b>Connected</b>
Arts District	SA.37 Construct protected bike lanes on 1st and 2nd Streets.
	<b>Thriving &amp; Equitable</b>
	SA.38 Redevelop City-owned land near the Arts District Station to include affordable housing.
	SA.39 Work with RRHA to ensure that mixed-use, mixed-income developments with a TOD form are developed in Jackson Ward.

**Table ES.11 Station Area [SA] Recommendations (continued)**

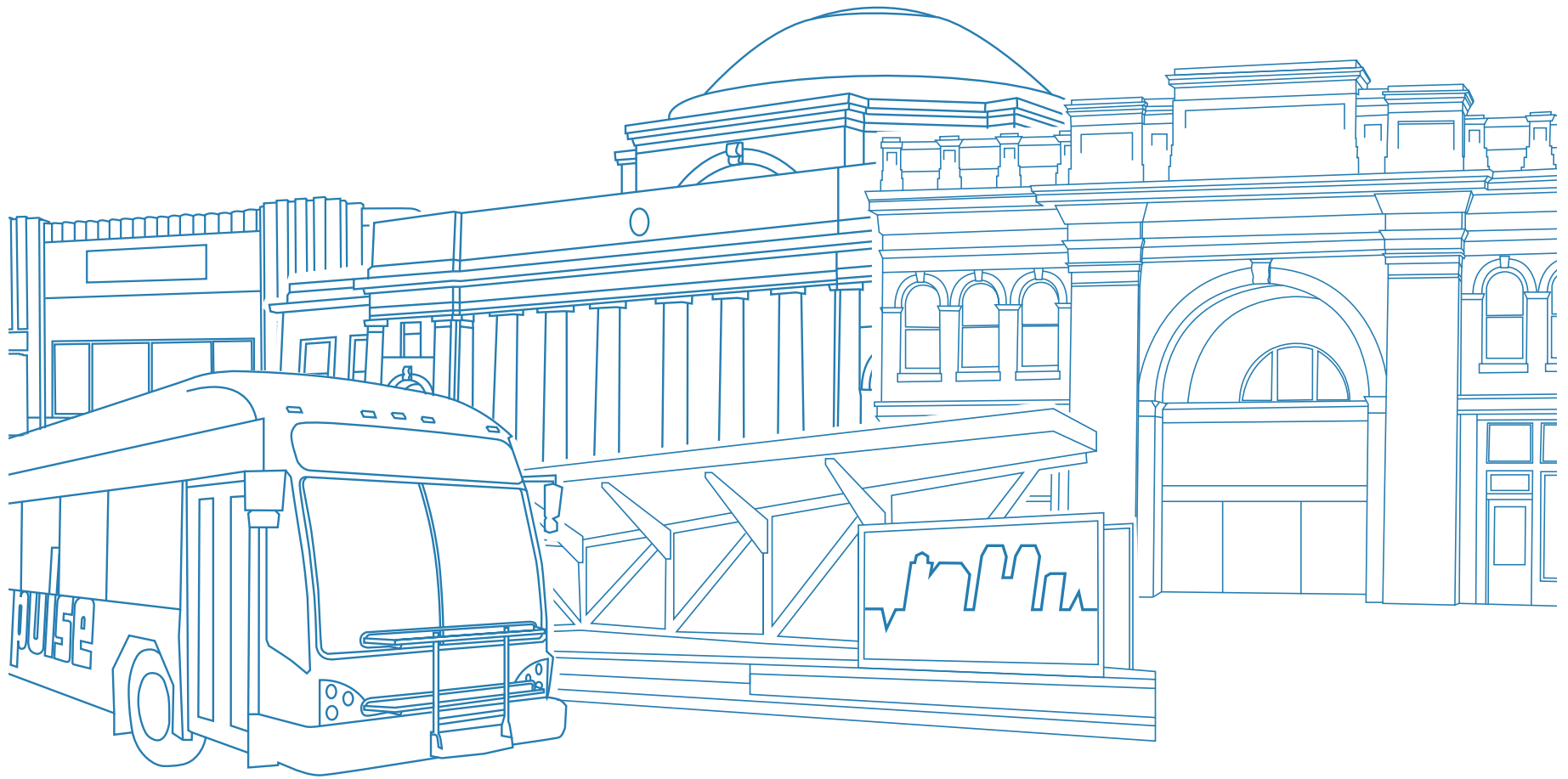
<b>Downtown Stations</b>	<b>Compact &amp; Mixed</b>
	SA.40 Develop a small area plan for the opportunity area around the VCU Medical Center, the Virginia Biotechnology Research Park, Blue's Armory, the Coliseum, and City-owned land. Include VCU Health and the Virginia Biotechnology Research Park in the planning process. Explore public-private-non-profit partnerships to redevelop properties to make the area a dynamic live-work environment.
	<b>Connected</b>
	SA.41 Build protected two-way bicycle infrastructure on Franklin Street.
	SA.42 Improve the intersections at E. Broad Street and the ramps to I-95.
	SA.43 Pursue two-way conversions of Grace and Marshall Streets in consultation with the City's Strategic Multimodal Transportation Plan, evaluating during implementation the balance of two-way conversion, on-street parking, and bicycle infrastructure.
	SA.44 Reconnect the street grid as opportunities present themselves in order to establish a more fine-grained street pattern while preserving the existing gridded street network by not closing any additional streets in the Downtown core.
	<b>Thriving &amp; Equitable</b>
	SA.45 Using City-owned lots, especially in the opportunity area around the Coliseum and the lot across from the Convention Center, develop affordable housing with a mix of uses.
	SA.46 Continue to develop the Virginia Biotechnology Research Park area by attracting biotech companies to the Biotech Research Park.
<b>Main Street Station</b>	<b>Compact &amp; Mixed</b>
	SA.47 Rezone the Main Street Station Area to districts that align with the Future Land Use Map.
	<b>Connected</b>
	SA.48 Improve crossing conditions along E. Broad Street between 14th Street and 17th Street.
	SA.49 Extend the Virginia Capital Trail to reach the Capitol. Require developments along the Virginia Capital Trail to provide amenities and infrastructure supportive of cyclists and pedestrians.
	SA.50 Work with private, state, and institutionally-owned entities to develop a shared parking strategy for the area around Main Street Station.
	SA.51 Pursue two-way conversions of the few one-way streets in Shockoe Bottom in consultation with the City's Strategic Multimodal Transportation Plan, evaluating during implementation the balance of two-way conversion, on-street parking, and bicycle infrastructure.
	<b>Thriving &amp; Equitable</b>
	SA.52 Promote Main Street Station as the regional mass transit hub with the convergence of rail, BRT, regional bus, and GRTC local bus routes.
	SA.53 Continue efforts to commemorate, memorialize, and interpret sites of historical and cultural significance in Shockoe Bottom and their on-going meaning to the city.
<b>Shockoe Bottom</b>	<b>Compact &amp; Mixed</b>
	SA.54 Rezone Shockoe Bottom to districts that align with the Future Land Use Map.
	SA.55 Encourage and support infill development on underutilized parcels in the Shockoe Bottom Station Area by working with the Army Corps of Engineers to mitigate the floodplain.
	<b>Connected</b>
	SA.56 Improve crossing conditions along Dock Street for pedestrians and cyclists going to and coming from the Capital Trail, and the Low Line.
	SA.57 Conduct a study to provide recommendations for increasing connectivity between Libby Hill Park and the Riverfront, particularly for cyclists and pedestrians.
	SA.58 Work with private, state, and institutionally-owned entities to develop a shared parking strategy for the Capital Trail.



**Table ES.11 Station Area [SA] Recommendations (continued)**

<b>East Riverfront and Orleans</b>	<b>Compact &amp; Mixed</b>
	SA.59 Coordinate with Henrico County to create a cohesive approach for development around Orleans Station.
	SA.60 Create a small area plan for the East Riverfront Station area.
	SA.61 Improve the former Lehigh Cement property as the next phase of the Riverfront Plan implementation.
	SA.62 Encourage and support infill development on underutilized parcels in the East Riverfront and Orleans Station Areas.
	SA.63 Develop the Historic Fulton Memorial Park at the foot of Powhatan Hill.
	<b>Connected</b>
	SA.64 Construct the Gillies Creek Greenway.
	SA.65 Recreate a street grid in the industrial area. Add new roads as development occurs in the block bound by the CSX railroad, Williamsburg Avenue, Nicholson Street, and Orleans Street.
	SA.66 Add traffic signals at Williamsburg Avenue/Orleans Street and Orleans Street/Route-5.
	SA.67 Investigate installing a pedestrian bridge over the Norfolk-Southern at-grade rail line and Gillies Creek that connects Fulton Street to the bottom of Chimborazo Park.
	SA.68 Improve pedestrian connections throughout the neighborhood with paths connecting Fulton Hill to Historic Fulton and pedestrian access to the waterfront at the end of Orleans Street and Nicholson Street.
	SA.69 Improve public art in this section of the Corridor, such as at the Dock & E. Main Streets roundabout, the CSX overpass at Orleans Street, or other locations as they become available.
	SA.70 Require developers to improve the streetscape of Orleans Street, per the streetscape design guidelines, as parcels redevelop.
	<b>Thriving &amp; Equitable</b>
	SA.71 Redevelop the Fulton Gas Works site and preserve the historic gasometer and the Fulton Works building. Continue the brownfield clean-up on this Utilities-owned site to prepare it for higher and better uses once regulatory items have been addressed, such as environmental remediation and Section 106 review for historic resources.





# 1. INTRODUCTION

## PLAN BACKGROUND

### THE PULSE

The Greater Richmond Transit Company (GRTC) expects the completion of its 7.6-mile Bus Rapid Transit (BRT) line by the end of 2017. The BRT, dubbed the Pulse, is the product of a four-year planning process between 2010 and 2014, which included an environmental impact analysis, a route with modifications from public input, system engineering, and the preliminary design of the stations. The 14-station route will have peak-time headways of 10 minutes, with 15-minute headways during off-peak periods.

Bus Rapid Transit is a form of transit developed in the 1970s. BRT is a fixed-route rapid transit line which includes dedicated lanes, off-board fare collection, and permanent stations with quick-loading platforms. In addition to having the advantages of fixed-route transit, BRT also has the advantages of a bus in its flexibility of routing and lower cost of implementation, operations, and maintenance, as compared to fixed-rail systems.

### THE PULSE CORRIDOR PLAN

The Pulse Corridor Plan seeks to augment market forces driving people to Richmond's core by supporting a walkable urban environment around Pulse stations through the adoption of goals, principles, and targeted recommendations. The Plan seeks to answer three questions:

1. Where is future development going to occur?
2. What will future development look like?
3. What are the best tools to get there?

#### WHAT IS TOD?

Transit-Oriented Development (TOD) is a form of development that is oriented around major transit hubs, mostly typically rail, but oftentimes Bus Rapid Transit. Development around such transit nodes is denser, uses are mixed, walkable connections are present, and less parking is required because transit is readily accessible. The benefits of TOD are many, including higher assessed value, less surface parking lots, and less trips generated by single-occupancy vehicles because of the proximity to other uses and more transportation choices. By promoting

TOD and its associated principles, the urban pattern of development along the Pulse BRT Route can be strengthened, allowing residents, employees, and customers a place to live, work, and play.

#### PROJECT TEAM

The City of Richmond contracted with the Richmond Regional Planning District Commission (RRPDC) to complete this plan. City of Richmond Department of Planning and Development Review (PDR) led the community engagement, advisory committee efforts, developed the recommendations, and finalized the plan for adoption, while the RRPDC staff conducted analyses and composed the plan document with assistance and collaboration with City staff (please see Figure 1.1).



Figure 1.1 Project Team

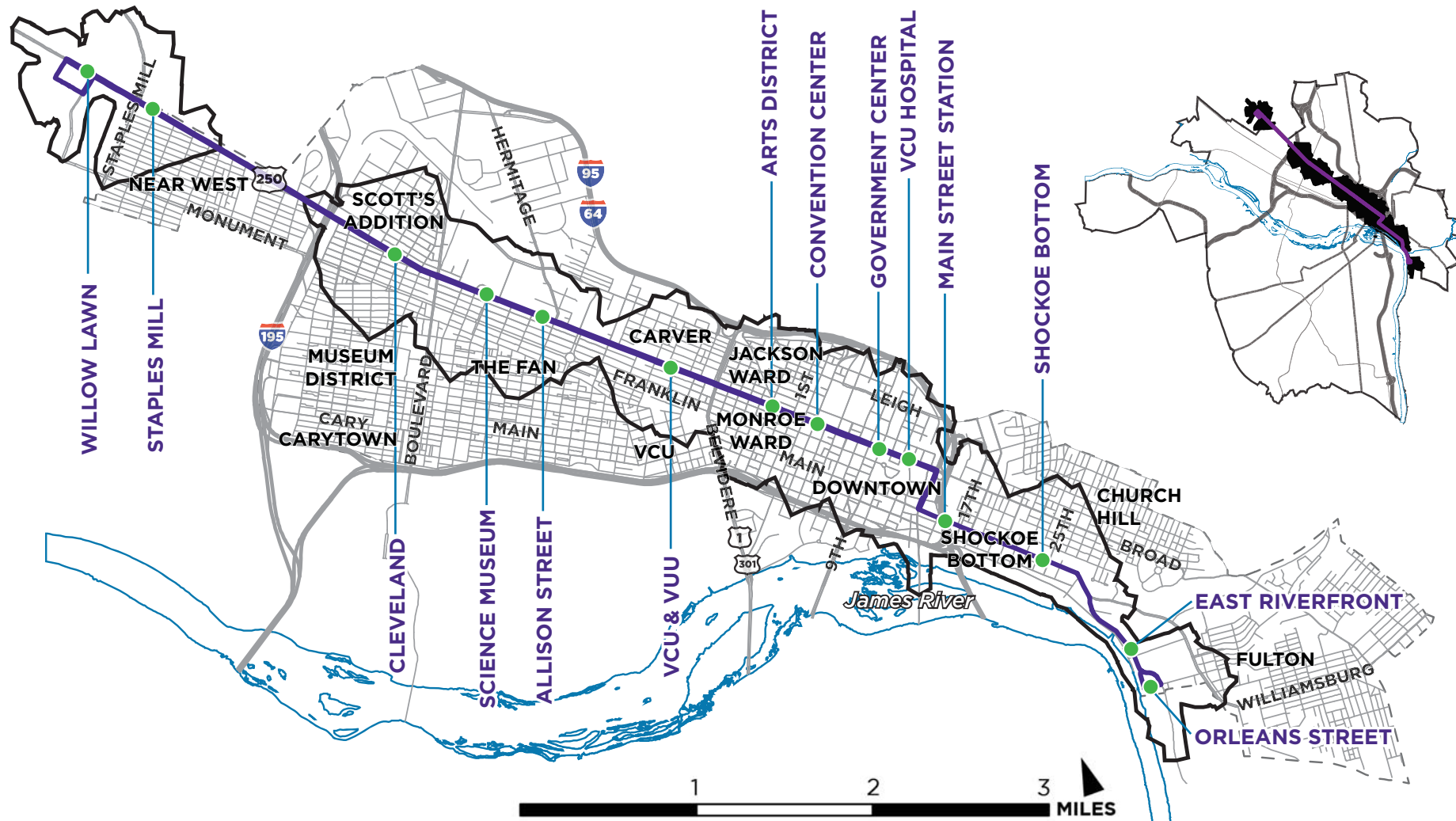


Figure 1.2 Half-mile Walksheds of the Pulse Stations

To accompany their TIGER grant,<sup>1</sup> USDOT selected Richmond for inclusion in the National Transit-Oriented Development Technical Assistance Ladders of Opportunity Initiative. This brought the expertise of Smart Growth America (SGA) to the planning process, a national non-profit completing transit-oriented development projects across the country. SGA provided additional data points for the Station Area prioritization matrix found in the Station Analysis Chapter, expanded on walk score data, and analyzed the economic conditions of the Corridor.

As part of the Initiative, SGA and their team provided recipients like Richmond further assistance in community development. This enabled the City to host a four day charrette led by Van Meter Williams Pollack, an urban design firm based in Denver, and the rest of the SGA team to look closely at the Orleans Station area. This charrette brought residents of the Fulton area to discuss and design the future of Historic Fulton, a portion of the Greater Fulton neighborhood demolished as part of an urban renewal project in the 1970s. The results of the charrette comprise the East Riverfront/Orleans Stations Chapter.

## PUBLIC ENGAGEMENT

### Technical Advisory Committee

The Technical Advisory Committee was assembled with professionals from various fields and backgrounds concerning urban planning, placemaking, and urban design.

<sup>1</sup> GRTC applied for a TIGER (Transportation Investment Generating Economic Recovery) grant from the U.S. Department of Transportation (USDOT) in 2014, who awarded GRTC a grant of \$24.9 million, fully executable by September 2015. Local funding from both Richmond and Henrico County matched the TIGER grant, bringing the project total to \$49.8 million.

Their range of expertise and feedback helped craft the plan into a pragmatic set of recommendations.

### Public Forum #1

The City of Richmond hosted a public forum in November 2015 to establish community visions for the overall plan. Over 50 attendees participated in a detailed workshop. The workshop activities included discussion of land use, public space, building form, public infrastructure, safety, and favorite places along the Corridor.

Participants completed visions statements for what the Corridor, and this part of the city will be in 20 years. Overwhelmingly, the participants' vision statements focused on increasing walkability and achieving a vibrant mixed-use corridor. As one participant said,

“In 20 years, I think this part of the city will have more people and more transit.”

### Stakeholder Meetings

While the public forum hosted by the City resulted in an incredible amount of detailed public input and indicated key places to investigate further, such as Scott's Addition, the intersections of W. Broad/Belvidere, W. Broad/Boulevard, and W. Broad/I-195, the Project Team sought further input to guide the recommendations as they developed. Over the course of the next several months, City staff attended almost two dozen different constituent and stakeholder group meetings. Most of these meetings were with existing civic and neighborhood associations. Staff attended standing association meetings to present about the Pulse BRT and the plan, and answer questions. In addition to civic



A group visioning exercise with Bike Walk RVA



and neighborhood associations, City staff had workshops with youth participants in Art 180 and with Bike Walk Northside, and hosted a Commercial Coffee event for the development community and an event with national TOD experts, Chris Leinberger and Chris Zimmerman of SGA.

A key theme of all of these community meetings, echoing the main takeaway from the November public forum, was a broad-based desire for more walkable neighborhoods along the Pulse Corridor, and particularly along and across W. Broad Street itself. Groups assumed that there would continue to be a mix of uses along the Corridor and its neighborhoods. Almost every group agreed that Scott's Addition was an exciting and rapidly-changing place that should be a priority for the plan.

Another common concern was parking. Neighborhood associations were concerned with parking availability, particularly on-street parking in residential areas. The community expressed a clear preference for structured parking in the Corridor, with a decrease in the number of large surface lots throughout the area and particularly fronting W. Broad Street.

### **Survey**

Throughout the months spent developing this plan, the City hosted an online survey that asked the same series of big picture questions and key details analysis that the November 2015 public workshop entailed. Respondents to the survey tended to be younger than attendees at the November public forum and civic association meetings, and generally had a vision for more growth, including taller buildings, in the Corridor.

### **Orleans Charrette**

Over four days in May and June of 2016, the City hosted a workshop with the Greater Fulton community to develop a vision for the future development of the Orleans Station Area. During the workshop, led by SGA and Van Meter Williams Pollack, community members developed recommendations for improving connectivity to the Orleans Station and changing land uses to support transit-oriented development. Over 50 individuals participated in the workshop.

### **Public Forum #2**

The City hosted two public meetings in November 2016 to receive comments from the public on the draft recommendations included in this plan. Over 60 community members shared their views on the recommendations. After the meetings, PDR staff made changes to recommendations to incorporate the public's comments. The public input and vetting of the analysis, goals, and recommendations in the Pulse Corridor Plan has led to a strong, implementable document.

### **Follow-up Meetings & Draft Dissemination**

Following the second public forum, PDR released a first draft of the plan (December 5, 2016). This draft was posted on the City's website and email notifications were sent to relevant City groups and agencies, members of the public who had signed up at prior meetings, and all civic association contacts on and around the Corridor. Follow-up meetings were held with these civic associations to discuss the draft plan, and comments from the public and internal City agencies were received, documented, and responded to for a two-month period.

## **DOCUMENT ORGANIZATION**

The pulse Corridor Plan is organized into the following chapters:

### **Chapter 2: Corridor-wide Existing Conditions**

Chapter 2 includes demographics and land use conditions at the Corridor level, station-level indicators and prioritization, and an overview of Smart Growth America's economic analysis.

### **Chapter 3: Corridor-wide Framework**

Building on the existing conditions analyses of the preceding chapter, Chapter 3 provides the principles, goals, and recommendations of the Plan at the Corridor-level. This chapter also features descriptions of the proposed future land use categories.

### **Chapter 4: Station Plans**

Chapter 4 features station-specific existing conditions, including land use and demographic data, as well as recommendations, providing a road map to reach the Plan's goals. Some stations are grouped based on proximity or similarity.

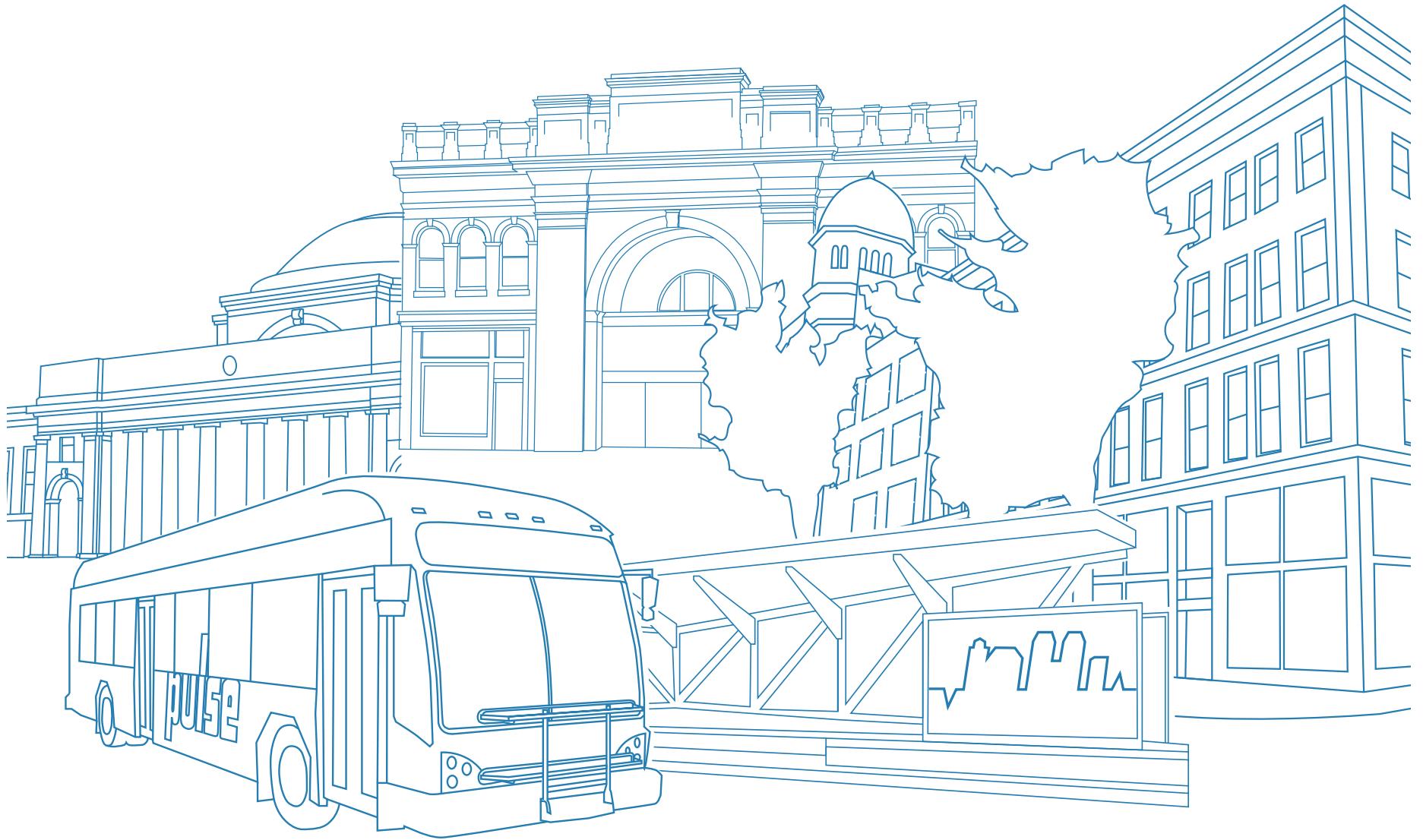
### **Chapter 5: Implementation**

Chapter 5 combines all of the mentioned recommendations, assigns an agency to carry them out, and gives a general timespan for implementation.

### **Chapter 6: Appendix**

The final chapter in the Plan provides supporting documentation as well as public engagement materials and feedback.





## **2. CORRIDOR-WIDE EXISTING CONDITIONS**

## STUDY AREA OVERVIEW

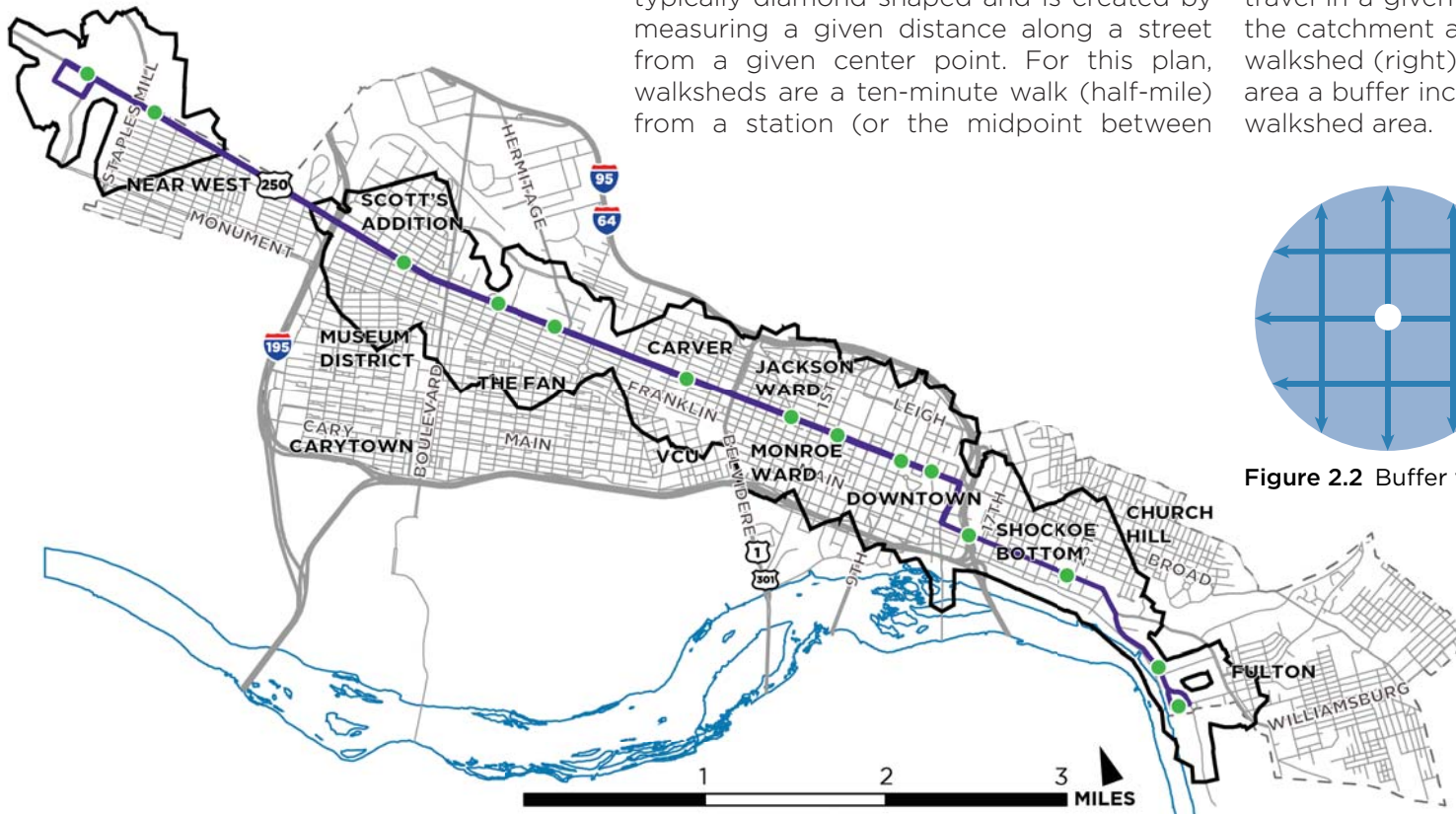
On its 7.6 mile route, the Pulse line travels along two of the most significant corridors in the entire city – Broad Street and E. Main Street – and serves as a spine for several high-activity neighborhoods (please see Figure 2.1).

**Census block groups:** This plan uses two separate study boundaries for corridor-wide data analysis. For U.S. Census data, Census block groups provide the smallest geography available which generally line up with neighborhood boundaries.

**Walksheds:** For land use data, this plan incorporates walksheds. A walkshed is typically diamond-shaped and is created by measuring a given distance along a street from a given center point. For this plan, walksheds are a ten-minute walk (half-mile) from a station (or the midpoint between

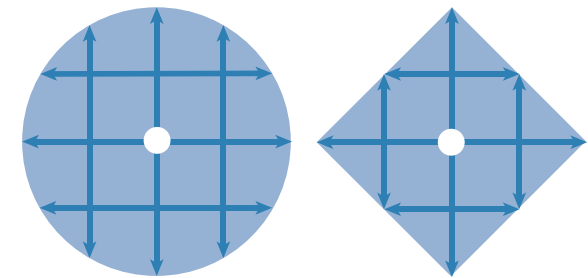
eastbound and westbound stations). While walksheds do not follow parcel boundaries, data collected at the walkshed level incorporates whole parcels that fall within the walkshed boundary.

Walksheds are superior to typical buffers in pedestrian analysis as they only capture the network of streets that pedestrians can travel in a given distance. Figure 2.2 depicts the catchment areas of a buffer (left) and a walkshed (right), illustrating the much larger area a buffer incorporates versus the smaller walkshed area.



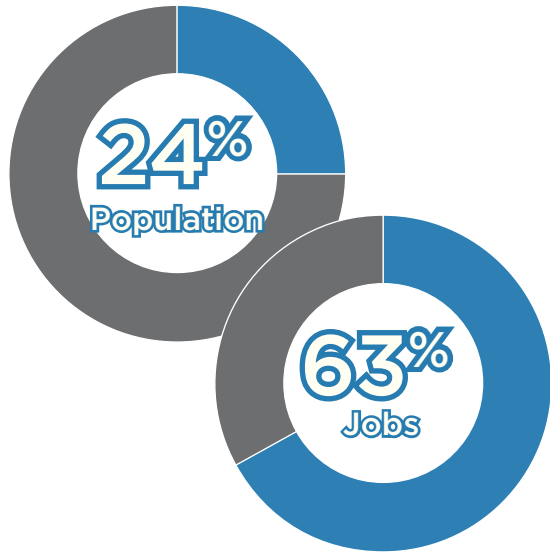
**Figure 2.1** Study Area Neighborhoods and Half-mile Walkshed

Source: City of Richmond and RRPDC

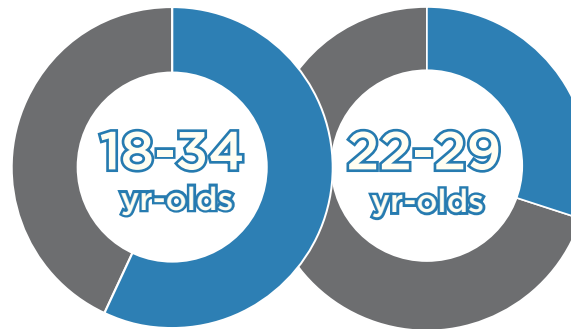


**Figure 2.2** Buffer vs. Walkshed Catchment

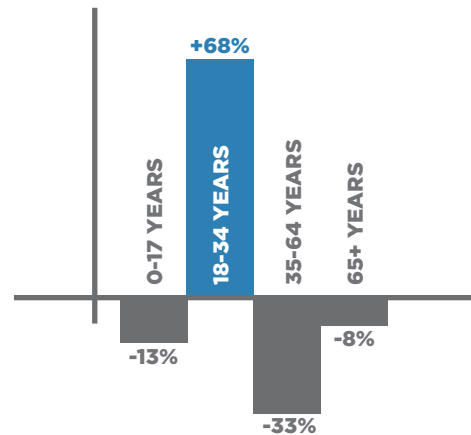
## DEMOGRAPHICS



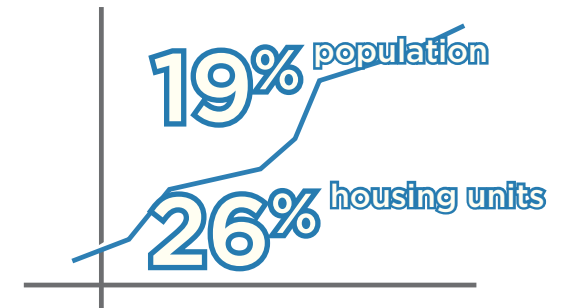
**ONE QUARTER OF THE  
POPULATION AND TWO-  
THIRDS OF THE JOBS IN THE  
CITY**



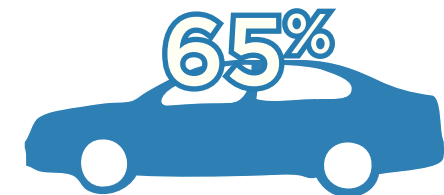
**57% ARE 18-34 YEAR-OLDS  
30% ARE 22-29 YEAR-OLDS**



**THIS AGE GROUP GREW  
WHILE ALL OTHERS DECLINED  
RELATIVELY BETWEEN  
2000-2013**



**POPULATION GREW 19% AND  
HOUSING UNITS GREW 26%  
BETWEEN 2000-2013**

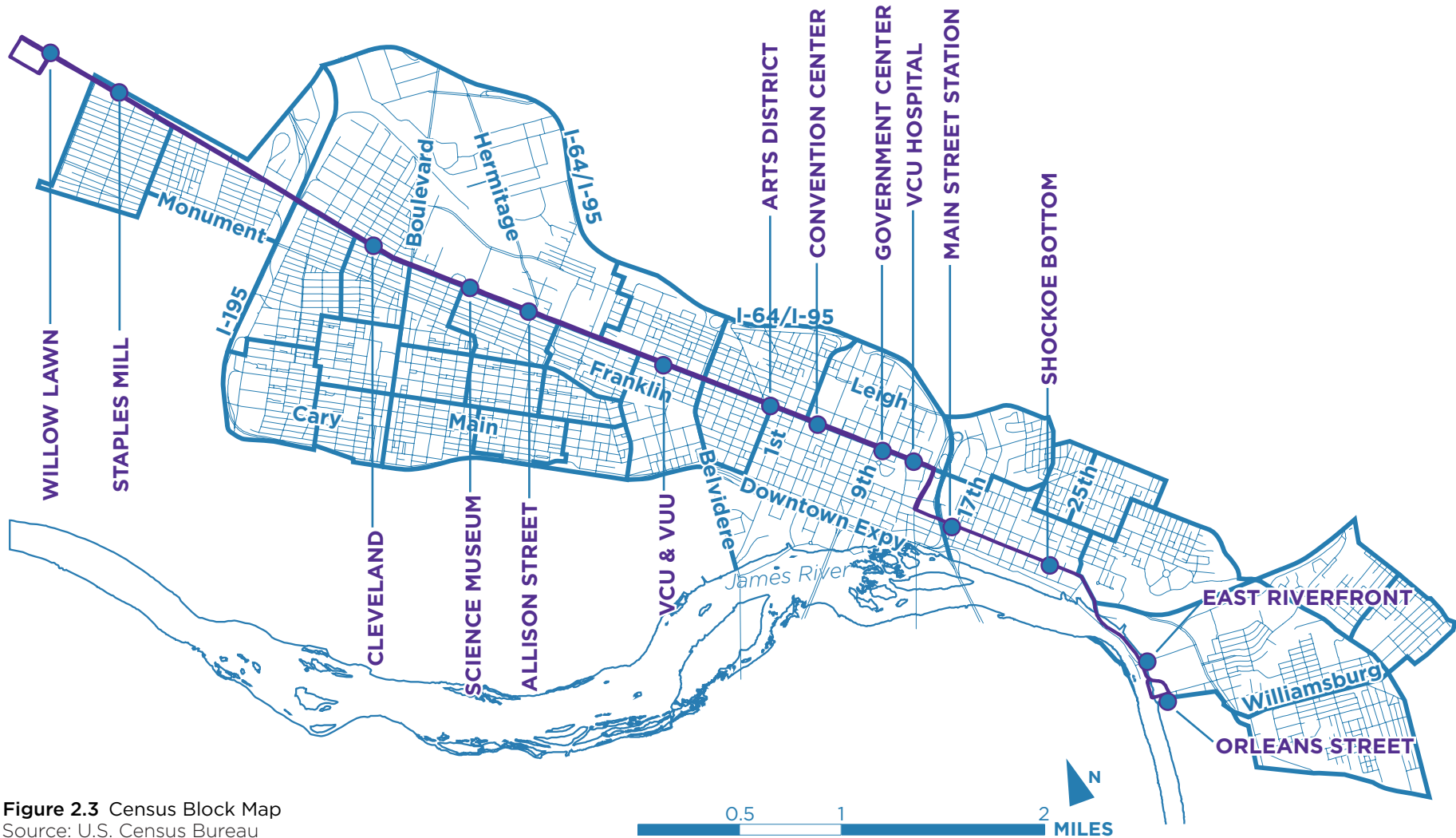


**TWO-THIRDS OF  
HOUSEHOLDS OWN ONE OR  
FEWER CARS**

Source: U.S. Census Bureau, 2009-2013 American Community Survey (ACS) 5-year estimates, Virginia Employment Commission 2012 Employment Data

## THE DEMOGRAPHIC STUDY AREA

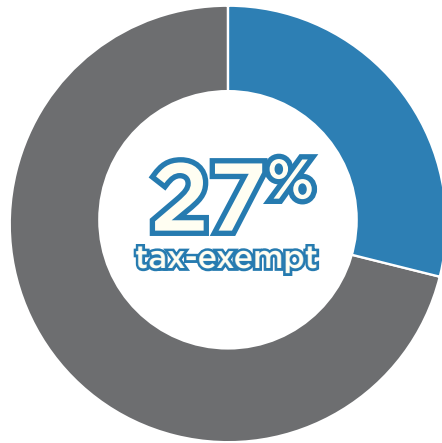
The 32 Census block groups of the study area, shown in Figure 2.3, incorporate whole neighborhoods for analysis rather than just block groups touching the BRT route. Using the shapes provided by the Census, the study area captures residents just out of reach of the stations, including those more than a half-mile walk from the stations.



**Figure 2.3** Census Block Map

Source: U.S. Census Bureau

## HALF-MILE WALKSHED CHARACTERISTICS



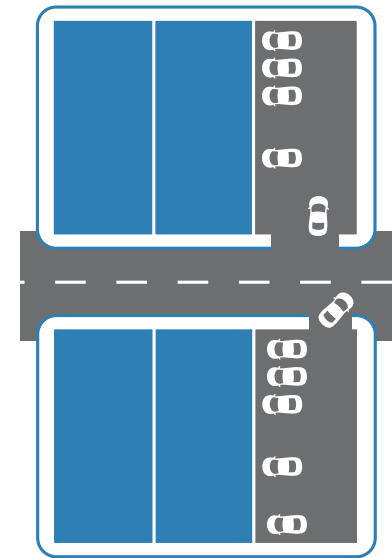
**27% OF PROPERTY IS  
TAX-EXEMPT**

**\$9.6  
BILLION**  
TOTAL ASSESSED PROPERTY  
VALUE AS OF JANUARY 2016

**\$1.2  
BILLION**  
BUILDING PERMIT ACTIVITY  
FROM 2010-2015



**59% OF LAND IS DESIGNATED  
HISTORIC**



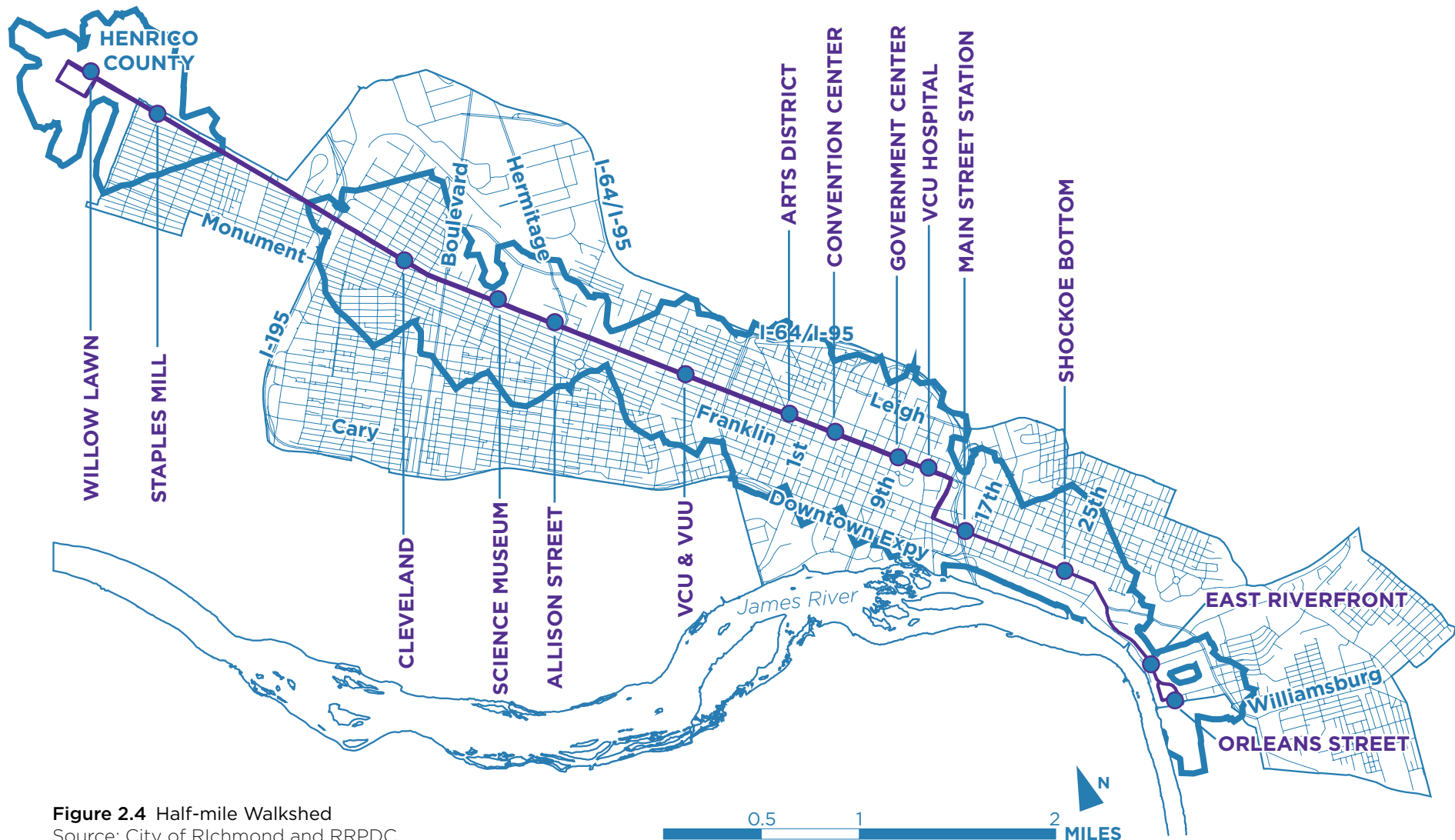
**23% OF LAND IS OCCUPIED  
BY SURFACE PARKING LOTS**

Source: City of Richmond



## HALF-MILE WALKSHED

Extending a half-mile from each station, the half-mile walkshed covers 2,168 acres of land, representing about 5 percent of the city, 668 acres of which are City-owned right-of-way, as shown in Figure 2.4. Most land use analyses in this plan use the walkshed as the geographical boundary.

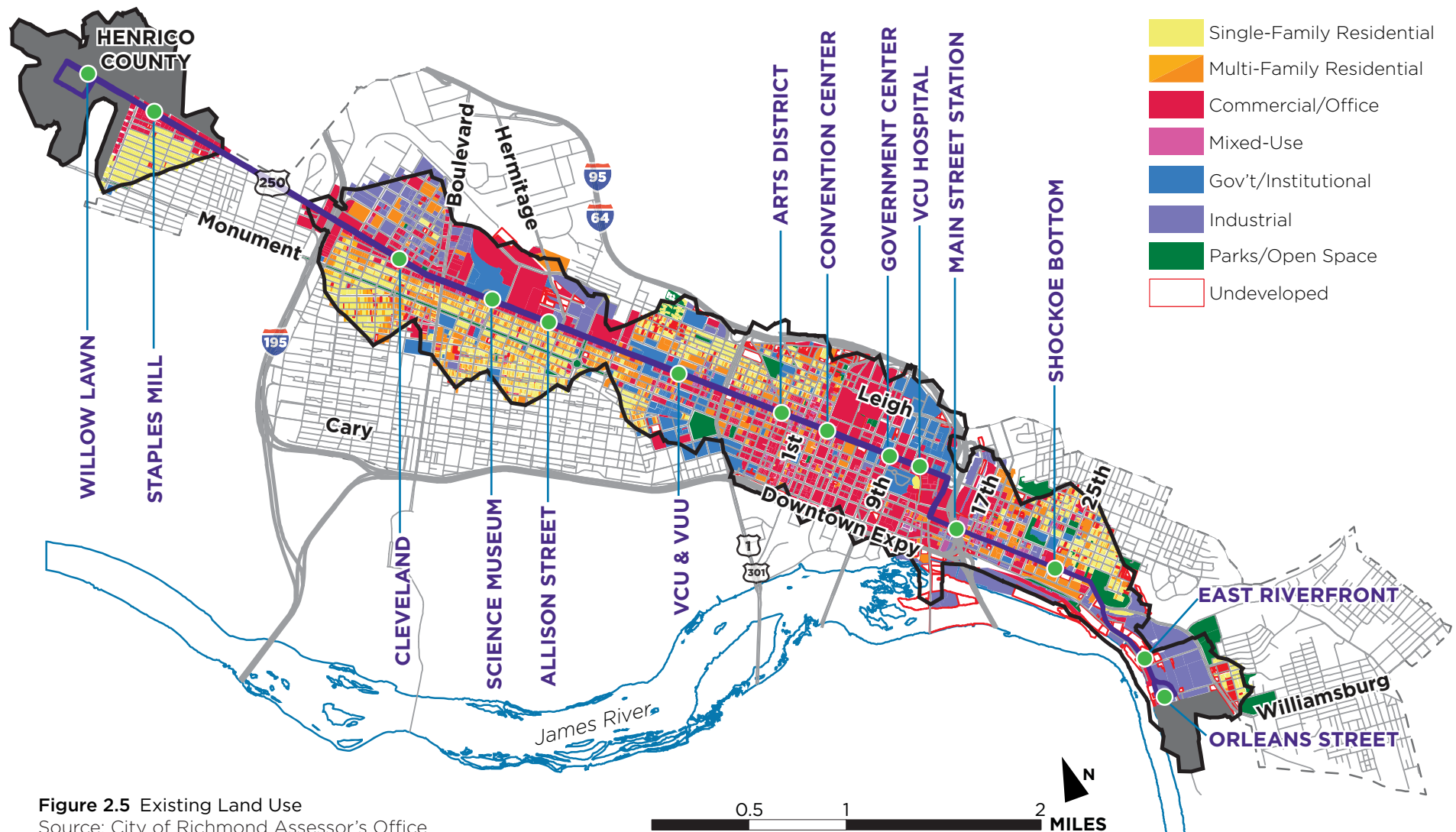


**Figure 2.4** Half-mile Walkshed  
Source: City of Richmond and RRPDC



## EXISTING LAND USE

Land uses are mixed throughout the station areas, as shown in Figure 2.5. Downtown hosts the largest concentration of commercial uses. Residential uses are dominant to the east and west of downtown. Scott's Addition and Greater Fulton are home to most of the industrial uses among the station areas.

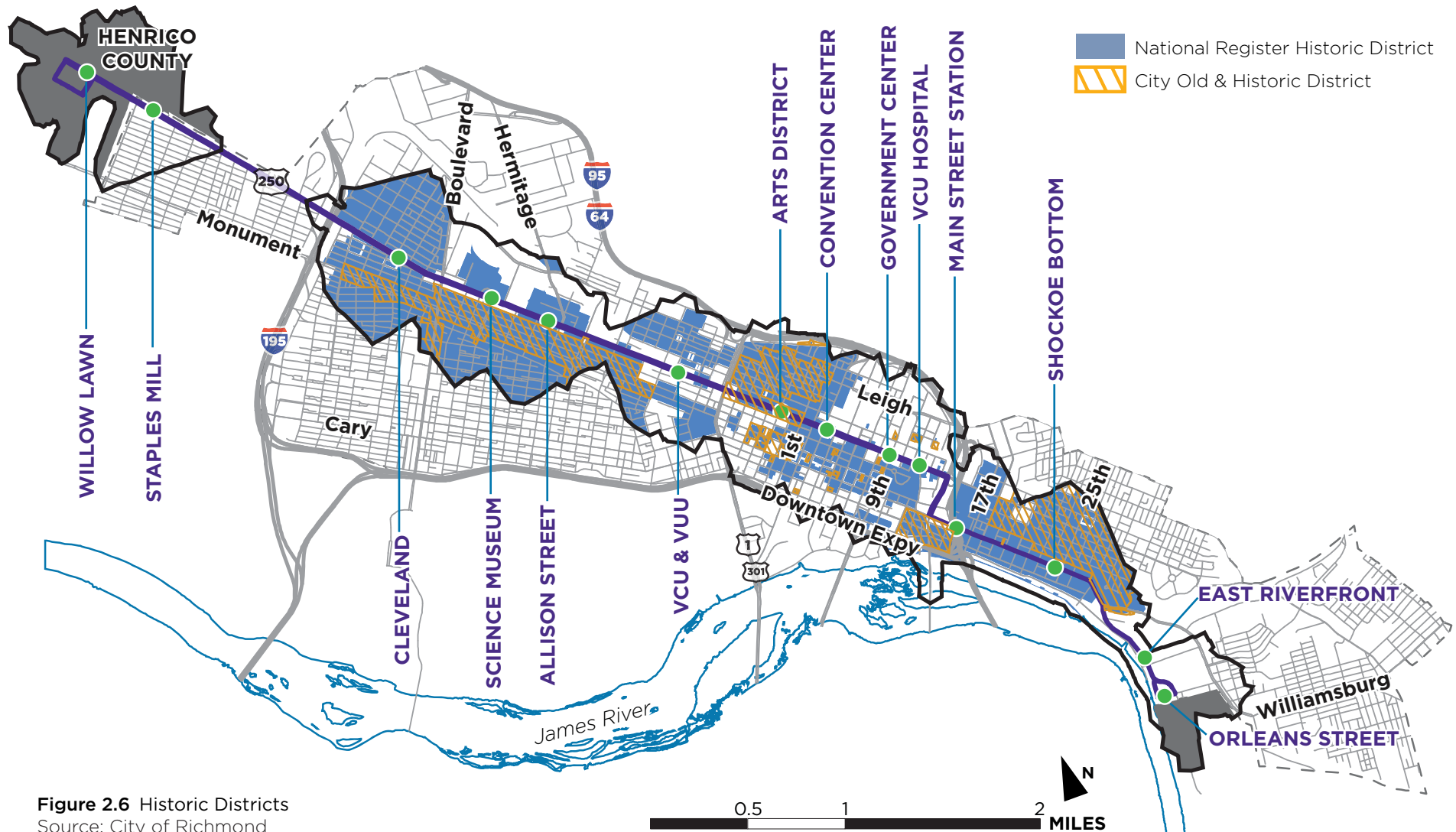


**Figure 2.5** Existing Land Use

Source: City of Richmond Assessor's Office

## HISTORIC DISTRICTS

The Pulse Corridor runs through areas of the city that hold historic significance. Nearly 60 percent of the land within the walkshed are located in National Register Historic Districts, City Old & Historic Districts, or both, as shown in Figure 2.6.

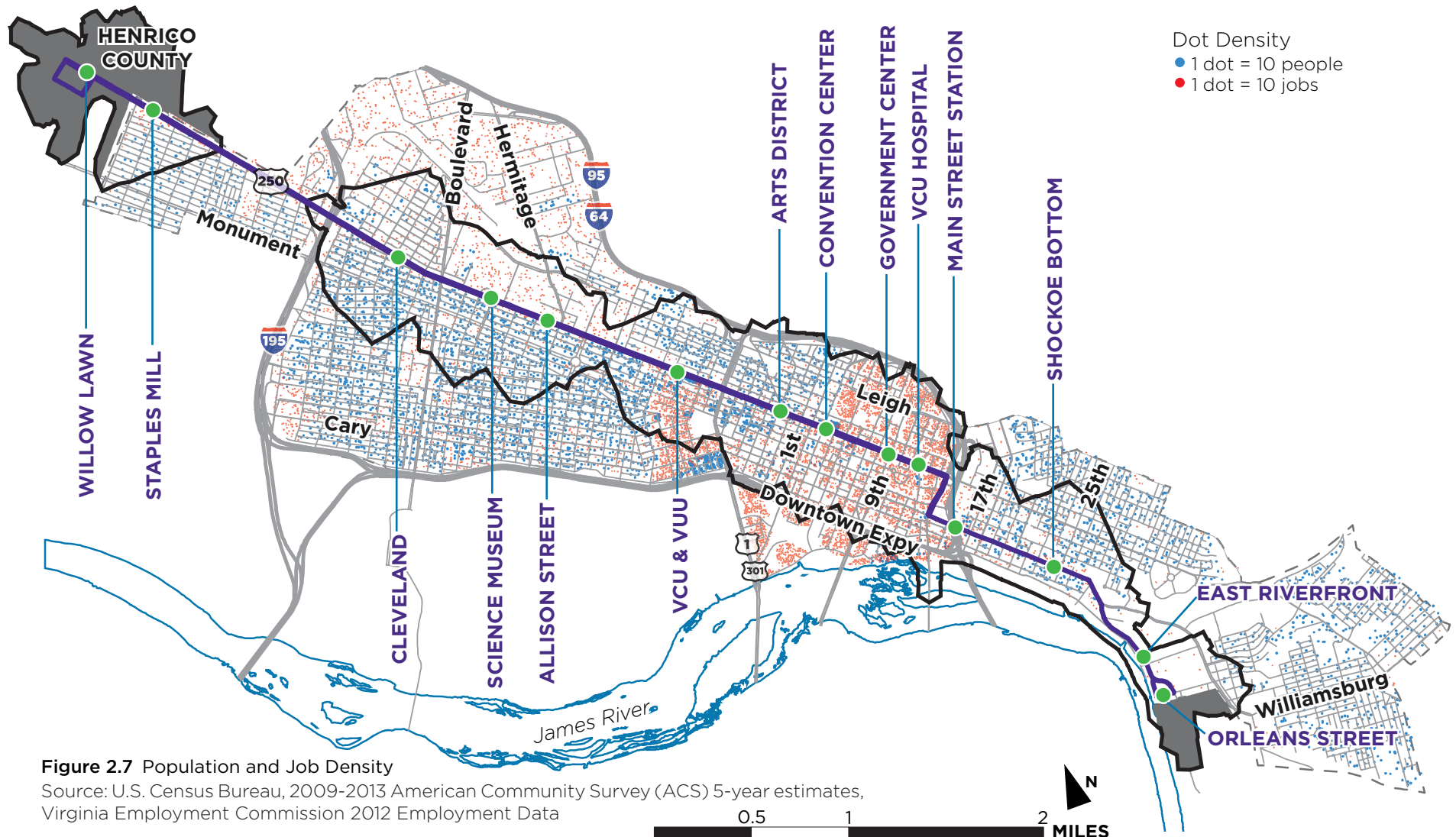


**Figure 2.6** Historic Districts

Source: City of Richmond

## ACTIVITY

The Pulse travels through the densest part of the city and is readily accessible by a multitude of development types. Figure 2.7 shows general activity trends in the demographic study area with the highest population densities between Boulevard and 3rd Street and the highest employment densities in Downtown Richmond and the VCU campuses. Dots are not precise, but are located on either residential or employment-generating parcels.



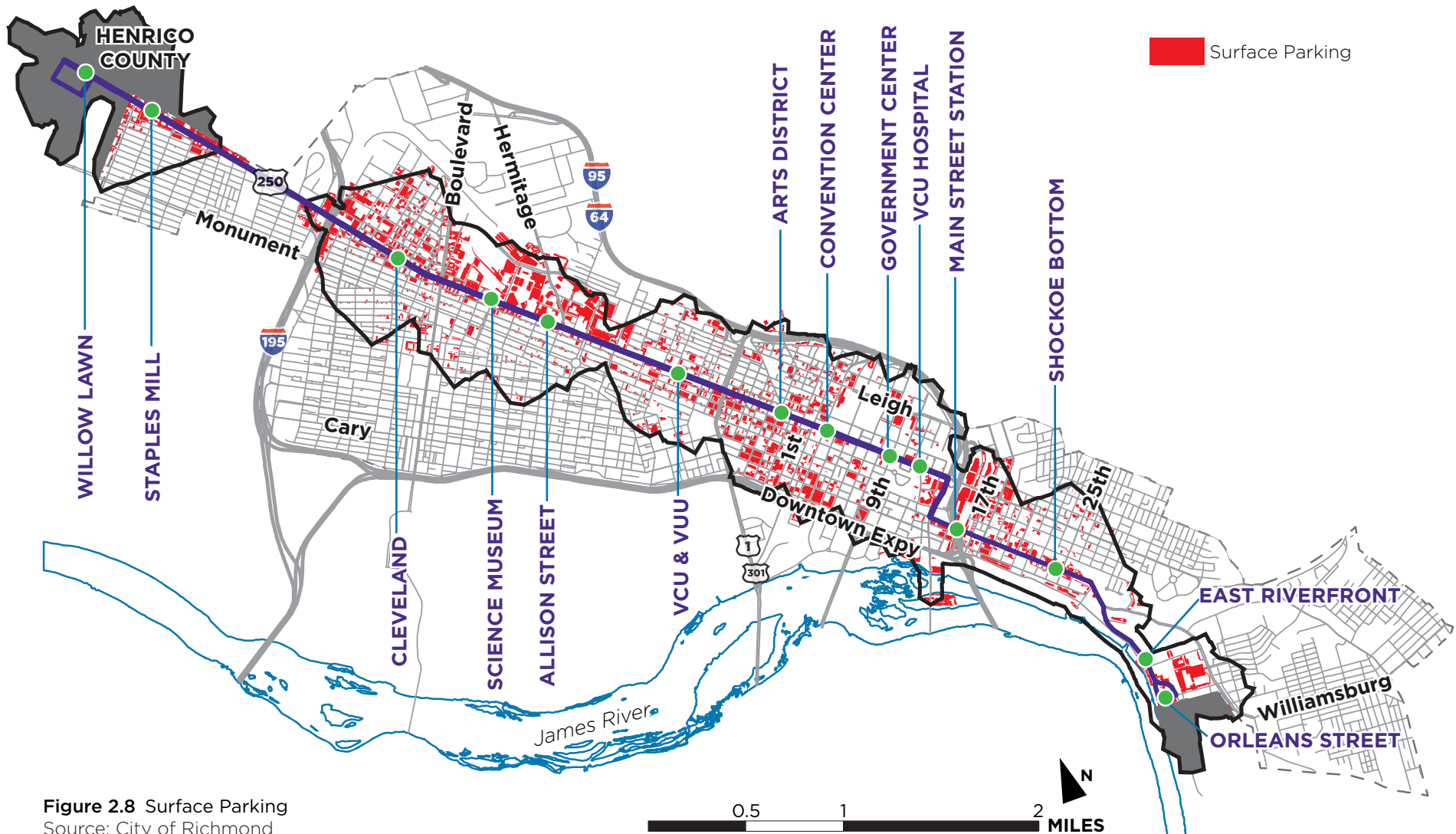
**Figure 2.7** Population and Job Density

Source: U.S. Census Bureau, 2009-2013 American Community Survey (ACS) 5-year estimates, Virginia Employment Commission 2012 Employment Data



## SURFACE PARKING LOTS

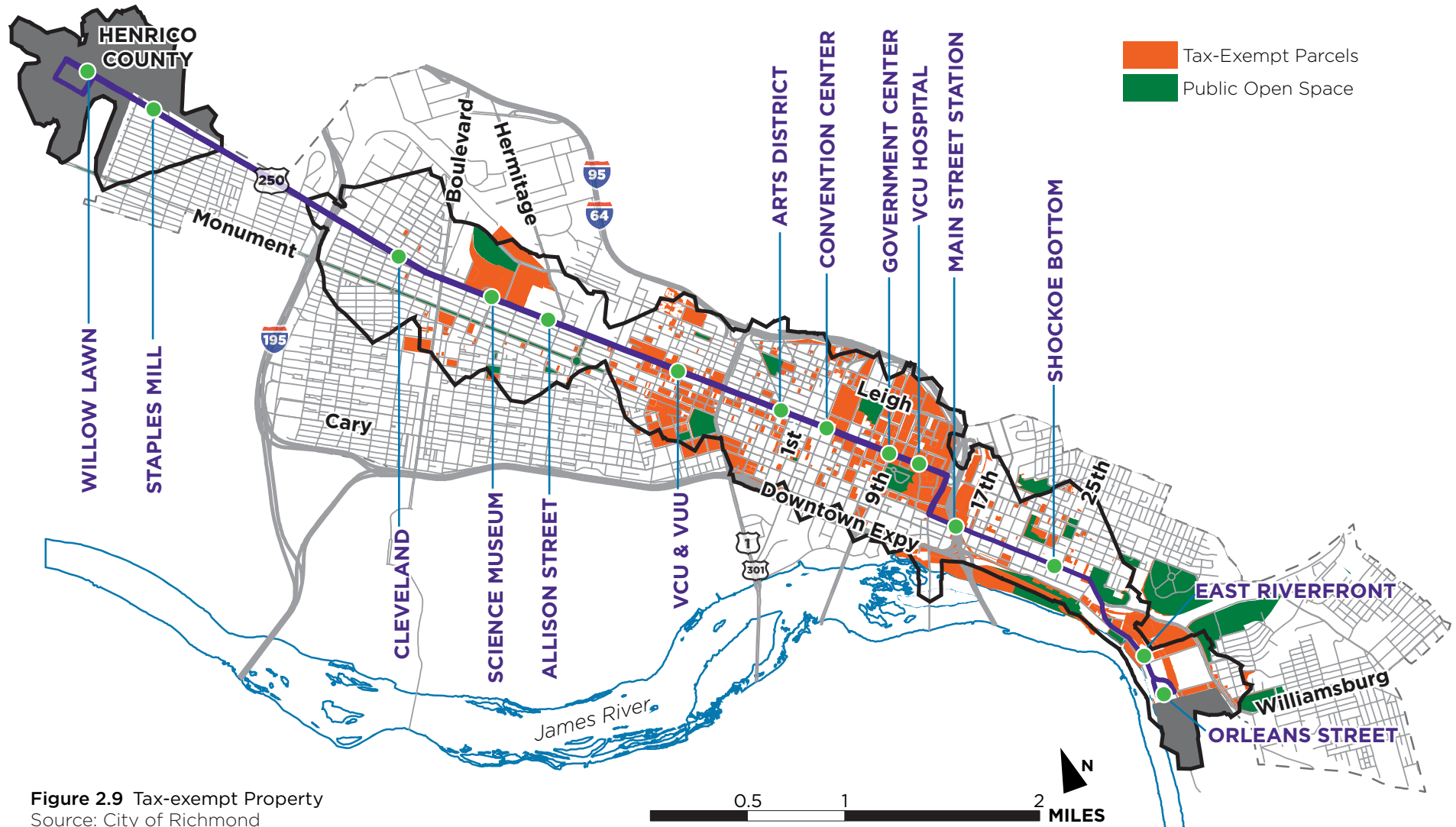
The walkshed has 341 acres of surface parking lots, or 23% of all land within the walkshed, as shown in Figure 2.8. This is more than 2.5 times the 123 acres of vacant land currently available in the station areas. As the city develops in a transit-supportive form along the Pulse Corridor, these parking lots will become key opportunities for infill development.



**Figure 2.8** Surface Parking  
Source: City of Richmond

## TAX-EXEMPT STATUS

Tax-exempt parcels occupy a significant amount of acreage in the station areas, as shown in Figure 2.9. Large concentrations occur at the Government Center and VCU Hospital stations, associated with City and State government offices as well as the medical center. Around the VCU & VUU station, there is a large cluster of tax-exempt property at VCU's Monroe Park campus. One goal of economic development is to encourage private development throughout the Corridor.

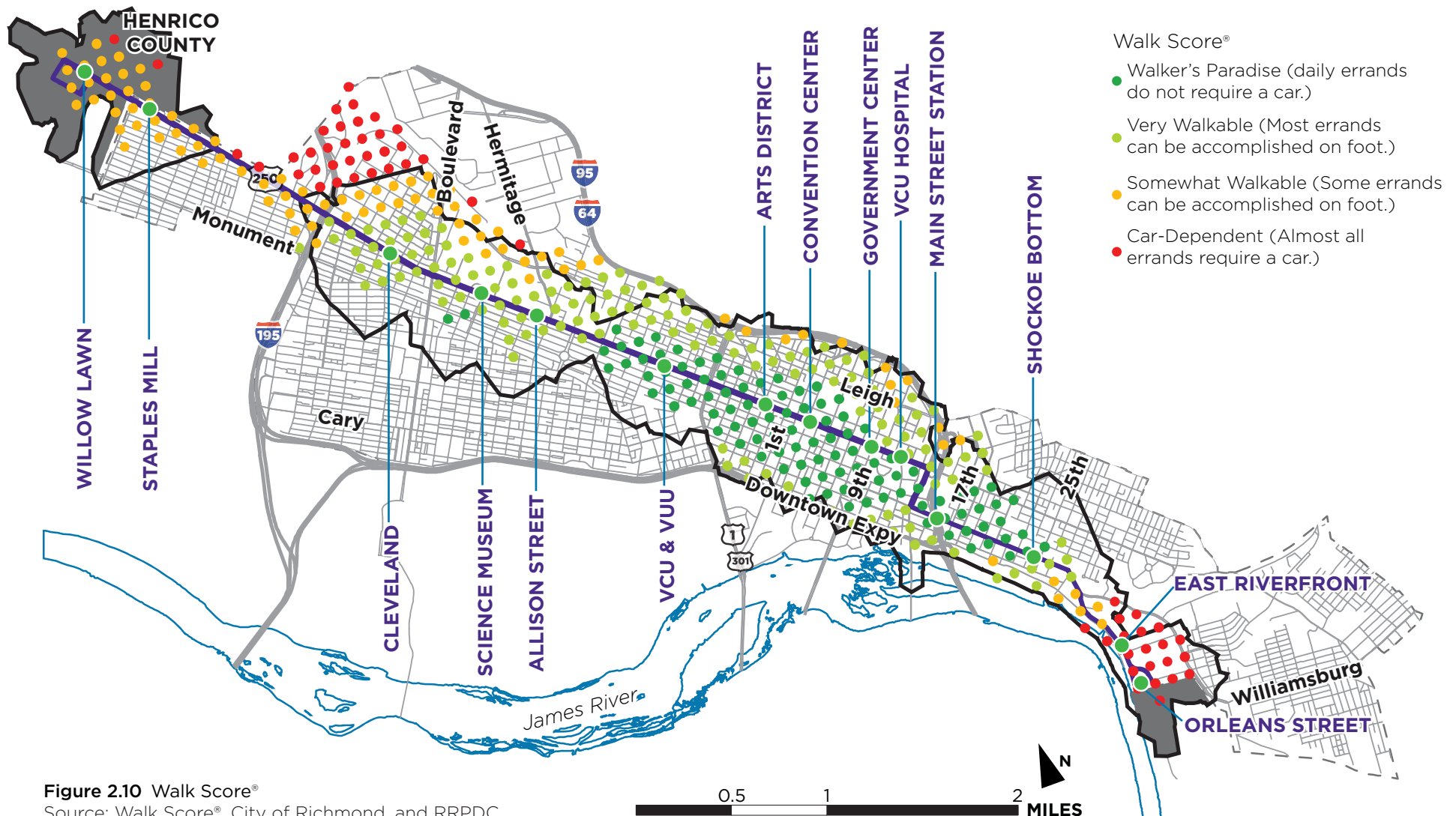


**Figure 2.9** Tax-exempt Property  
Source: City of Richmond



## WALK SCORE®

Walk Score® is a number between 0 and 100 that measures the walkability of any address, and is calculated by the proximity to amenities such as businesses, parks, theaters, and schools. While the city as a whole has a “somewhat walkable” score, the Pulse Corridor ranks in the “very walkable” category according to Walk Score’s® measures. Stations range from 29 (Orleans Station) to 95 (Government Center). The most walkable span of the Corridor is between Main Street Station and VCU/VUU Station, as shown in Figure 2.10.



**Figure 2.10** Walk Score®  
Source: Walk Score®, City of Richmond, and RRPDC

## STATION AREA PRIORITIZATION

### TYOLOGIES

Each of the 14 stations are in close proximity to some of the city's most active and desirable real estate markets and have great development potential in their own right. However, this plan distinguishes stations from each other and categorizes them into three typologies based on development patterns and land use planning needs (please see Figure 2.11):

**Pre-TOD Stations:** These areas are more suburban in street pattern, have much lower population and employment densities than the other typologies, and are automobile-oriented. Through directed planning efforts, these stations will move toward TOD forms over time.

**Emerging Stations:** These areas have pedestrian-oriented commercial nodes and corridors, and are generally urban in form. Emerging stations have the most development opportunities in the TOD context. With TOD land use changes and investments, these areas can be directed towards a TOD form.

**Established Stations:** These areas are pedestrian-oriented and highly connected to dense populations, employment centers, and a wealth of commercial activity. Established stations have key opportunities for infill development in a transit-oriented form.



Pre-TOD Stations



Emerging Stations



Established Stations

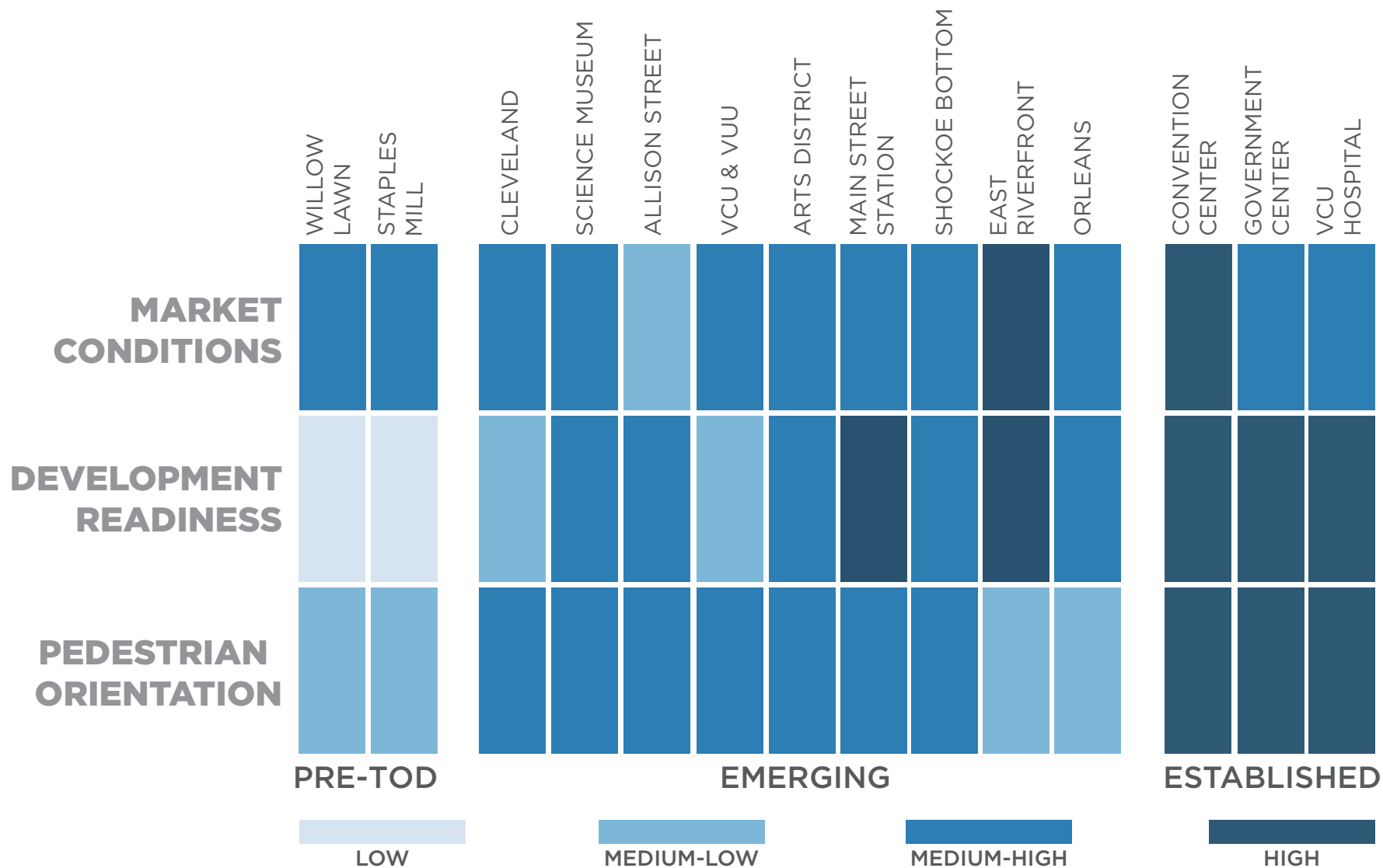
Figure 2.11 Station Area Typologies

### PRIORITIZATION MATRIX

The following pages feature the station area prioritization matrix and the 20 indicators used in its creation. The matrix, as shown in Figure 2.12, scores the 14 stations to determine which stations are most ready for transit-oriented development. These indicators are organized into three groupings:

- **Market Conditions** estimate growth and value of a station and are mostly market-driven, but can improve over time through the alteration of indicators in the other two groupings.
- **Development Readiness** estimates the physical condition of a station area and how close it is to being developed in a transit-oriented form.
- **Pedestrian Orientation** estimates the living, walking, and cycling conditions of a Station Area.

High scores in all three groupings indicate a station area is primed for successful transit-oriented development.



**Figure 2.12** Station Priority Matrix

## STATION PRIORITY MATRIX INDICATORS

### MARKET CONDITIONS

#### HOUSEHOLD GROWTH (ACS)

Higher 2000-2013 population growth scores higher

#### EMPLOYMENT GROWTH (VEC)

Higher 2008-2012 employment growth scores higher

#### PROPERTY VALUES (CITY)

Lower total property value scores higher

#### OFFICE RENT SCORE (COSTAR)

Lower average office rents score higher

#### RETAIL RENT SCORE (COSTAR)

Lower average retail rents score higher

#### COMMERCIAL PERMITS (CITY)

Higher 2010-2015 commercial permit activity scores higher

#### RESIDENTIAL PERMITS (CITY)

Higher 2010-2015 residential permit activity scores higher

### DEVELOPMENT READINESS

#### BY-RIGHT ZONING (CITY)

Higher percent of TOD-like zoning in place scores higher.

#### PARCELIZATION (CITY)

Fewer parcels per acre scores higher

#### VACANT LAND (CITY)

Higher acreage of vacant land scores higher

#### UNDER-PERFORMING LAND (CITY)

Higher acreage of lands that are underdeveloped scores higher

### PEDESTRIAN ORIENTATION

#### POPULATION DENSITY (ACS)

Higher densities score higher

#### EMPLOYMENT DENSITY (VEC)

Higher densities score higher

#### BUS FREQUENCY (GRTC)

Shorter wait time score higher

#### BLOCK PATTERN (CITY)

Fewer city blocks greater than 4 acres score higher

#### INTERSECTION DENSITY (RRPDC)

More intersections per area score higher

#### BIKE LANE ACCESS (CITY)

Higher linear footage of dedicated bike lanes scores higher

#### CAR-FREE HOUSEHOLDS (ACS)

Higher amount of households without cars scores higher

#### PARKS ACCESS (RRPDC)

Shorter distance from station to greenspace scores higher

#### WALK SCORE® (WALKSCORE.COM)

Higher walk score scores higher

*Source Abbreviations:*

*ACS: U.S. Census: American Community Survey 2013 5-year estimates*

*City: City of Richmond GIS Data*

*GRTC: Greater Richmond Transit Company*

*VEC: Virginia Employment Commission 2012 Employment Data*

## SMART GROWTH AMERICA ECONOMIC ANALYSIS

As part of the Ladders of Opportunity initiative, Smart Growth America (SGA) provided technical assistance for this plan. SGA examined expanded Walk Score® conditions, rent premiums, and absorption. The data they provided strengthened the findings of the station area priority matrix.

### WALK SCORE®

While the city as a whole has a “somewhat walkable” score, the Pulse Corridor has a “very walkable” score according to Walk Score’s® measures. Stations range from 29 (Orleans Station) to 95 (Government Center). The most walkable span of the Corridor is between Main Street Station and VCU & VUU Station.

### RENT PREMIUMS

Rents per square foot vary widely from station to station. Orleans Station has the highest office rents while three emerging stations – Cleveland, Allison, and Arts District – have some of the lowest office rents. These areas could be strengthened by new offices seeking to take advantage of BRT access and lower rents per square foot.

### NET ABSORPTION AND FAIR SHARE INDEX

Net absorption measures the net level of leasing activity in an area over a given period of time, and accounts for new leasing activity less move-outs. A hot market will have a large amount of net absorption. Weak markets will see low, and potentially negative, levels of net

absorption. SGA measured absorption in the five year span between 2010-2015.

Four of the top five stations with the most absorbed square footage are emerging stations – Arts District, Cleveland, and Science Museum of Virginia. These areas, along with Convention Center and VCU & VUU are growing faster than the other stations – with VCU & VUU (number five out of 14) having almost 100,000 more square feet absorbed than the number six spot, Main Street Station.

Finally, SGA found the Fair Share Index (FSI) for the Corridor. The FSI compares two market shares: the area’s absorption share relative to the larger market, and the area’s total square footage market share, compared to the same market. If assuming the share of absorption will be proportional to the overall market share based on square footage, then the FSI would be equal to 1.0. An FSI of greater than 1.0 indicates an area “over-performing” in terms of market share, while an FSI of less than 1.0 indicates an area “under-performing.”

The Pulse Corridor’s overall market share at the start of the 2010-2015 period was 41 percent of total square footage in the city. However, its 4.4 million square feet of net absorption is 60 percent of the city’s 7.4 million. Thus, the Pulse Corridor has an FSI of 1.48, indicating this is a growing market.



## RESULTS OF STATION ANALYSIS

The combination of the Station Priority Matrix and SGA's market analysis determines the following station prioritization:

### PRE-TOD STATIONS

Station Areas:

- Willow Lawn
- Staples Mill

These two stations occupy a small portion of the city and are primarily in Henrico County. The city section is a low-density, gridded neighborhood with automobile-oriented commercial. The area scores high in Market Conditions, but low scores elsewhere indicate this area's development pattern is largely set as a lower-density suburb.

### ESTABLISHED STATIONS

Station Areas:

- Convention Center
- Government Center
- VCU Hospital

The Established stations constitute the core of the city. These areas have a strong street grid, a dense pattern of development with a high concentration of population and employment, and development conditions that foster or require transit-oriented development patterns.

While largely developed, there are opportunities to rethink large, government-owned parcels that could be redeveloped into a neighborhood form, used to enhance development opportunities, or serve as

sites for organizations that better connect into the larger downtown community (such as Reynolds Community College, Virginia Biotechnology Research Park, and the VCU Medical Center).

### EMERGING STATIONS

Station Areas:

- Cleveland
- Science Museum of Virginia
- Allison Street
- VCU & VUU
- Arts District
- Main Street Station
- Shockoe Bottom
- East Riverfront
- Orleans

The Emerging stations have wider variation among each other but for the most part are dense and walkable. These stations have strong street networks, but need dedicated planning, development, and infrastructure efforts to achieve a TOD land use pattern and form.

The East Riverfront and Orleans stations feature growing markets and few barriers to development. However, as a result of a destructive urban renewal program that demolished the neighborhood near the station areas and the James River and Gillies Creek floodplain, this area has low connectivity. Public infrastructure investment should focus on improving connectivity to the stations and encouraging TOD form of development.

### THE SIX PRIORITY STATIONS

The following six stations, all from the Emerging typology, were found to have the most potential for transit-oriented development. With directed planning intervention and infrastructure improvements, development in these station areas will make the Pulse line more viable and the Corridor more vibrant.

Those stations, from west to east, are:

- Cleveland
- Science Museum of Virginia
- Allison Street
- Arts District
- Main Street Station
- Orleans





### **3. CORRIDOR-WIDE FRAMEWORK**

## PLAN FRAMEWORK

Development along the Pulse Corridor will follow six guiding principles to reach three goals through targeted recommendations that work toward those goals (please see Figure 3.1).

### CORRIDOR PRINCIPLES

Development along the Corridor will seek to follow six guiding principles of TOD, as described below and shown in Figure 3.2. These principles are generally accepted as best practices in supporting TOD.

- **Mixed-Use** Housing, employment, and daily needs are near each station area. Mixed use can be vertical or horizontal within a neighborhood context.
- **Viable Transportation Options** Walking and biking to accomplish everyday tasks is an option for people living and working near station areas.
- **Dense, Compact Development** New buildings are taller and larger in the Pulse Corridor to add housing and jobs to create a more walkable and vibrant area.
- **Historic Preservation** Retaining existing historic buildings is a priority. Smaller historic buildings add to a diversity of style and use along the Corridor.
- **Transit Access** Individuals have easy access to the Pulse and to the local transit network, enabling less dependency on auto-travel.
- **Connectivity** A highly-connected street grid and transit network is the glue that leads to successful TOD.

**6 PRINCIPLES**  
Guide Richmond's  
transit-oriented  
future

**3 GOALS** Reach a highly walkable Corridor

**RECOMMENDATIONS & VISIONS** Outline steps to reach the goals:

- 35 Corridor-wide Recommendations
- 71 Station Area Recommendations
- 14 Station Area Vision Statements

Figure 3.1 Plan Framework

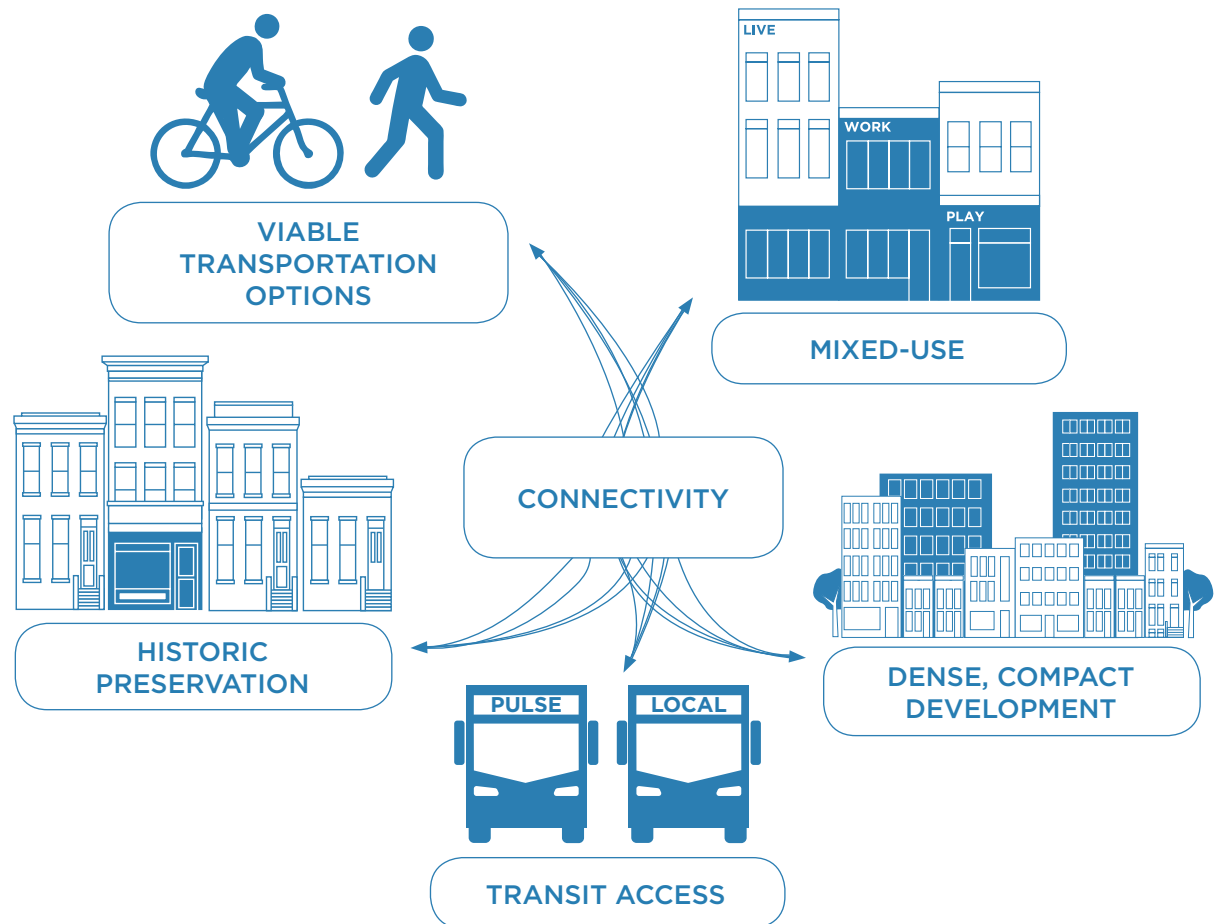
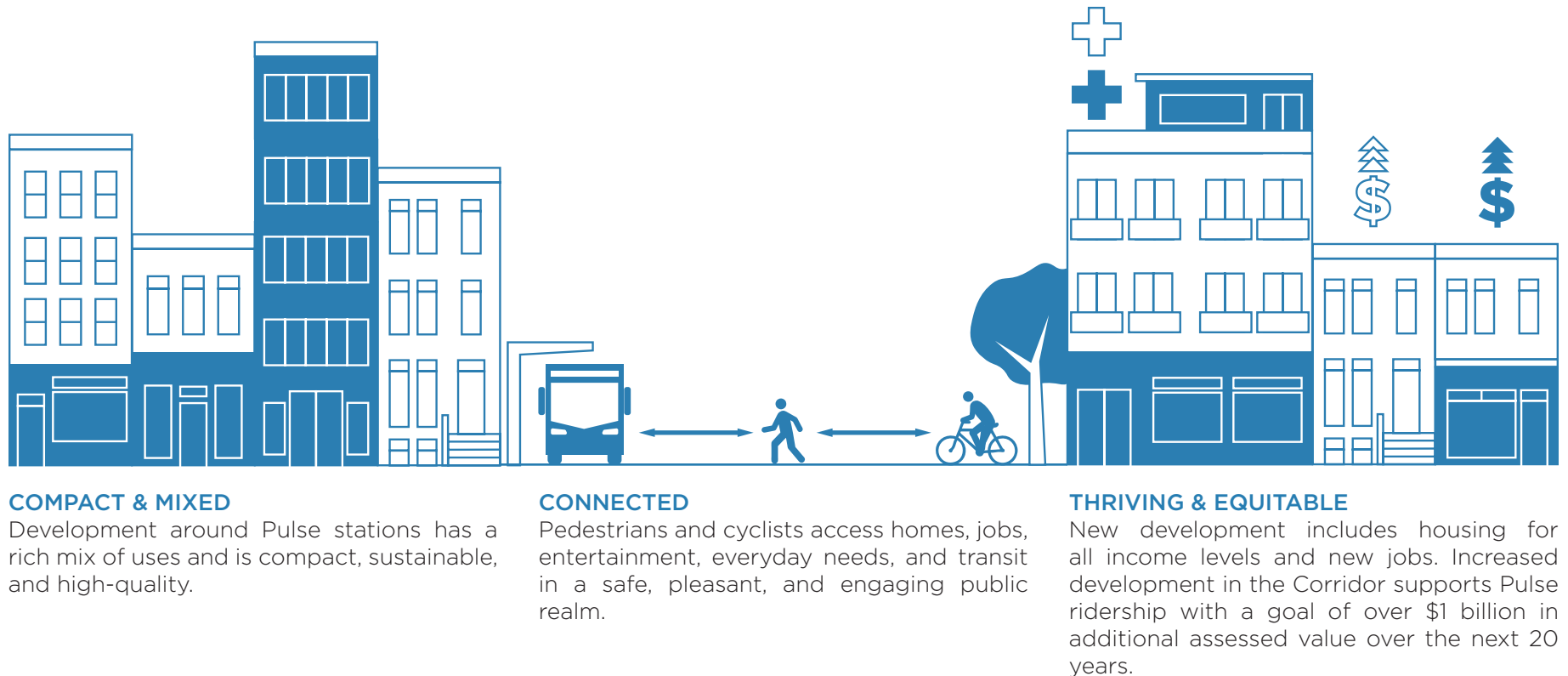


Figure 3.2 Pulse Corridor Principles

## CORRIDOR GOALS

Through the public and stakeholder meetings, the City established three goals for future development along the Pulse Corridor: to be **Compact & Mixed**, **Connected**, and **Thriving & Equitable** (please see Figure 3.3).



**Figure 3.3** Pulse Corridor Goals



## CORRIDOR-WIDE RECOMMENDATIONS

The 35 Corridor-wide recommendations described below work in concert to create a highly walkable Pulse Corridor is that is **Compact & Mixed**, **Connected**, and **Thriving & Equitable**.

### COMPACT & MIXED

**CW.1 Create a Plan of Development overlay.** A Plan of Development overlay along the Corridor will outline form elements projects must incorporate into their site plan to meet TOD goals. (Please see Figure 3.4.)

- **Hold the corner:** Buildings and spaces at intersections have active ground floors that wrap around the corner.
- **Entrances face the street:** Main entrances to businesses and residences front the street, fostering pedestrian activity.
- **Appropriate setbacks/stepbacks:** Commercial uses are closer to the street while residential uses are setback to foster privacy and to create a semi-public space. Stepbacks at upper stories create a means to honor existing form without overwhelming it.
- **Transparency:** Facade fenestration allows visibility to and from the street. This is especially important on the ground floor, where fenestration should occupy a higher percentage of the building face.
- **Façade articulation:** Long, monolithic façades should be broken up and made more human-scale by varying the streetwall plane, height, colors, and materials.
- **Screened parking/services:** Attractive landscaping pushed to the sidewalk help maintain a streetwall and mitigate the disruption caused by surface parking lots and utilitarian services.



Hold the Corner



Appropriate Setbacks/Stepbacks



Entrances Face the Street



Transparency



Façade Articulation



Screened Parking/Services

**Figure 3.4** Plan of Development Overlay Form Elements

Under the Plan of Development Overlay, developers must make considerations to each of the six elements in site plan design, which are key in creating an engaging pedestrian environment.

**CW.2 Rezone the Corridor to match the future land use map.** Priority station areas are Cleveland, Science Museum, Allison, Arts District, Main Street Station, and Orleans. Recommended changes to future land use, as shown in Figure 3.5, will help the Corridor achieve a more transit-oriented form. Future land use designations give the City the ability to direct new development to match the goals of this plan and enables zoning changes where existing zoning and future land use differ. The future land use categories are described in Table 3.1. Chapter 4 has detailed maps of each station area with descriptions of land uses as proposed around each station.

**CW.3 Create a new mixed-use zoning district that allows mid-rise buildings, up to 12 stories in building height.** Current zoning districts do not allow the type of development envisioned for the Nodal Mixed-Use land use category, and sometimes for the Corridor Mixed-use land use category. A new district would fill this gap in the zoning ordinance and provide opportunities to build mid-rise buildings.

**CW.4 Encourage underground and wrapped parking decks.** Incentivize underground parking, require wrapping of structured parking, discourage the development of new surface parking lots along the Corridor, and encourage redevelopment of existing surface lots as new infill sites. Surface parking has a negative effect on the streetscape, deadens overall activity, and presents an opportunity for redevelopment (please see the Appendix for surface parking analysis).

**CW. 5 Encourage contextual small-scale infill development.** Remove parking requirements for smaller-scale projects as a way to reduce barriers to entry and provide for a diversity of housing choices.

**CW. 6 Update the map of Street-Oriented Commercial and Priority Streets along the Pulse Corridor to incorporate into the Zoning Ordinance.** The existing street-oriented commercial designation should be re-examined and/or expanded to other areas of the city. A new “priority streets”

designation would identify streets whose streetscape and pedestrian experience are crucial for a neighborhood and would have similar requirements as “principal streets.” This map will be established as part of a future City-initiated rezoning process in consultation with neighborhood stakeholders, property owners, and transportation officials.



**CW.7 Improve existing parks and establish new open space.** Improve existing parks and identify opportunities for new park space through the use of City-owned land and incentives for privately-created public open space.

## FUTURE LAND USE & ZONING

The Future Land Use categories below in Table 3.1 describe the general vision for an area and its land use. Multiple potential future zoning districts for each Future Land Use are listed because while these Future Land Use categories are broad enough to cover multiple differing areas along the Corridor, specific zoning districts will be proposed and vetted as part of a City-initiated rezoning process. A City-initiated rezoning process involves extensive public


input to evaluate and determine new zoning designations that align with adopted Future Land Use, but are also more precisely tailored to that area's existing context and community vision. Zoning designations stipulate what a property owner can legally build on their parcel and include height limits, setback requirements, and permitted uses, and sometimes form-based requirements, such as fenestration and entrance regulations. After the rezoning process and adoption, properties will have new zoning designations.

**Table 3.1** Future Land Use Categories




Land Use Category and Description	Details	Example Photograph
<p><b>Downtown Mixed-use</b></p> <ul style="list-style-type: none"> <li>Central business district of the Richmond region features high-density development with office buildings, apartments, and a mix of complementary uses, including regional destinations.</li> <li>Higher-density pedestrian- and transit-oriented development encouraged on vacant or underutilized sites; new development should be urban in form and may be of larger scale than existing context.</li> <li>Active commercial ground floor uses required on street-oriented commercial frontages. Active ground floor uses and design required on priority street frontages.</li> <li>Driveway entrances required to be off alleys whenever possible; new driveways prohibited on street-oriented commercial and priority street frontages.</li> <li>Little to no setback of new development unless to create pedestrian-oriented amenities like plazas and outdoor dining.</li> <li>Surface parking prohibited as a principal use; when surface parking is provided as an accessory use, it should be located to the rear of buildings and screened by shade trees.</li> <li>Parking requirements are substantially less in these areas than other areas of the city and are largely eliminated.</li> </ul>	<p><b>Density/Size:</b> High density, buildings typically a minimum height of 5 stories.</p> <p><b>Potential Future Zoning Districts:</b> B-4, RF-2.</p> <p><b>Primary Uses:</b> Diverse mix of office, retail, personal service, multi-family residential, and cultural uses.</p> <p><b>Secondary Uses:</b> Institutional and governmental uses, plazas, squares, pocket parks, and open space.</p>	
<p><b>Nodal Mixed-use</b></p> <ul style="list-style-type: none"> <li>Transit-oriented district located immediately adjacent to the Pulse BRT or other frequent transit service at key gateways and prominent places in the city in order to provide for significant, urban-form development in appropriate locations.</li> <li>Higher-density pedestrian- and transit-oriented development encouraged on vacant and underutilized sites; new development should be urban in form and may be of larger scale than existing context. It should directly engage with the prominence of Nodal Mixed-Use places and the public realm.</li> <li>Highly active street frontages and urban design features that encourage pedestrian activity required.</li> <li>Driveway entrances required to be off alleys whenever possible; new driveways prohibited on street-oriented commercial and priority street frontages.</li> <li>Little to no setback of new development unless to create pedestrian-oriented amenities like plazas and outdoor dining.</li> <li>Surface parking prohibited as a principal use; when surface parking is provided as an accessory use, it should be located to the rear of buildings and screened by shade trees.</li> <li>Parking requirements are reduced to allow more market-based parking strategies, including shared parking.</li> </ul>	<p><b>Density/Size:</b> High density, buildings typically a minimum height of 5 stories.</p> <p><b>Potential Future Zoning Districts:</b> B-4, B-5, RF-1, RF-2, or new district.</p> <p><b>Primary Uses:</b> Office, retail, personal service, cultural, and multi-family residential.</p> <p><b>Secondary Uses:</b> Institutional and governmental uses, plazas, squares, pocket parks, and open space.</p>	



**Table 3.1** Future Land Use Categories (continued)

Land Use Category and Description	Details	Example Photograph
<p><b>Corridor Mixed-use</b></p> <ul style="list-style-type: none"> <li>- Found along major, traditionally commercial corridors like Broad and E. Main Streets, and envisioned to provide for medium-density pedestrian- and transit-oriented infill development to fill “missing teeth” of the corridor fabric.</li> <li>- The building size, density, and zoning districts for these areas will vary depending on historic densities and neighborhood characteristics. New development should be in scale with existing context or respond to unique site characteristics and opportunities for redevelopment.</li> <li>- Active commercial uses required on principal street frontages. Ground floor residential uses should have street-oriented facades with setbacks, front yards, porches, and balconies where appropriate.</li> <li>- Driveway entrances required to be off alleys whenever possible; new driveways prohibited on street-oriented commercial and priority street frontages.</li> <li>- Parking lots and areas are located on the rear of buildings and require screening; shared parking requirements are encouraged to allow for commercial development while ensuring adequate residential parking.</li> </ul>	<p><b>Density/Size:</b> Medium density, buildings generally ranging from 2 to 10 stories with additional height where appropriate.</p> <p><b>Potential Future Zoning Districts:</b> UB-2, B-5, B-6, RF-1, or a new district.</p> <p><b>Primary Uses</b> Office, retail, personal service, cultural, and multi-family residential.</p> <p><b>Secondary Uses</b> Institutional and governmental uses, plazas, squares, pocket parks, and open space.</p>	
<p><b>Neighborhood Mixed-use</b></p> <ul style="list-style-type: none"> <li>- Neighborhood Mixed-use areas are cohesive districts that provide a mix of uses, but with a larger amount of residential uses than other mixed-use districts. They are an urban, walkable environment with limited neighborhood-oriented uses incorporated along key commercial corridors and at corner sites.</li> <li>- The building size, density, and zoning districts for these areas will vary depending on historic densities and neighborhood characteristics. New development should be in scale with existing context.</li> <li>- Regardless of use, buildings should have street-oriented facades with windows and door openings along street frontages. Appropriate setbacks and open space should be provided for residential uses.</li> <li>- New driveway entrances prohibited on priority streets. Vehicular access to parcels should use alleys where possible.</li> <li>- Parking lots and parking areas should be located to the rear of street-facing buildings.</li> </ul>	<p><b>Density/Size:</b> Low to medium density, 2 to 8 stories, depending on neighborhood.</p> <p><b>Potential Future Zoning Districts:</b> R-7, R-8, R-63, B-5, B-6, B-7, RF-1, UB-2.</p> <p><b>Primary Uses:</b> Single-family and multi-family residential.</p> <p><b>Secondary Use:</b> Retail, office, personal service, cultural, institutional and governmental uses, plazas, squares, pocket parks, and open space.</p>	
<p><b>Transitional</b></p> <ul style="list-style-type: none"> <li>- Transitional areas provide a gradual transition between intense commercial areas and primarily single-family residential areas.</li> <li>- Landscaping, screening, setbacks, gradual transition of intensity or type of use, and other site design approaches should be used to create a transition.</li> <li>- The scale and type of uses will vary in order to transition to the adjacent residential neighborhood.</li> <li>- Regardless of use, buildings should have street-oriented facades with windows and door openings along street frontages.</li> <li>- New driveway entrances prohibited on primary streets and minimal driveway entrances allowed on secondary streets. Vehicular access to parcels should use alleys where possible.</li> <li>- Parking lots and parking areas should be located to the rear of street-facing buildings.</li> </ul>	<p><b>Density/Size:</b> Low to medium density, 2 to 4 stories.</p> <p><b>Potential Future Zoning Districts:</b> R-8, R-63, UB, UB-2, others as appropriate.</p> <p><b>Primary Uses:</b> Office and multi-family residential.</p> <p><b>Secondary Uses:</b> Retail, personal service, cultural, institutional and governmental uses, plazas, squares, and pocket parks.</p>	

**Table 3.1** Future Land Use Categories (continued)

Land Use Category and Description	Details	Example Photograph
<p><b>Industrial Mixed-use</b></p> <ul style="list-style-type: none"> <li>- <b>Industrial Mixed-use areas are traditionally industrial areas that are transitioning to mixed-use due to their proximity to growing neighborhoods, but still retain industrial uses.</b></li> <li>- Non-industrial use buildings should have street-oriented facades with windows and door openings along street frontages.</li> <li>- New light industrial uses are compatible with residential and office uses.</li> <li>- New driveway entrances prohibited on principal streets and minimal driveway entrances allowed on secondary streets. Vehicular access to parcels should use alleys where possible.</li> <li>- Parking lots and parking areas should be located to the rear of street-facing buildings.</li> <li>- Streetscape accommodates truck access but allows for multi-modal uses.</li> </ul>	<p><b>Density/Size:</b> Medium density, 3 to 8 stories,  <b>Potential Future Zoning Districts:</b> B-7, or a new district.  <b>Primary Uses:</b> Industrial, multi-family residential, office, retail, and personal service.  <b>Secondary Uses:</b> Cultural, institutional and governmental uses, plazas, squares, pocket parks, and open space.</p>	
<p><b>Industrial</b></p> <ul style="list-style-type: none"> <li>- <b>Industrial areas feature easy highway access, large parcels, and separation of residential areas, in order to allow light and heavy industrial uses.</b></li> </ul>	<p><b>Density/Size:</b> Low density, 1 to 3 stories.  <b>Potential Future Zoning Districts:</b> M-1, M-2.  <b>Primary Uses:</b> Industrial.  <b>Secondary Uses:</b> Office.</p>	
<p><b>Institutional</b></p> <ul style="list-style-type: none"> <li>- <b>Public and quasi-public entities, such as local, state, and federal government, hospitals, and universities.</b></li> <li>- Active commercial uses on ground floors are required on primary street frontages. Residential uses may be permitted on the ground floor in certain sections of the area. Regardless, ground floor residential units should still have street-oriented facades with setbacks, front yards, and balconies where appropriate.</li> <li>- New driveway entrances prohibited on primary streets and minimal driveway entrances allowed on secondary streets.</li> <li>- Ground floor parking prohibited on primary street frontages.</li> </ul>	<p><b>Density/Size:</b> Varies.  <b>Potential Future Zoning Districts:</b> B-4, B-5, I.  <b>Primary Uses:</b> Institutional and governmental uses, community centers, libraries, museums, police and fire precincts, hospitals, and schools.  <b>Secondary Uses:</b> Retail, personal service, cultural, multi-family residential, plazas, squares, and pocket parks.</p>	
<p><b>Street-Oriented Commercial</b></p> <ul style="list-style-type: none"> <li>- Buildings on streets that are designated as Street-Oriented Commercial must have ground floor commercial uses, which activate the street edge and work toward creating a more walkable environment.</li> </ul>		
<p><b>Priority Streets</b></p> <ul style="list-style-type: none"> <li>- Streets to be identified which are significant to a given property and the larger neighborhood, where buildings are required to face and engage with the street and new driveway entrances are prohibited in order to foster the pedestrian environment.</li> </ul>		
<p><b>Opportunity Area</b></p> <ul style="list-style-type: none"> <li>- Large tracts of underdeveloped land along the Pulse Corridor that are ideal for redevelopment due to proximity of the Pulse Corridor as well as adjacency to stable neighborhoods. The opportunity areas along the Corridor require further study via a small area plan.</li> </ul>		
<p><b>Significant Nodes</b></p> <ul style="list-style-type: none"> <li>- Key intersections throughout the Pulse Corridor are identified as nodes. Nodes are locations where major roads intersect and the land uses around the node currently generate a significant activity or have the potential to develop into land uses that create vibrant centers.</li> </ul>		



## FUTURE LAND USE MAP

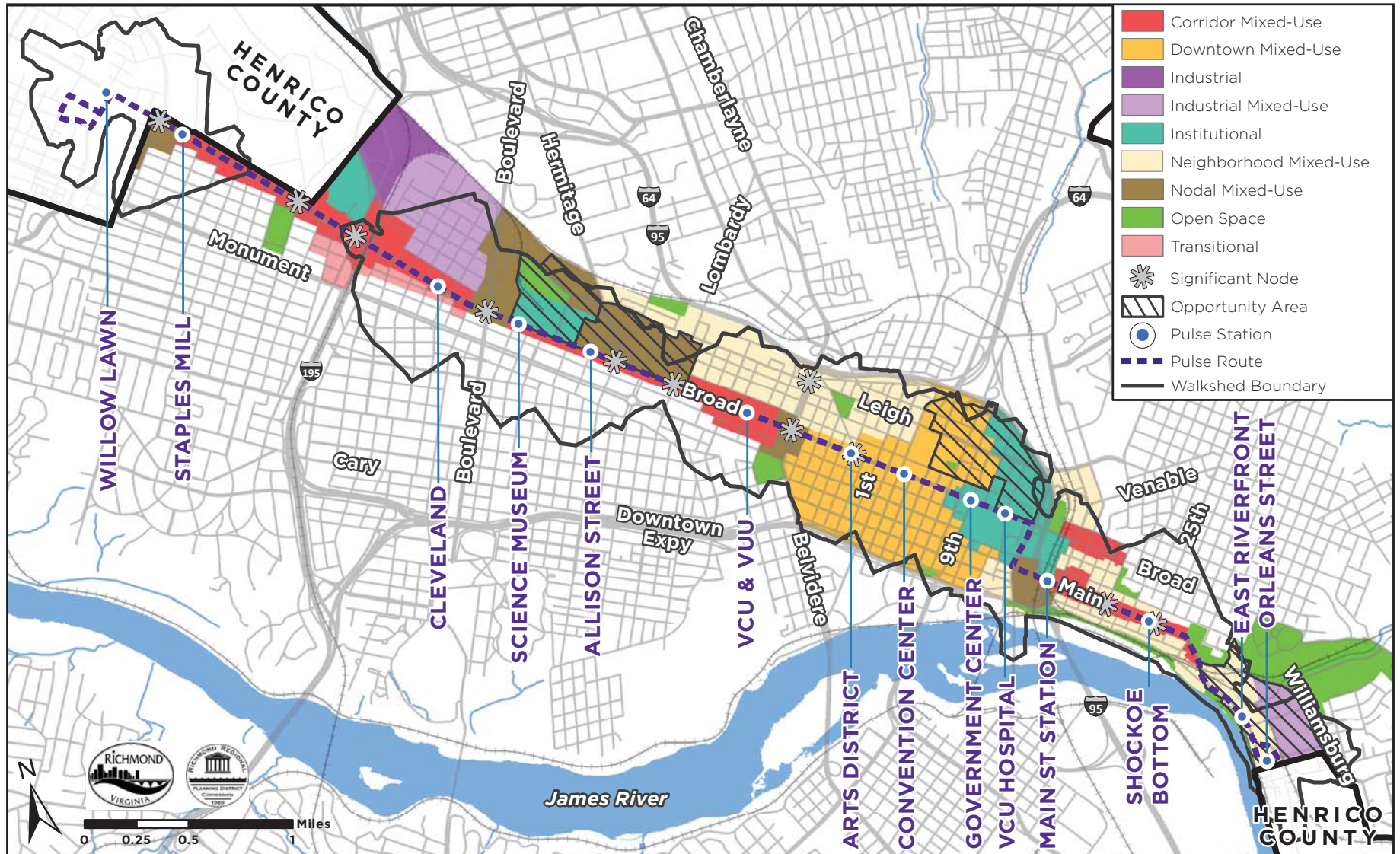


Figure 3.5 Future Land Use Map

## CONNECTED

Refer to the Future Connections Map (please see Figure 3.7) for locations of some of the “Connected” recommendations listed below.

**CW.8 Improve streetscape amenities.** To create a safe, engaging pedestrian experience, provide consistent streetscape amenities where they do not already exist. Guide CIP investment to sections of the Corridor that lack streetscape amenities such as sidewalks, pedestrian-oriented lighting, street furnishings, street trees, and underground utilities. See illustration in Figure 3.6 showing the elements of a streetscape that create a walkable environment.

**CW.9 Provide wider sidewalks and streetscape.** Focus on areas where high-density redevelopment is occurring, through road diets, or setbacks of new development.

**CW.10 Improve intersections to better accommodate pedestrians and cyclists.** Utilize context-sensitive solutions and designing to complete street standards.

**CW.11 Install sidewalks.** Construct sidewalks where missing in the neighborhoods along the Corridor and repair and improve existing sidewalks. Widen sidewalks based on changes in land use and redevelopment and minimize redevelopment that reduces sidewalk widths. Follow ADA guidelines to provide universal access.

**CW.12 Plant trees.** Fill empty tree wells along the Corridor and at station areas. Require developers to plant trees in their



**Figure 3.6 Streetscape Elements**

This illustration depicts some of the features of a walkable pedestrian environment featuring wide sidewalks, pedestrian-oriented streetlights, underground utilities, street furniture, street trees, and buildings with windows facing the street.

setbacks and in tree wells adjacent to their developments. Encourage property owners to take advantage of the City’s “Adopt a Tree” program. Amend appropriate buffers in the Zoning Ordinance to require trees.

**CW.13 Integrate public art.** Focus on key points and gateways along the Corridor, such as I-195/Broad, Broad/Belvidere, and Orleans/CSX Railroad.

**CW.14 Improve lighting.** Install pedestrian-scale and -oriented lighting throughout the Corridor.

**CW.15 Underground overhead utilities.** Bury utility lines along Broad Street and E. Main Street.

**CW.16 Align local GRTC bus routes with the Pulse in order to support existing and future development** as indicated in the recommendations outlined in the Richmond Transit Network Plan. Allow easy transfers and improve the pedestrian experience at key transit locations.

**CW.17 Improve bicycle infrastructure throughout the Corridor.** Install key projects referenced on the Future Connections Map and work towards more protected bicycle infrastructure in consultation with the Bike Master Plan while balancing the needs of travel lanes, on-street parking, and bicycle infrastructure within a limited right-of-way. Co-locate bike-share stations near the Pulse station areas.



## FUTURE CONNECTIONS MAP

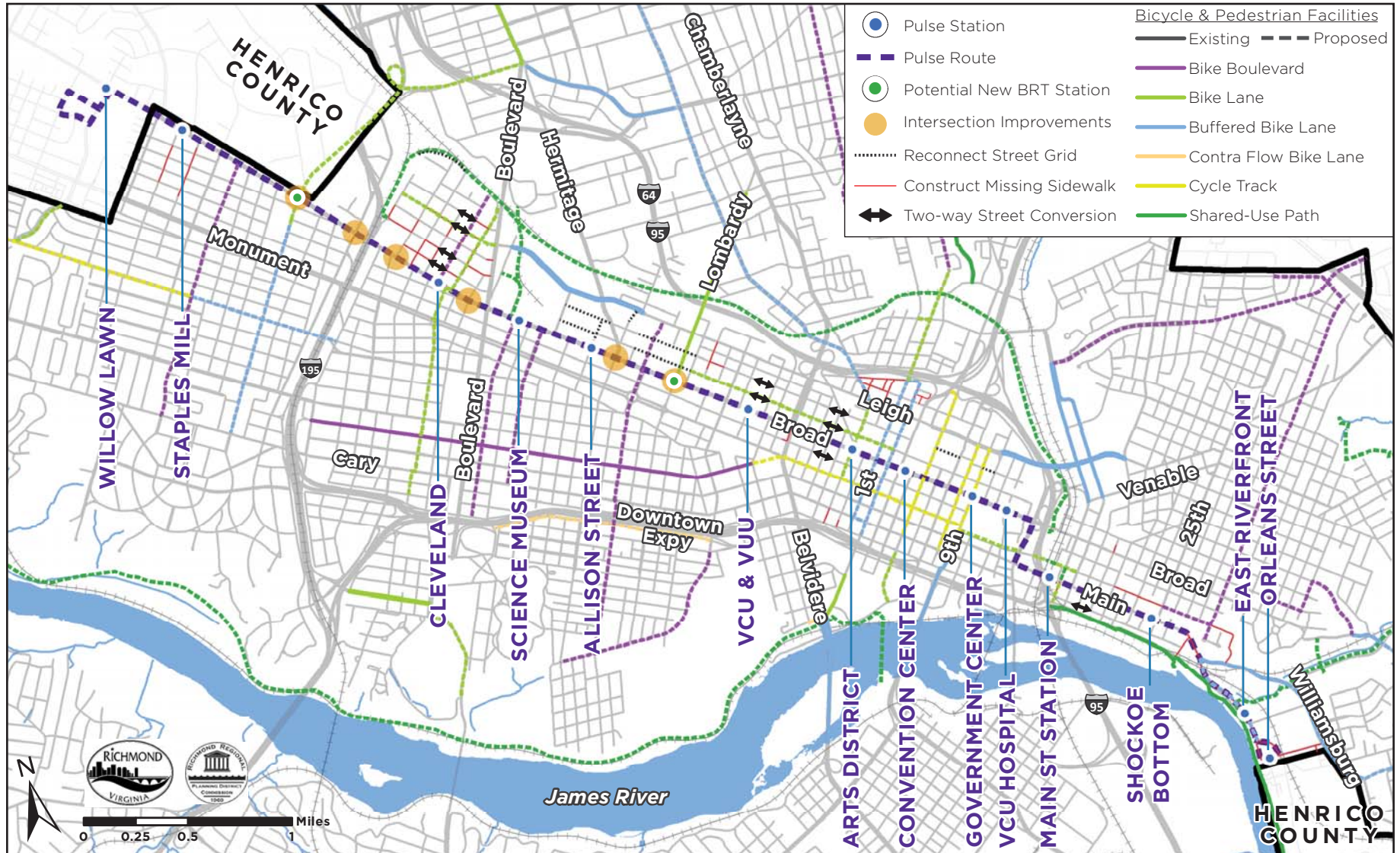


Figure 3.7 Future Connections Map

As defined in the Richmond Bicycle Master Plan, bicycle infrastructure definitions are as follows (see Figure 3-8 in the Bicycle Master Plan):

- **Bike Boulevard:** Provides a comfortable and attractive bicycling environment without utilizing physical separation. A bike boulevard includes traffic calming measures.
- **Bike Lane:** An exclusive space for bicyclists through the use of pavement markings and signage.
- **Buffered Bike Lane:** Separated by painted buffer to vehicle travel lanes or parking lanes.
- **Contra Flow Bike Lane:** A bike lane that allows bicyclists to ride against the flow of traffic.
- **Cycle Track:** Physically separated bike-way. Could be one or two way.
- **Shared-use Path:** A path that is completely separated from a roadway and shared with pedestrians.

**CW.18 Encourage car-sharing programs.** These programs can reduce the need to own an automobile for residents and employees along the Corridor and provide flexibility of travel.

**CW.19 Create streetscape design guidelines** from Belvidere Street to the City/County line to beautify W. Broad Street through additional screening standards, underground utilities, etc.

**CW.20 Encourage reduced automobile parking** in exchange for dedicated car-share spots, sponsoring a bike-share station and/

or providing additional bike parking.

**CW.21 Prioritize alley improvements.** Create better access to parking and loading via alleys, reducing the need for driveway entrances along the Corridor. Encourage driveway entrances off alleys where possible by maintaining and improving alley infrastructure and eliminating curb cuts on streets. Encourage the creation of new alleys as new development occurs.

**CW.22 Manage on-street parking as a key resource in redevelopment.** Ensure on-street parking regulations are appropriate to surrounding land use context, parking pressures, and ensuring adequate parking and loading. Study possible reforms to the residential permit parking program to manage neighborhood parking and avoid spillover. Study areas to add to regulated on-street parking, or paid on-street parking, to determine the best course of action.

**CW.23 Preserve the gridded street network.** Given the importance of the street grid to Richmond's urban environment, in terms of both connectivity and neighborhood cohesion, every effort should be made to preserve the grid, including alleys, as the city develops.

## **THRIVING & EQUITABLE**

**CW.24 Explore affordable housing** as an element of any redevelopment of City-owned land along the Corridor.

**CW.25 Direct investments of City Affordable Housing Trust Fund to property along the Corridor.**

**CW.26 Foster a stronger relationship with the State Affordable Housing Trust Fund.**

**CW.27 Award bonuses for affordable housing.** Award added building height and reduce parking requirements in exchange for the inclusion of affordable housing in projects. Update the City's affordable dwelling unit bonus provisions to include mixed-use districts envisioned in the Future Land Use plan .

**CW.28 Preserve historic structures.** In addition to providing a historical context and commemorating significant historic events, historic structures provide housing and commercial space choice, and a diversity of building type and style.

**CW.29 Support new dense, vibrant developments** in order to preserve existing historic buildings while increasing vitality at the street and neighborhood levels.

**CW.30 Explore creating a transfer of development rights program** to capture zoning value of historic structures without demolishing them.

**CW.31 Create new business improvement districts (BIDs) along the Corridor.** BIDs are public-private partnerships dedicated to showcasing an area by providing street cleaning services, developing marketing, hosting events, and conducting various other activities as supported by the

businesses within the BID. BIDs are funded by a slight increase in tax revenue on properties within the BID boundary.

**CW.32 Attract new businesses to Station Areas.** Direct new or expanding businesses to locations along the Corridor by creating a customized incentive program to support small business, expanding the Façade Improvement Program, and leveraging other existing programs such as C.A.R.E.

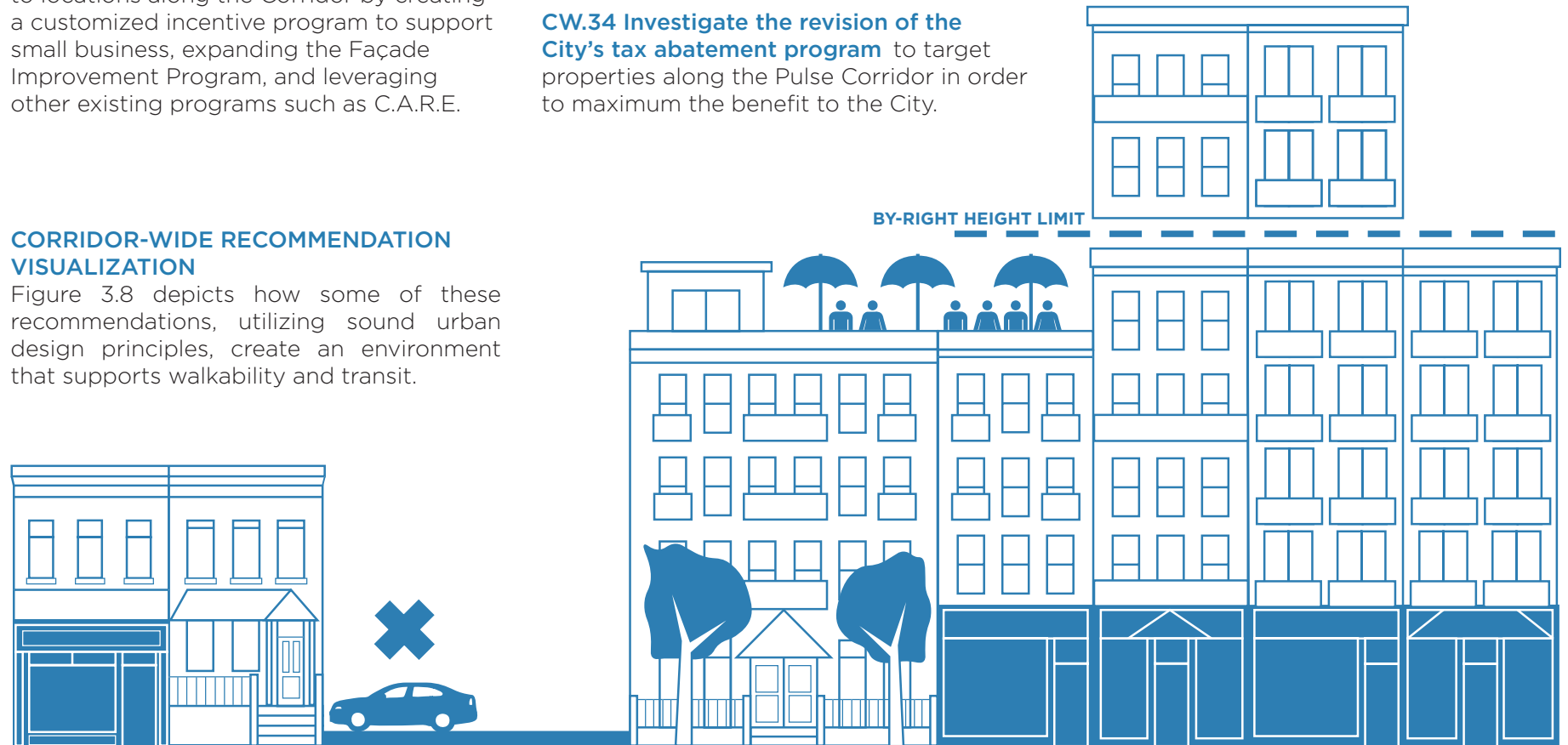
**CW.33 Incentivize transit-oriented development.** Investigate strategies such as a tax increment finance district, a technology zone, and other incentives to support enhanced job creation opportunities along the Corridor.

**CW.34 Investigate the revision of the City's tax abatement program** to target properties along the Pulse Corridor in order to maximum the benefit to the City.

**CW.35 Create and adopt an affordable housing strategy for the Pulse Corridor.** In developing that strategy, conduct an inventory of housing stock and affordability along the Corridor, and set affordable housing goals.

### CORRIDOR-WIDE RECOMMENDATION VISUALIZATION

Figure 3.8 depicts how some of these recommendations, utilizing sound urban design principles, create an environment that supports walkability and transit.



**Small-scale infill** Parking requirements removed for small-scale projects (CW.5).

**Restricted primary uses** Surface parking lots prohibited as a primary use (CW.4).

**Open Space** Buildings include open space which can be patios, porches, balconies, rooftops, pocket parks, or changes to site layout (CW.7).

**Form Regulation** Developers within the POD Overlay must follow the six form requirements to ensure high-quality TOD (CW.1).

**Affordable Housing Bonus** Additional height is allowed if a certain percentage of the units are affordable (CW.27).

**Figure 3.8** TOD Recommendation Diagram







## **4. STATION AREA PLANS**

## STAPLES MILL STATION AREA

### EXISTING CONDITIONS

The Staples Mills Station area is a “Pre-TOD Station” because low-density and automobile-oriented uses keep the area suburban in character. The area has a moderate Walkscore® and enjoys a strongly gridded street network but lacks a streetscape that encourages walkability. The Corridor between the Staples Mill Station and the Cleveland Station is an area with several opportunities for future development. This area, though outside of any Pulse Station walkshed, is examined in detail in this section.

#### MARKET CONDITIONS: MEDIUM-HIGH

##### HOUSEHOLD GROWTH • • • • •

2000-2013 population growth: 15.2%

##### EMPLOYMENT GROWTH • • • • •

2008-2012 employment growth: 1.6%

##### PROPERTY VALUES • • • • •

Walkshed property total: \$105 million +

##### OFFICE RENT SCORE • • • • •

Office rent per sq ft: \$16.06

##### RETAIL RENT SCORE • • • • •

Retail rent per sq ft: \$14.52

##### COMMERCIAL PERMITS • • • • •

2010-2015 permit activity: \$3.7 million +

##### RESIDENTIAL PERMITS • • • • •

2010-2015 permit activity: \$1.4 million +

#### DEVELOPMENT READINESS: LOW

##### BY-RIGHT ZONING • • • • •

Land coverage allowing TOD: 0%

##### PARCELIZATION • • • • •

Parcels per acre: 4.81

##### VACANT LAND • • • • •

Acres of vacant land: 1.2

##### UNDERPERFORMING LAND • • • • •

Acres of redevelopment land: 19.3

#### PEDESTRIAN ORIENTATION: MEDIUM-LOW

##### POPULATION DENSITY • • • • •

People per acre: 13.7

##### EMPLOYMENT DENSITY • • • • •

Jobs per acre: 26.5

##### BUS FREQUENCY • • • • •

Average wait time: 41 minutes

##### BLOCK PATTERN • • • • •

Percent of blocks greater than 4 acres: 9%

##### INTERSECTION DENSITY • • • • •

Amount of intersections: 163

##### BIKE LANE ACCESS • • • • •

Linear feet of bike lanes in walkshed: 0'

##### CAR-FREE HOUSEHOLDS • • • • •

Households without a car: 4.9%

##### PARKS ACCESS • • • • •

Miles from station to greenspace: 0.57

##### WALKSCORE® • • • • •

Walkscore.com score at station: 63

### CITY/COUNTY LINE

Very little of the Willow Lawn/Staples Mill combined station area is within the City of Richmond's jurisdiction, as shown in Figure 4.1. The City's share of the station area is a low-density residential neighborhood framed with automobile-oriented commercial and office uses. Henrico County's portion has a greater variety of uses.

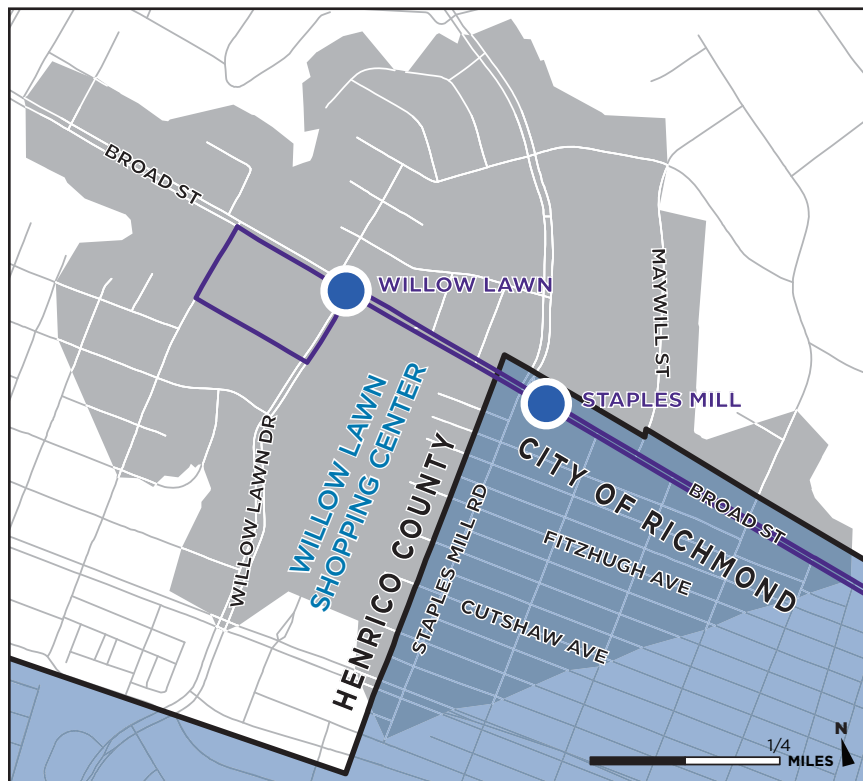


Figure 4.1 Staples Mill: City & County Boundary

### EXISTING LAND USE

Land uses are not mixed around the Staples Mill station, as shown in Figure 4.2. Commercial and office uses, comprising 37% of all land uses, front W. Broad Street and Staples Mill Road, with office uses providing a buffer between the automobile-oriented uses and the single-family neighborhood to the south. The single-family neighborhood is small in scale and comprises 59% of all land uses.

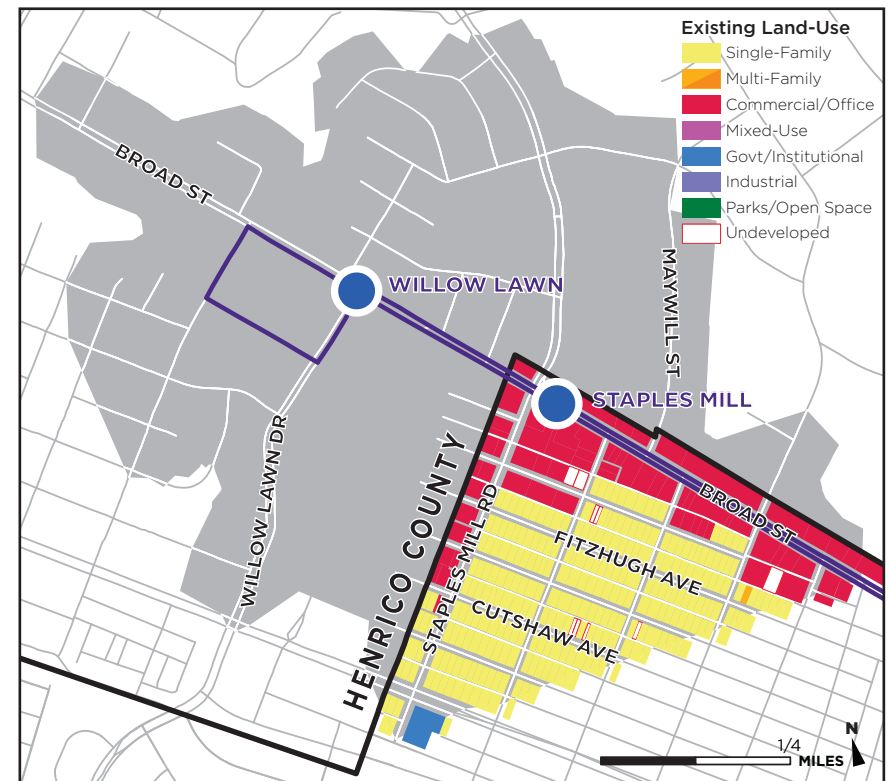
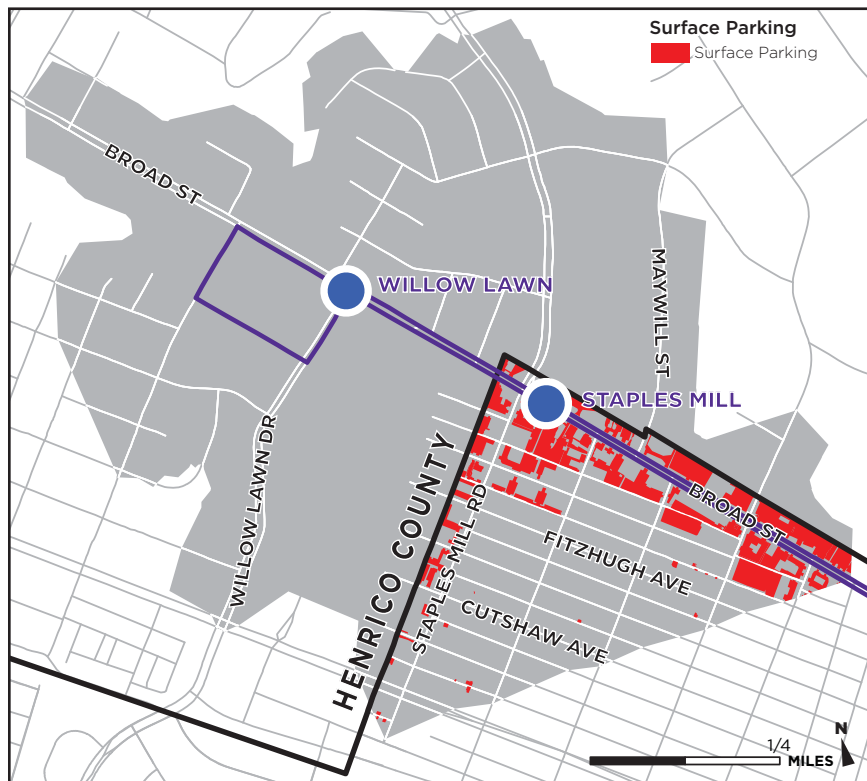


Figure 4.2 Staples Mill: Existing Land Use

## SURFACE PARKING

Surface parking is concentrated along W. Broad Street and Staples Mill Road, where non-residential uses are also concentrated. This exemplifies the automobile-oriented nature of the commercial corridors in these areas, as shown in Figure 4.3.



**Figure 4.3** Staples Mill: Surface Parking

### MALVERN GAP

The Pulse line has one gap in the half-mile walkshed centered on Malvern Avenue, as shown in Figure 4.4. The span itself is a half-mile in length and, while it currently has too low of density to support a Pulse station, this could be an area for a future station. Sauer's Garden is to the south of W. Broad Street. North of W. Broad Street after a shallow frontage is the Henrico County Line and the United Methodist Family Services (UMFS) Campus.

### Demographics

This area here has a population of just under 1,000, a median household income of \$48,581, and a dwelling unit density of 5.5 units per acre of residential land (much lower than FTA's recommended minimum of 12 dwelling units per acre for BRT). Despite the absence of a Pulse station, the area has high-frequency local bus service.

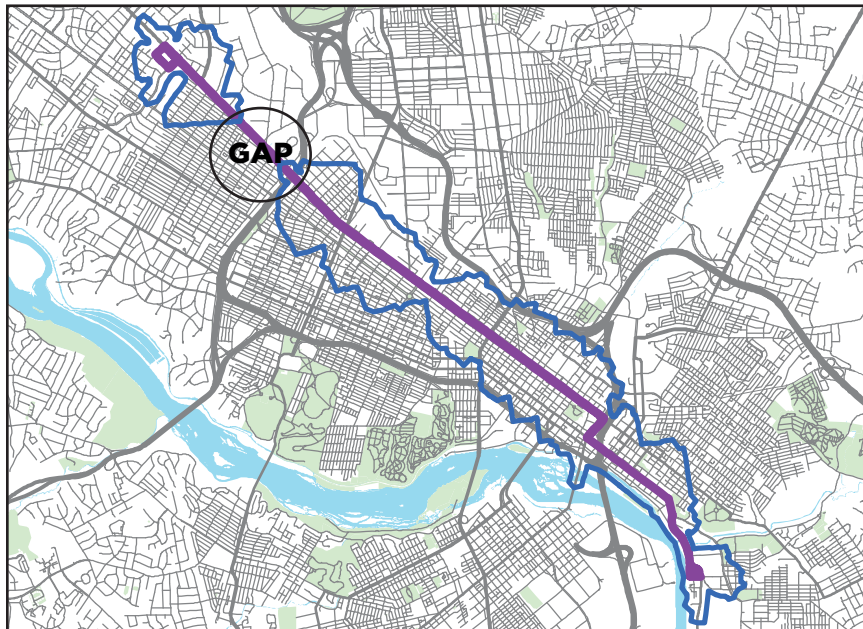


Figure 4.4 Malvern Gap: Walkshed Gap

### Existing Land Use

The Sauer's Gardens neighborhood is mostly small, single-family homes with scattered duplexes and apartment buildings, as shown in Figure 4.5. At the center of the neighborhood is Thomas Jefferson High School.

On the north side of W. Broad Street, parcels between Dabney Road and Westmoreland Ave extend about 110' to 140' before meeting with the Henrico County line. It is common to find surface parking lots on the Richmond parcels with primary buildings on the Henrico side of the line.

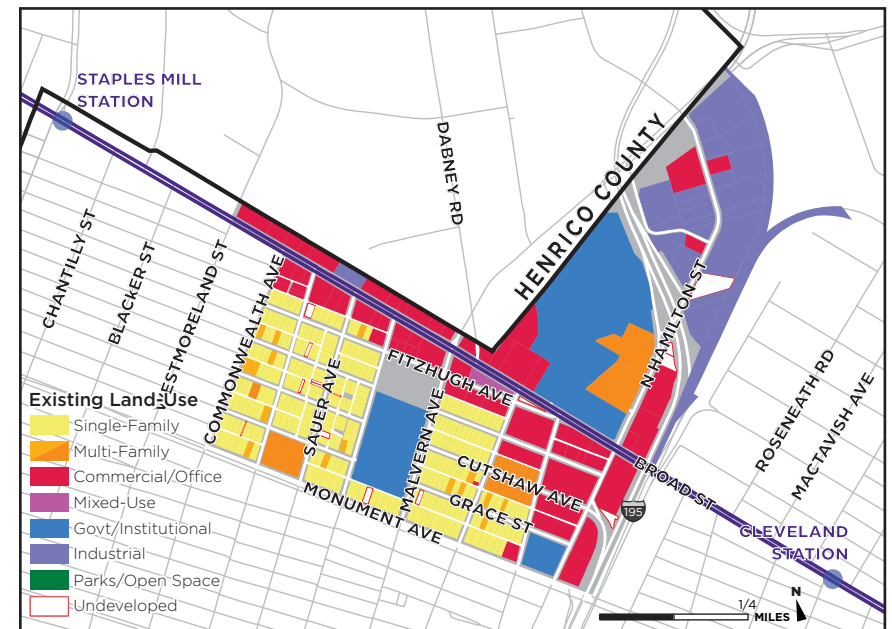


Figure 4.5 Malvern Gap: Existing Land Use



### Surface Parking

W. Broad Street itself is fronted by automobile-oriented commercial uses. Most buildings are separated from the street by surface parking lots, though some buildings have minimal setbacks. Surface lots are common along the Hamilton Street corridor as well. (Please see Figure 4.6.)

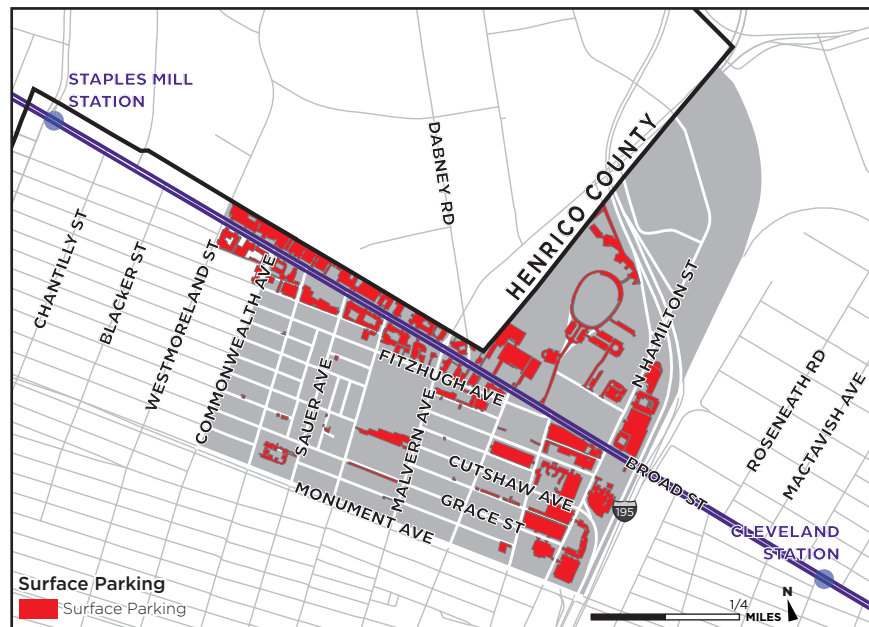


Figure 4.6 Malvern Gap: Surface Parking

### Opportunity Sites

The major opportunities here are large parcel clusters with single owners, as shown in Figure 4.7. From east to west, the clusters are the Estes headquarters (a freight transportation provider), the United Methodist Family Services (UMFS) campus, the former site of the Commonwealth's Department of Game and Inland Fisheries now owned by 2252 LLC, and nearly two blocks of parcels owned by Sauer Properties.

Together these parcels occupy a significant amount of the W. Broad Street frontage and could be key elements in the future of this portion of W. Broad Street.

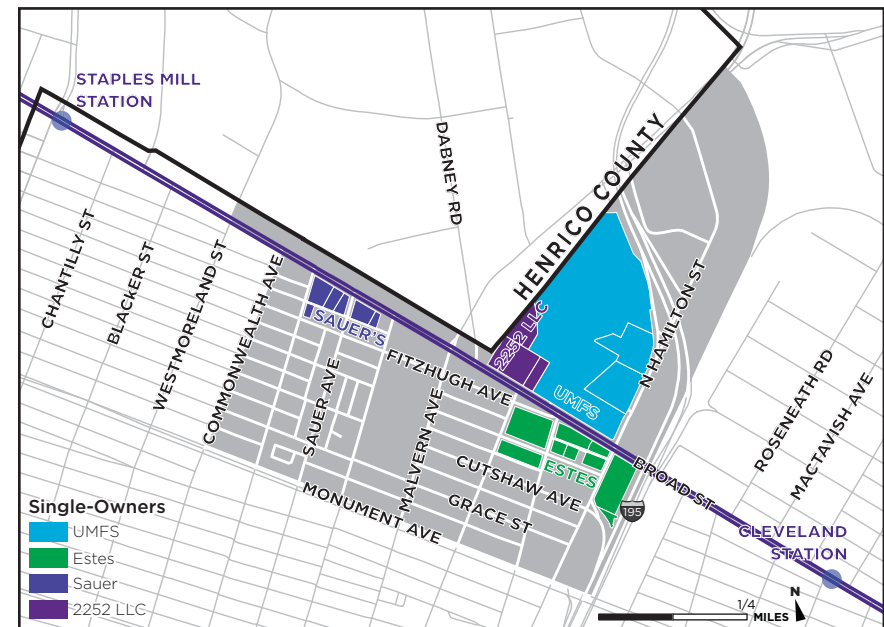


Figure 4.7 Malvern Gap: Single-Ownership Clusters





## STAPLES MILL STATION AREA VISION

The Staples Mill Station is transformed into a walkable node with new, denser, mixed-use buildings, and streetscape improvements along W. Broad Street and Staples Mill Road. As density of activity grows, there is a new infill Pulse Station at Malvern Avenue and W. Broad Street.

### FUTURE LAND USE

The Nodal Mixed-Uses at the intersection of Staples Mill Road and W. Broad Street allow for increased height to establish a prominent gateway to the city at the Staples Mill Station, as shown in Figure 4.8. Parking lots at this major intersection are developed with higher density uses and lower height buildings are expanded or redeveloped into taller buildings. The Corridor Mixed-Uses along W. Broad Street from Chantilly Street to I-195 encourage the redevelopment of low-density, automobile-oriented parcels into projects that generate more residential, worker, and shopper activity in a walkable environment. The Transitional uses south of W. Broad Street and west of I-195 are less active and lower in intensity to create a transition zone between the Corridor Mixed-Use land uses on W. Broad Street and the adjacent single-family detached residential neighborhood. Full descriptions of the land use categories are in Chapter 3.

### FUTURE CONNECTIONS

Improvements in the pedestrian and bicycle networks in this station area allow for improved and safer travel by alternative modes of transportation. New sidewalks where they are currently missing, such as along Chantilly and Blacker Streets, help complete the pedestrian network, and new bicycle facilities provide better options for cyclists to navigate the area. (Please see Figure 4.9).

Bicycle infrastructure recommendations are sourced from the Richmond Bike Master Plan with some modifications from public input which includes the recommendation for a bike boulevard along Commonwealth Avenue, and the change to a buffered bike lane instead of a bike lane on Malvern Avenue. These recommendations will need further study and public vetting to determine their feasibility and associated trade-offs with on-street parking and travel lanes.

### STATION AREA RECOMMENDATIONS

#### Compact and Mixed

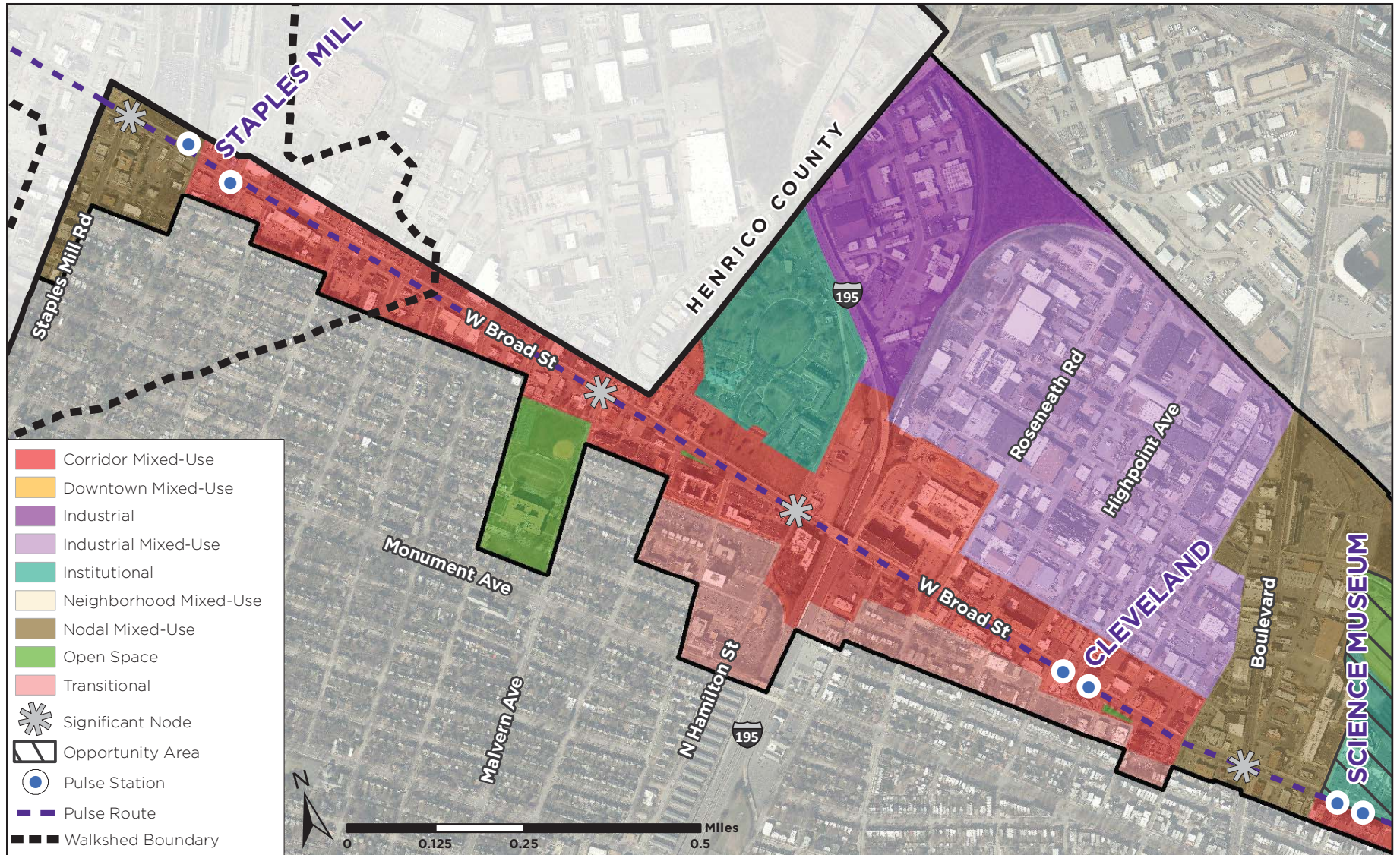
- **CW.1 – CW.7** See descriptions in Chapter 3.
- **SA.1** Rezone areas along W. Broad Street between I-195 and Staples Mill to less auto-oriented districts with specific form requirements that align with the Future Land Use Map. Promote adequate screening and landscaping of all surface parking areas.
- **SA.2** Invite major land owners in this area to discuss their plans for future development and how they will meet Corridor goals and lead to infill development.
- **SA.3** Create a green space on City-owned land at Fitzhugh Avenue, Kent Road, and W. Broad Street.

#### Connected

- **CW.8 – CW.23** See descriptions in Chapter 3.
- **SA.4** Install sidewalks on Chantilly Street and Blacker Street.
- **SA.5** Prioritize the segment of W. Broad Street from I-195 to Staples Mill Road for streetscape improvements as funding becomes available.
- **SA.6** Install public art and attractive, unique infrastructure at the I-195 overpass making it a gateway to the city and improving the pedestrian environment.
- **SA.7** Improve crossing conditions across W. Broad Street between Staples Mills Road and Westmoreland Place.

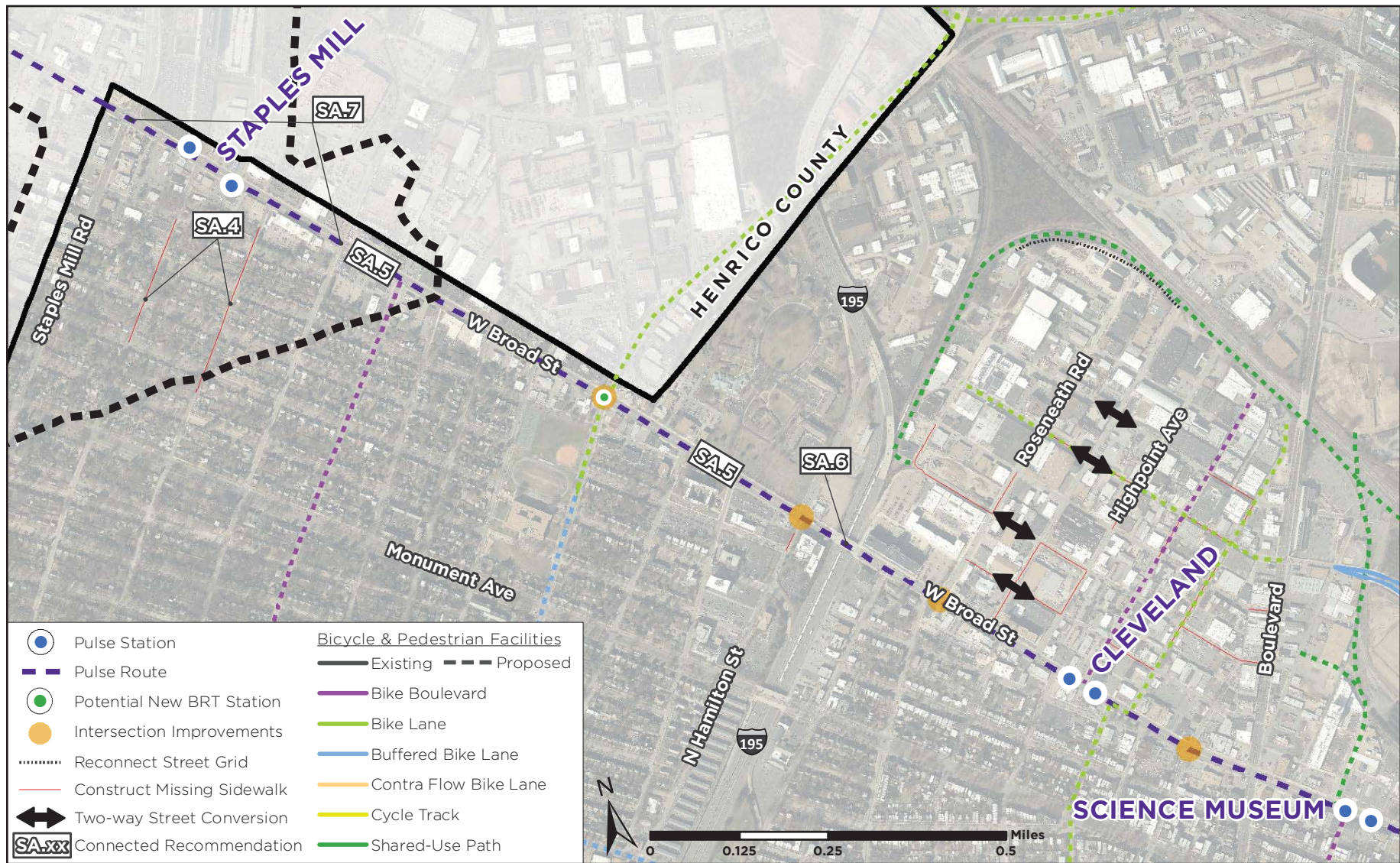
#### Thriving and Equitable

- **CW.24 – CW.35** See descriptions in Chapter 3.
- **SA.8** Coordinate with Henrico County to meet Corridor goals at the Staples Mill station.



**Figure 4.8** Staples Mill: Future Land Use Map





**Figure 4.9** Staples Mill: Future Connections Map



## RECOMMENDATION VISUALIZATION

### UMFS & ESTES SECTIONS

The cross sections below illustrate the existing and potential future conditions along W. Broad Street at the United Methodist Family Services (UMFS) campus and Estes Express Lines (please see Figure 4.10 and Figure 4.11). The existing condition shows the lack of development fronting Broad Street in this section of the Corridor, with surface parking and private open space as the primary uses. The future potential section illustrates how new development could help enclose the street while bringing more vibrancy and activity, both commercial and residential, to this section of the Corridor.

Please note that this section drawing is an illustration of how new development may appear at specific heights and forms. Please refer to the Future Land Use map and the Station Area Vision for the land use policy for this area.



Section cut-through line

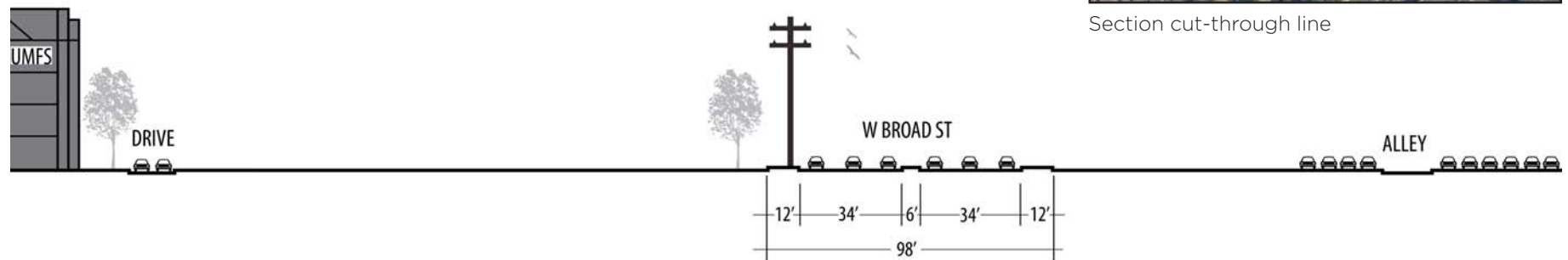


Figure 4.10 UMFS & Estes: Existing Section

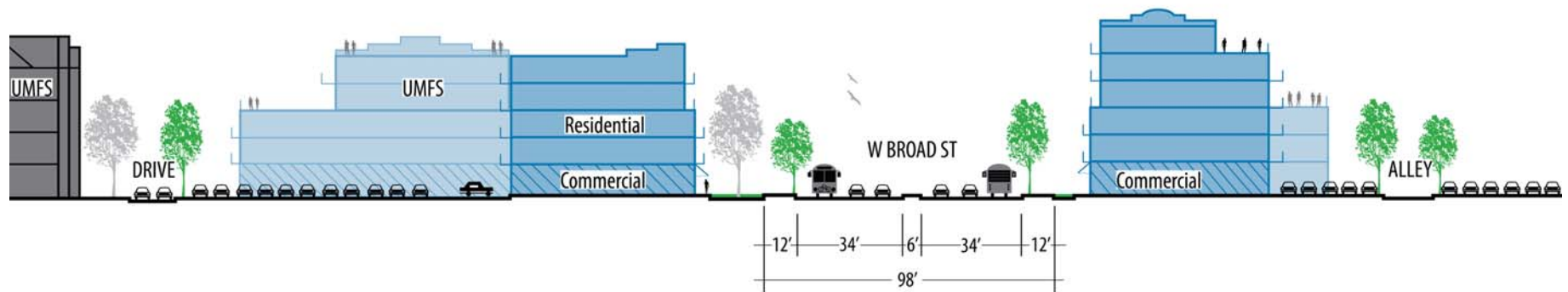


Figure 4.11 UMFS & Estes: Potential Future Section



## CLEVELAND STATION AREA PRIORITY STATION

### EXISTING CONDITIONS

The Cleveland Station area is an “Emerging Station” because the area is experiencing population and employment growth, features lower property values, offers low office rents per square foot, and has seen a large amount of permit activity over the past five years. The area is part of one of the densest population clusters in the city of Richmond and enjoys a strong street grid and high connectivity, though it is in need of a complete sidewalk network and overall complete streets network.

#### MARKET CONDITIONS: MEDIUM-HIGH

##### HOUSEHOLD GROWTH • • • • •

2000-2013 household growth: 11.79%

##### EMPLOYMENT GROWTH • • • • •

2008-2012 employment growth: 11.42%

##### PROPERTY VALUES • • • • •

Walkshed property total: \$771 million +

##### OFFICE RENT SCORE • • • • •

Office rent per sq ft: \$13.93

##### RETAIL RENT SCORE • • • • •

Retail rent per sq ft: \$16.66

##### COMMERCIAL PERMITS • • • • •

2010-2015 permit activity: \$45 million +

##### RESIDENTIAL PERMITS • • • • •

2010-2015 permit activity: \$67 million +

#### DEVELOPMENT READINESS: MEDIUM-LOW

##### BY-RIGHT ZONING • • • • •

Land coverage allowing TOD: 11.67%

##### PARCELIZATION • • • • •

Parcels per acre: 4.03

##### VACANT LAND • • • • •

Acres of vacant land: 3.4

##### UNDERPERFORMING LAND • • • • •

Acres of redevelopment land: 96.1

#### PEDESTRIAN ORIENTATION: MEDIUM-HIGH

##### POPULATION DENSITY • • • • •

People per acre: 48.6

##### EMPLOYMENT DENSITY • • • • •

Jobs per acre: 15.0

##### BUS FREQUENCY • • • • •

Average wait time: 38 minutes

##### BLOCK PATTERN • • • • •

Percent of blocks greater than 4 acres: 13%

##### INTERSECTION DENSITY • • • • •

Amount of intersections: 269

##### BIKE LANE ACCESS • • • • •

Linear feet of bike lanes in walkshed: 0'

##### CAR-FREE HOUSEHOLDS • • • • •

Households without a car: 14%

##### PARKS ACCESS • • • • •

Miles from station to greenspace: 0.18

##### WALKSCORE® • • • • •

Walkscore.com score at station: 87

## NEIGHBORHOODS

Two very different neighborhoods converge at the Cleveland Station, as shown in Figure 4.12. The Museum District is a historic residential neighborhood featuring detached and attached single-family homes, multi-family residential buildings, corner commercial uses, and a commercial node at Devil's Triangle. The Museum District is mostly built-out and does not have many opportunities for significant infill development. Scott's Addition is a rapidly redeveloping industrial center transitioning into a mixed-use neighborhood. Scott's Addition has small-footprint spaces that are ideal for small-scale industrial uses such as makers spaces and microbreweries, that can coexist with the increasing presence of residential and office uses in the neighborhood. Scott's Addition has been a redevelopment hotspot in the city for the past several years

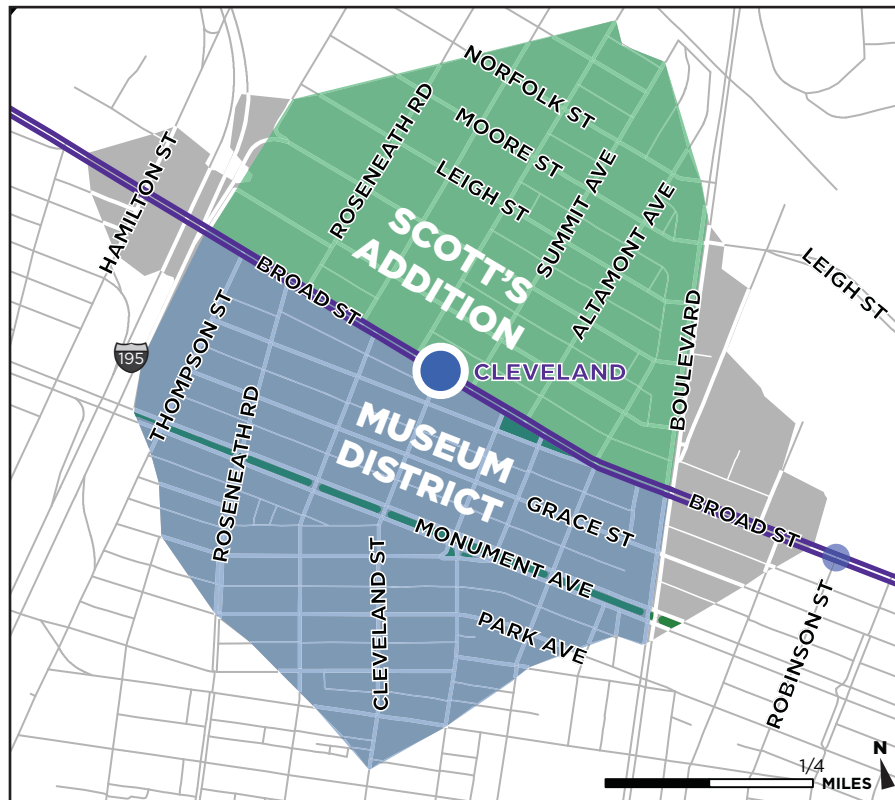


Figure 4.12 Cleveland: Neighborhoods

and there continues to be redevelopment and infill opportunities in this transitioning neighborhood. In this station area, W. Broad Street itself sees some of its lowest densities within the city. Many parcels that front W. Broad are oriented to the automobile and make for an uncomfortable and uninteresting pedestrian environment.

## EXISTING LAND USE

The Cleveland Station area has a distinct mix of uses, as shown in Figure 4.13. Commercial uses comprise about 30% of the walkshed, followed by industrial uses at 18%. Both of these uses are concentrated in Scott's Addition. Multi-family (16%) and single-family (12%) are the third and fourth most common uses, and are concentrated in the Museum District. This map shows the expansion of housing into Scott's Addition – occurring in all quadrants of the neighborhood.

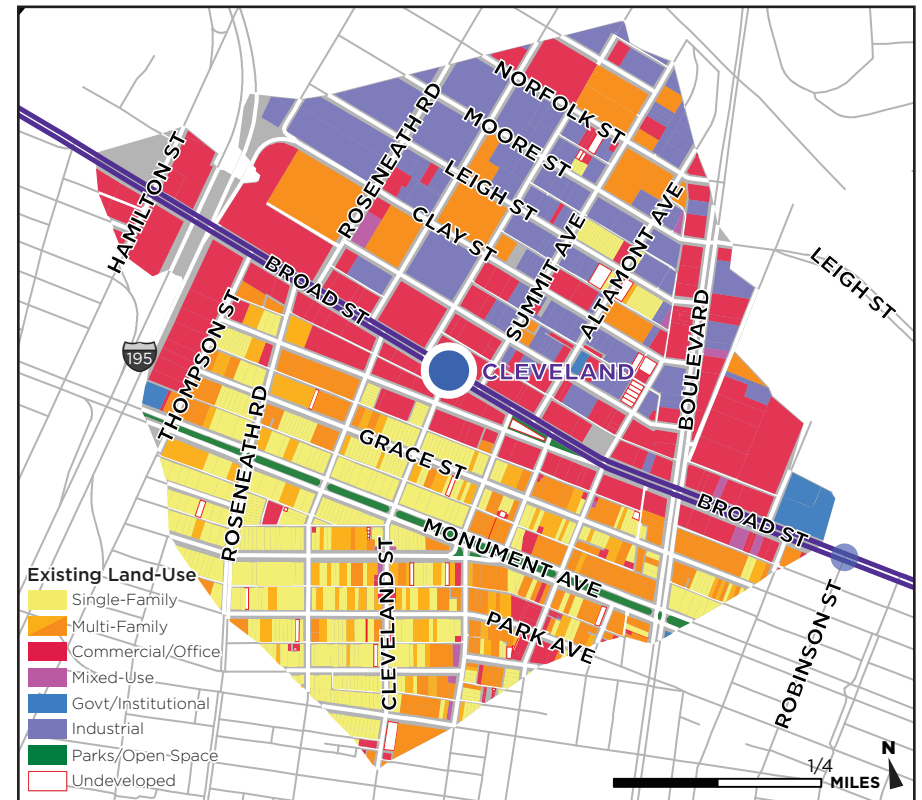


Figure 4.13 Cleveland: Existing Land Use

## SURFACE PARKING

Surface parking lots occupy 37% of the walkshed – the majority of which are located in Scott's Addition, as shown in Figure 4.14. Many parking lots here support industrial uses; however some could be redeveloped as new uses emerge in the neighborhood.

## HISTORIC & OVERLAY DISTRICTS

Nearly all of the station area is in at least one type of historic or design overlay district, as shown in Figure 4.15. The National Register of Historic Places opens the area to federal and state historic tax credit programs, which are subject to National Park Service review. City Old & Historic Districts cover Monument Avenue and parts of the Fan, and require exterior changes to buildings to go through the City's Commission of Architectural Review. The Design Overlay District encompasses areas of the Museum District not within a City Old & Historic District and is regulated by the City's Urban Design Committee.

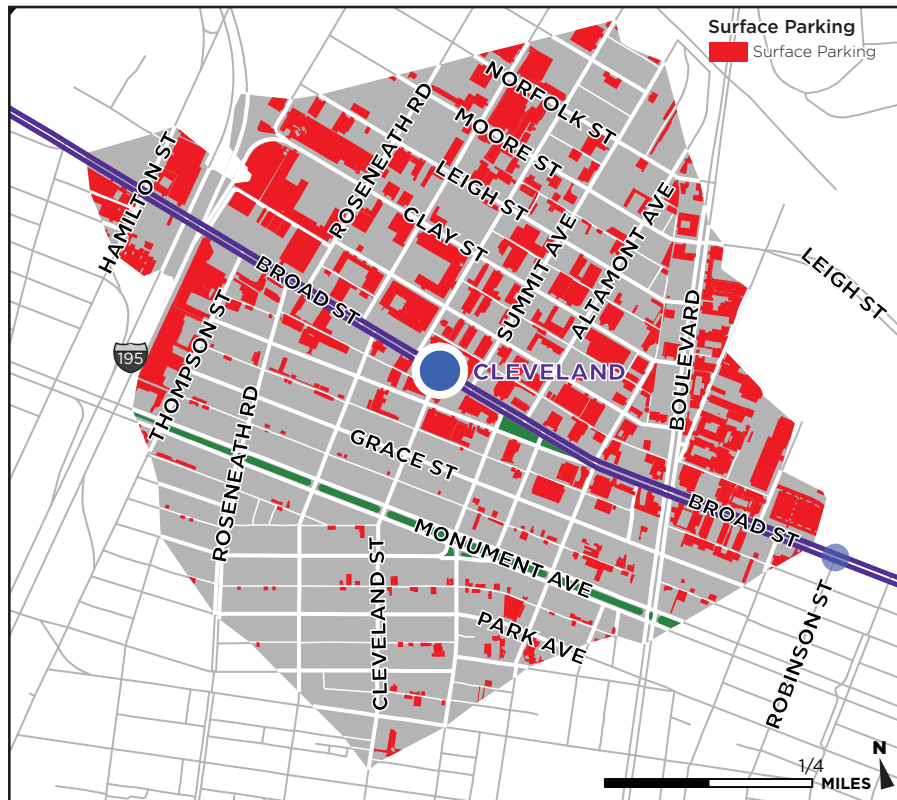


Figure 4.14 Cleveland Station: Surface Parking

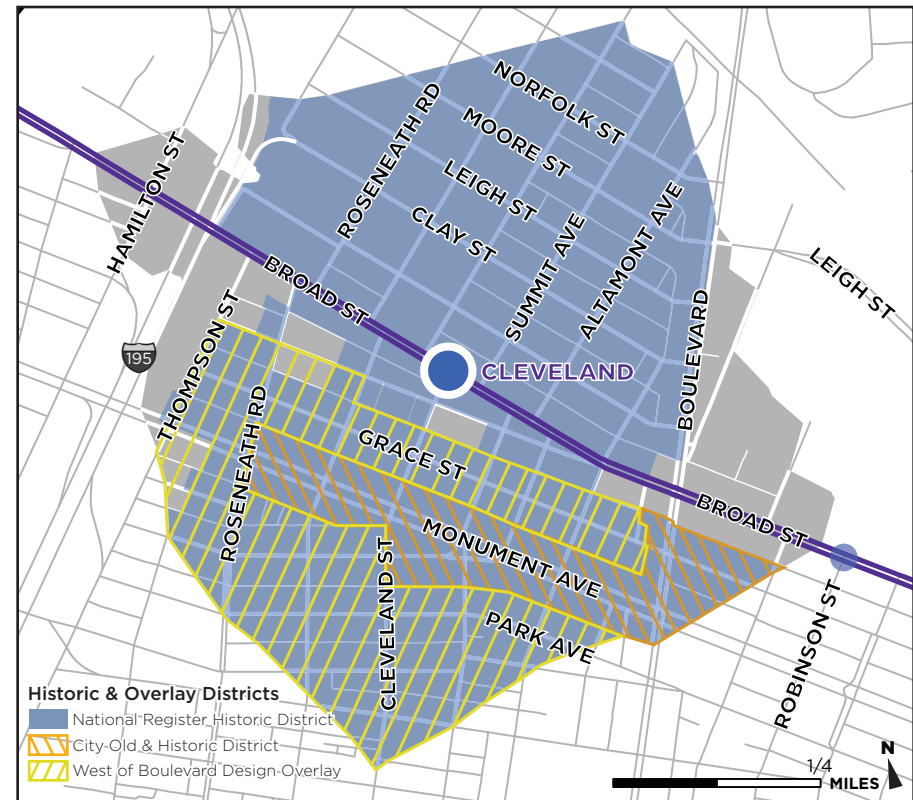


Figure 4.15 Cleveland Station: Historic & Overlay Districts

## VISUALLY ACTIVE FRONTAGE

Patterns of visually active frontage (commercial storefronts that engage the street) vary in the Cleveland Station walkshed, as shown in Figure 4.16. W. Broad street and Boulevard have active frontages due to their status as commercial corridors, Scott's Addition has areas of active frontage throughout, but especially concentrated on Summit and Altamont Avenues. The Museum District's interspersed active frontages are consistent with a corner-commercial residential neighborhood.

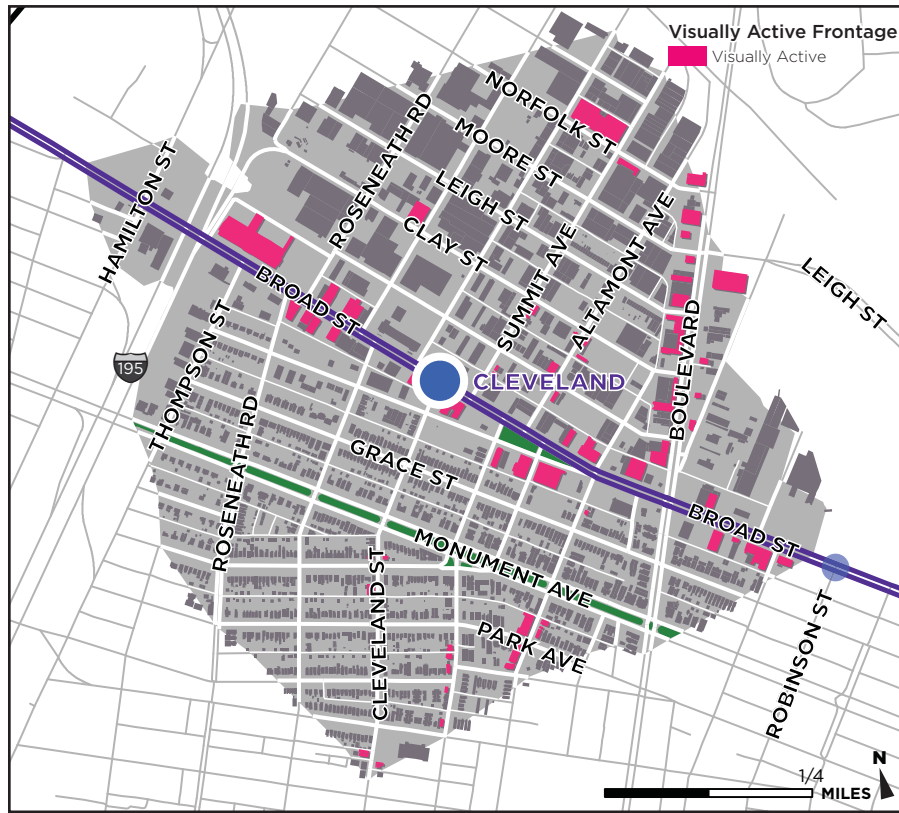


Figure 4.16 Cleveland Station: Visually Active Frontage



## CLEVELAND STATION AREA VISION

The Cleveland Station area unifies two vibrant, distinct, pedestrian-oriented neighborhoods by maximizing the potential of under-utilized parcels and supporting new forms of development that are walkable, dense, and mixed-use. Scott's Addition continues its evolution as a mixed-use neighborhood, and W. Broad Street transforms into a high quality urban avenue that is safe to cross, while becoming a destination in its own right for residential, office, retail and compatible entertainment uses.

### FUTURE LAND USE

The Corridor Mixed-Uses along W. Broad Street between I-195 and Sheppard Street support the redevelopment of under-utilized parcels on the Pulse Corridor into denser buildings that interact with the primary street by providing commercial uses on the ground floor, as shown in Figure 4.17. The Transitional use south of W. Broad Street creates a buffer zone with medium density commercial and multi-family uses between the intense uses along W. Broad Street and the dense residential neighborhood to the south. The Industrial Mixed-Uses in Scott's Addition accommodate the emerging residential, office, and retail uses alongside the established and emerging light industrial uses.

### FUTURE CONNECTIONS

Improvements to the transportation system help transition the neighborhood from one of primarily industrial uses to a more mixed-use neighborhood by constructing sidewalks where missing, providing bike lanes for safer bicycle travel, and converting one-way streets to two-way in order to create more neighborhood-style streets. (Please see Figure 4.18). A comprehensive study of pedestrian and bicycle facilities, circulation, truck routes, lighting, and other needs is completed in the near future to help determine priorities for the needs of this evolving neighborhood.

Bicycle infrastructure recommendations are sourced from the Richmond Bike Master Plan with some modifications from public input which includes the recommendation for bike lanes on Belmont and Altamont Avenues and Moore Street, as well as a bike boulevard on Summit Avenue. These recommendations will need further study and public vetting to determine their feasibility and associated trade-offs with on-street parking and travel lanes.

### STATION AREA RECOMMENDATIONS

#### Compact and Mixed

- **CW.1 – CW.7** See descriptions in Chapter 3.
- **SA.9** Rezone Scott's Addition to districts that align with the

Future Land Use Map.

- **SA.10** Develop a small area plan for the Boulevard/W. Broad Street "Nodal Mixed-Use" area.
- **SA.11** Create a green space at Cutshaw Avenue and W. Broad Street that relates to the nearby Pulse station with shade and seating.
- **SA.12** Develop and prioritize the establishment of a park and open space plan for Scott's Addition.
- **SA.13** Explore methods to incentivize private development to create public open space in Scott's Addition.

#### Connected

- **CW.8 – CW.23** See descriptions in Chapter 3.
- **SA.14** As development occurs, add sidewalks in Scott's Addition where missing.
- **SA.15** Install streetlights and pedestrian lights throughout Scott's Addition as needed to encourage a safe complete streets environment.
- **SA.16** Complete a multi-use path across the northern edge of the neighborhood. Conduct a feasibility review for continuing the path under Boulevard.
- **SA.17** Plant trees throughout Scott's Addition. Require tree planting in public right-of-way by private developers. Require developers to incorporate trees in parking screening.
- **SA.18** Prioritize the segment of W. Broad Street from Boulevard to I-195 for streetscape improvements.
- **SA.19** Complete a comprehensive, complete streets transportation and circulation plan for Scott's Addition that addresses two-way street conversions, truck routing, bicycle facilities, lighting, and other needs.

#### Thriving & Equitable

- **CW.24 – CW.35** See descriptions in Chapter 3.
- **SA.20** Maintain a balance of uses as the neighborhood develops by drawing small-scale, neighborhood-compatible industrial and "maker" spaces to the neighborhood.



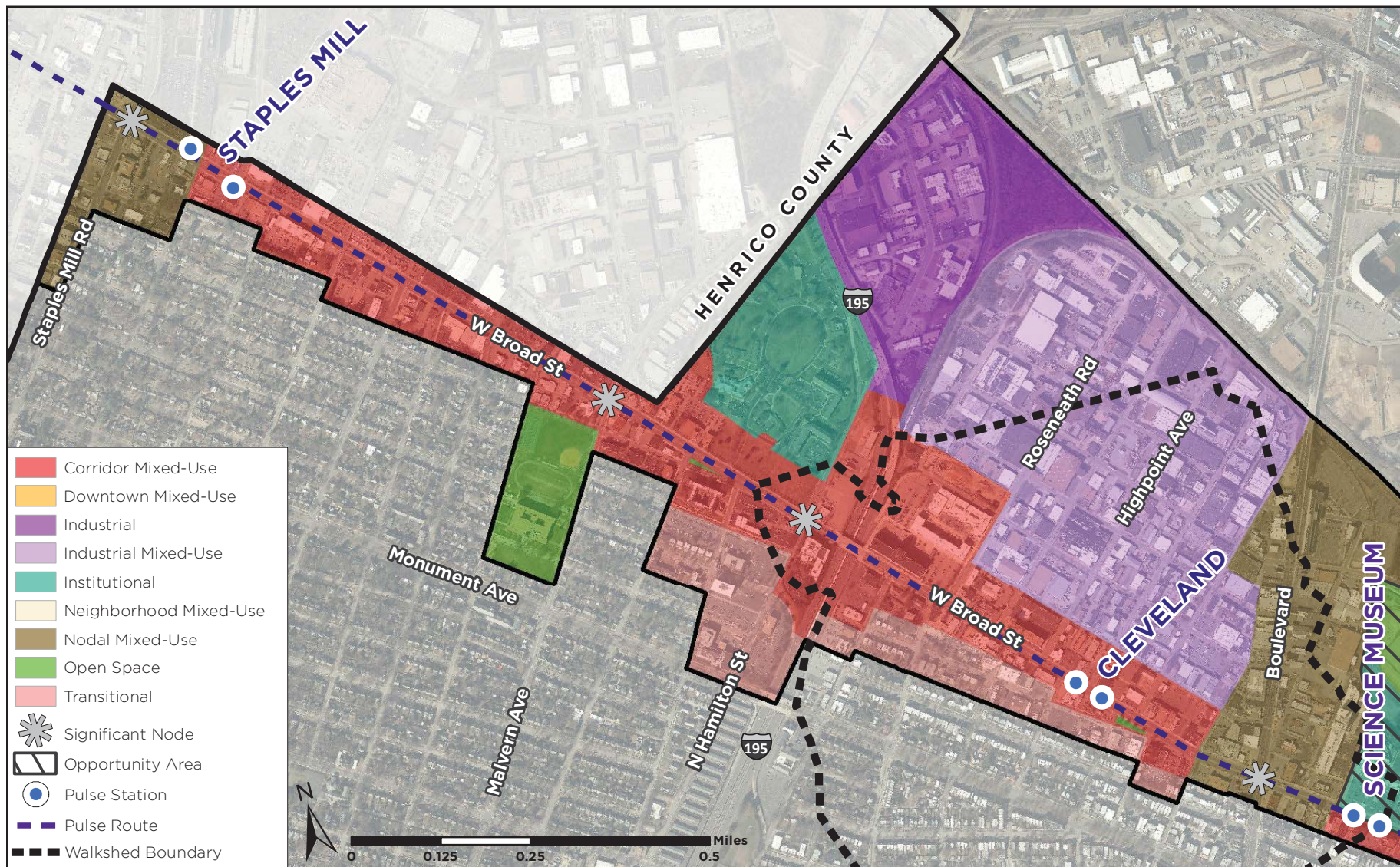
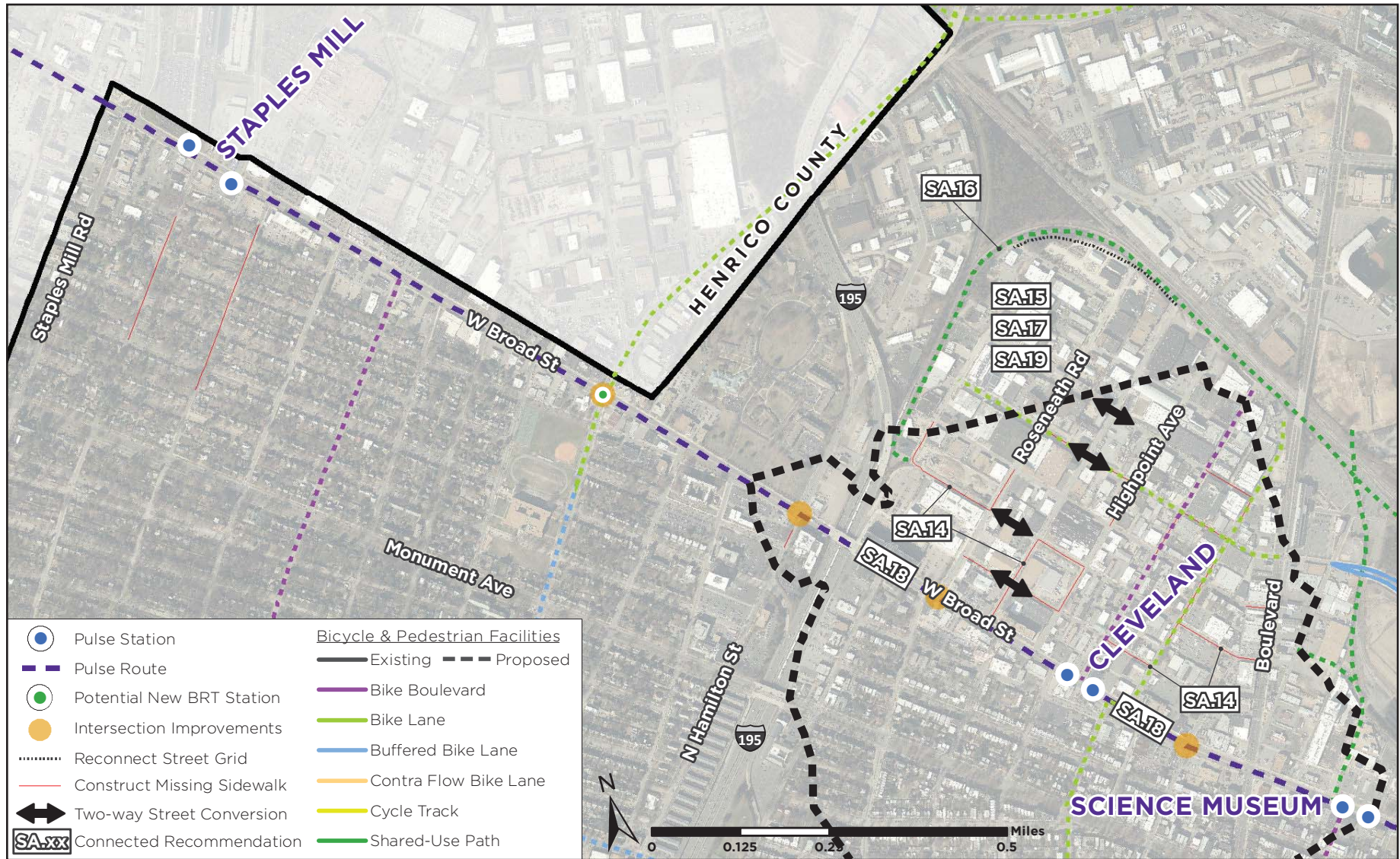


Figure 4.17 Cleveland: Future Land Use Map





**Figure 4.18** Cleveland: Future Connections Map



## RECOMMENDATION VISUALIZATION

### COMFORT INN SECTIONS

The existing street section, shown in Figure 4.19, highlights the diversity of development near the Cleveland Station. The Comfort Inn – a six-story building, is much taller and atypical of this section of Broad (though the nearby 3600 Broad building is even taller). Sidewalks are a comfortable 12 feet, though the width of the street and speed of traffic combined with a lack of buffer makes the pedestrian experience less comfortable.

The future section, shown in Figure 4.20, visualizes how this portion of Broad Street could evolve over time with the redevelopment of small-scale buildings into larger-scale, mixed-use structures that help frame the street and make structured parking viable. Streetscape improvements, such as street trees, enhance the pedestrian experience and soften the built environment. Design elements and frameworks are in place that push more of the mass of new buildings towards W. Broad Street and away from lower-density areas to the south.

Please note that this section drawing is an illustration of how new development may appear at specific heights and forms. Please refer to the Future Land Use map and the Station Area Vision for the land use policy for this area.



Section cut-through line

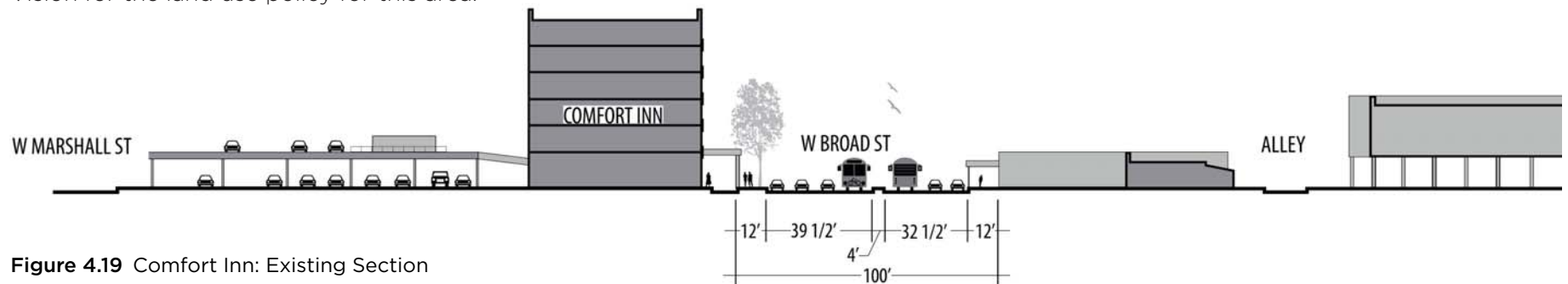


Figure 4.19 Comfort Inn: Existing Section

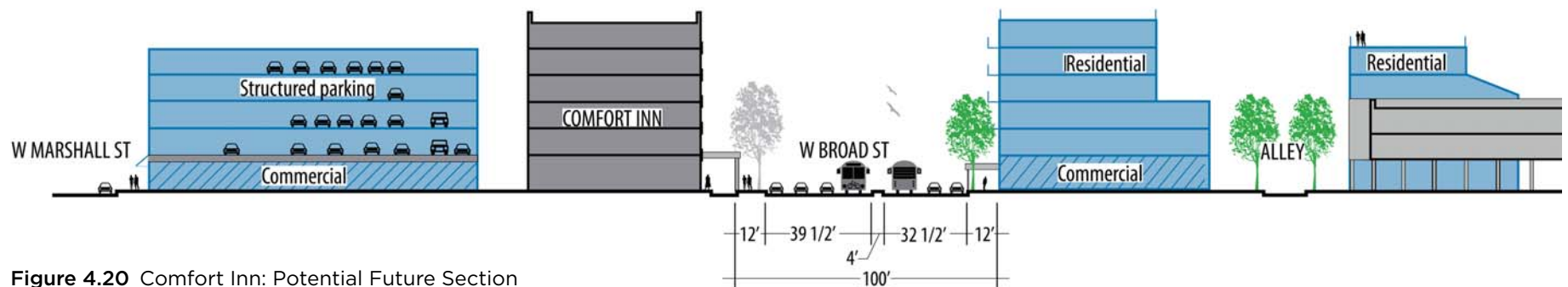


Figure 4.20 Comfort Inn: Potential Future Section

## POTENTIAL DEVELOPMENT SCENARIO

Figure 4.21 shows what could happen with TOD land use changes that spur infill development around the Cleveland Station and focused on W. Broad Street. This scenario:

- Adds 4.1 million square feet of additional floor space.
- Adds 2.5 acres of open space on both ground-level and rooftops.
- Respects and preserves historic buildings.
- Focuses on new development closest to the station.

Please note that this drawing is an illustration of how new development may appear at specific heights and forms. Please refer to the Future Land Use map and the Station Area Vision for the land use policy for this area.



**Figure 4.21** Cleveland: Potential Development Scenario

## SCIENCE MUSEUM & ALLISON STREET STATION AREAS PRIORITY STATIONS

### EXISTING CONDITIONS

The Sciences Museum of Virginia and Allison Street Station Areas are “Emerging Stations.” These areas have seen a small increase in population, feature low land costs, and low office rents. However, most of the area is not zoned to enable by-right high-intensity development. The area north of W. Broad Street is a collection of superblocks, which create inhospitable pedestrian environments today, but could be significantly redeveloped with a walkable higher-density development pattern over time.

#### MARKET CONDITIONS: MEDIUM-HIGH

##### HOUSEHOLD GROWTH • • • • •

2000-2013 household growth: 11.79%

##### EMPLOYMENT GROWTH • • • • •

2008-2012 employment growth: 0%

##### PROPERTY VALUES • • • • •

Walkshed property total: \$1.3 billion +

##### OFFICE RENT SCORE • • • • •

Office rent per sq ft: \$13.93

##### RETAIL RENT SCORE • • • • •

Retail rent per sq ft: \$16.66

##### COMMERCIAL PERMITS • • • • •

2010-2015 permit activity: \$35 million +

##### RESIDENTIAL PERMITS • • • • •

2010-2015 permit activity: \$41 million +

#### DEVELOPMENT READINESS: MEDIUM-HIGH

##### BY-RIGHT ZONING • • • • •

Land coverage allowing TOD: 11.44%

##### PARCELIZATION • • • • •

Parcels per acre: 4.12

##### VACANT LAND • • • • •

Acres of vacant land: 8.2

##### UNDERPERFORMING LAND • • • • •

Acres of redevelopment land: 120.66

#### PEDESTRIAN ORIENTATION: MEDIUM-HIGH

##### POPULATION DENSITY • • • • •

People per acre: 48.6

##### EMPLOYMENT DENSITY • • • • •

Jobs per acre: 10.5

##### FREQUENCY • • • • •

Average wait time: 38 minutes

##### BLOCK PATTERN • • • • •

Percent of blocks greater than 4 acres: 23%

##### INTERSECTION DENSITY • • • • •

Amount of intersections: 326

##### BIKE LANE ACCESS • • • • •

Linear feet of bike lanes in walkshed: 2323'

##### CAR-FREE HOUSEHOLDS • • • • •

Households without a car: 14%

##### PARKS ACCESS • • • • •

Miles from station to greenspace: 0.15

##### WALKSCORE® • • • • •

Walkscore.com score at station: 87



## NEIGHBORHOODS

The Science Museum and Allison Street Stations serve the Fan District neighborhood – one of the most densely populated and most intact historic neighborhoods in Richmond. The Fan District, located south of W. Broad Street and east of Boulevard, has few infill and redevelopment opportunities. W. Broad Street itself varies throughout the walkshed, featuring many gaps between historic and modern-era storefronts. The incomplete street grid north of W. Broad Street leads to low connectivity and reduced walkability. This area has some of the largest superblocks along the entire Corridor. (Please see Figure 4.22.)

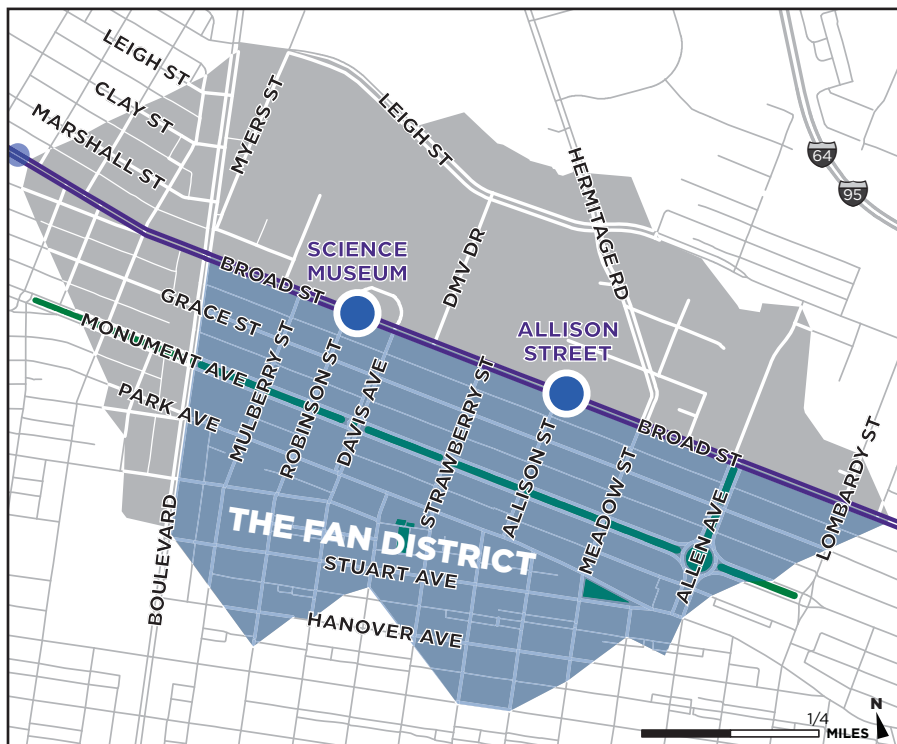


Figure 4.22 Science Museum & Allison Street: Neighborhoods

## EXISTING LAND USE

W. Broad Street is almost entirely fronted by non-residential uses. Commercial/office uses (21%) line W. Broad Street with large commercial parcels north of W. Broad and smaller parcels south of W. Broad. The Fan District is a mixed-use residential neighborhood with corner-commercial uses and a commercial core along Robinson Street. The majority of residential uses in the walkshed are multi-family (49%) with single-family interspersed (11%). (Please see Figure 4.23.)

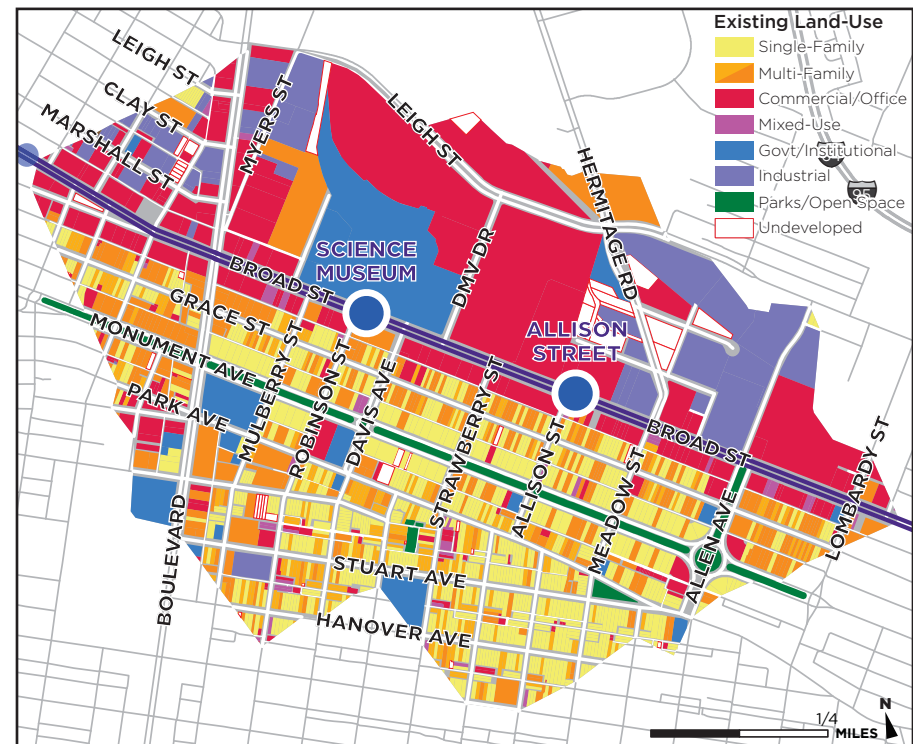


Figure 4.23 Science Museum & Allison Street: Existing Land Use

## SURFACE PARKING

Surface parking lots occupy 35% of the walkshed – the majority of which are located north of W. Broad Street, as shown in Figure 4.24. Many parking lots here support industrial and commercial uses. The DMV headquarters maintains a significant share of the surface parking lots. The large amount of surface parking along W. Broad Street itself can be seen here.

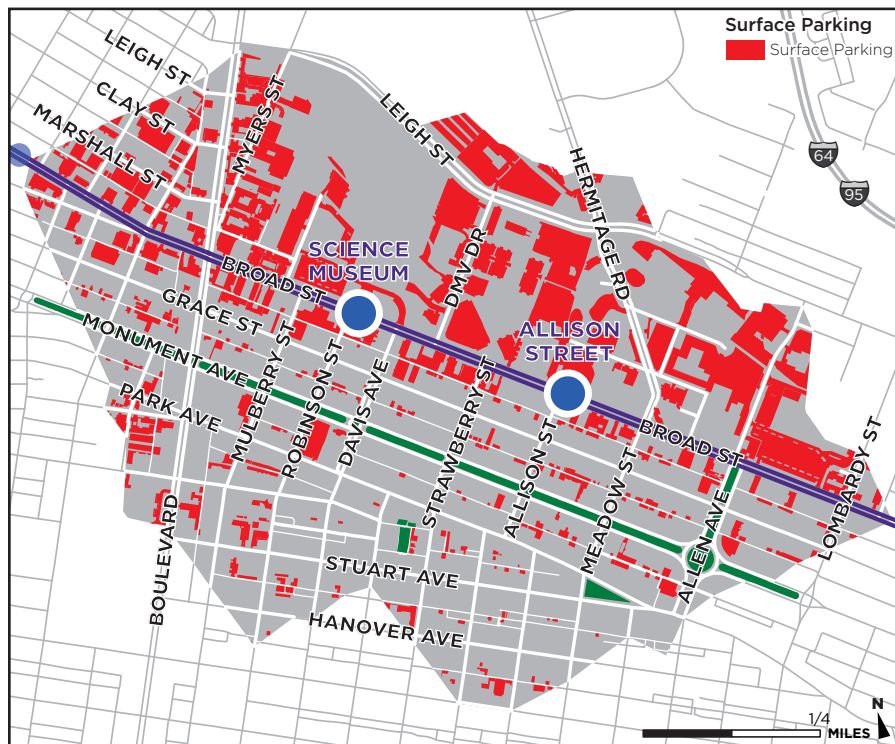


Figure 4.24 Science Museum & Allison Street: Surface Parking

## HISTORIC DISTRICTS

The majority of these station areas are designated as either a City Old & Historic District, or a National Register Historic District, as shown in Figure 4.25. The West Grace Street Historic District, which runs between Boulevard and Ryland Street, is adjacent to the Pulse Corridor, bordering the alley to the south of W. Broad Street. City Old & Historic Districts require exterior changes to buildings to go through the City's Commission of Architectural Review while National Register Historic Districts provide federal and state historic tax credits for historic renovations which are reviewed by the National Park Service.

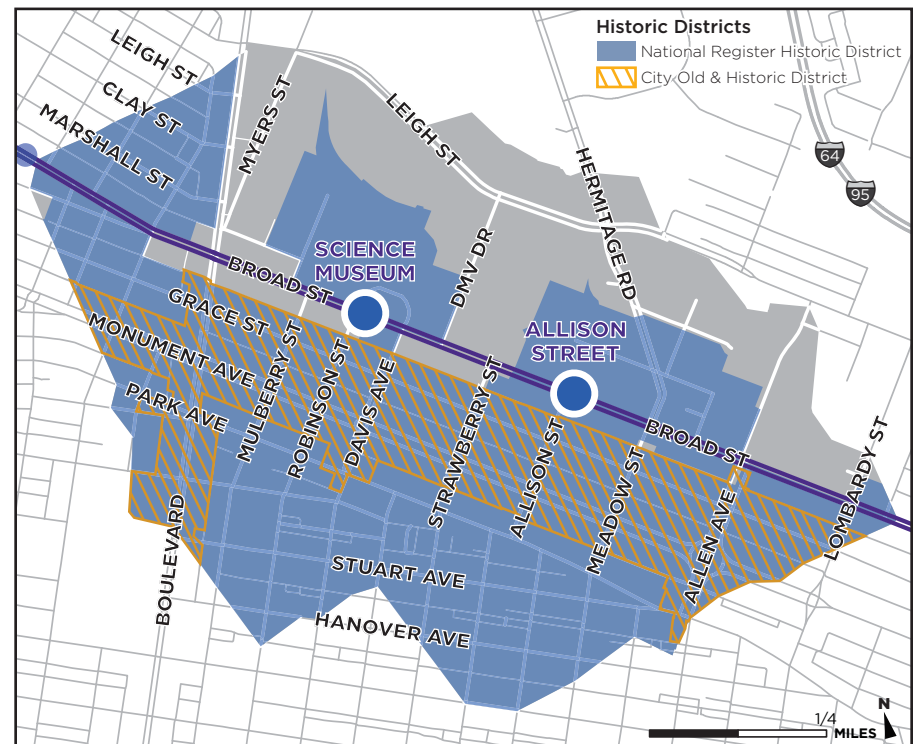
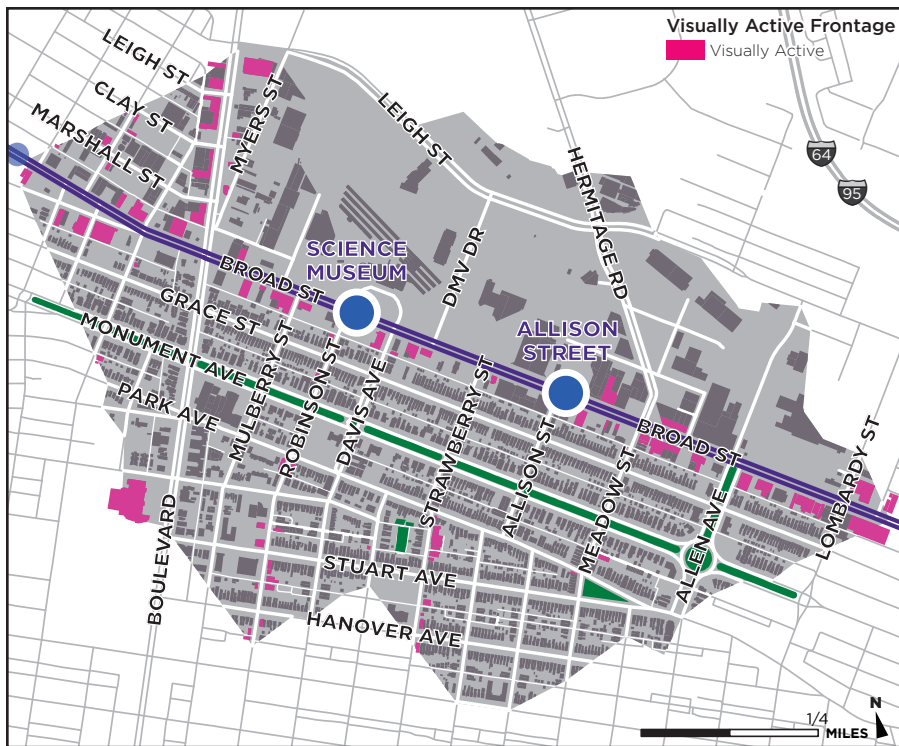


Figure 4.25 Science Museum & Allison Street: Historic Districts

## VISUALLY ACTIVE FRONTAGE

Visually active frontages (commercial storefronts that engage the street) align with the commercial corridors found in this walkshed, as shown in Figure 4.26. W. Broad Street has a major concentration of the frontage, but other corridors include Robinson and Strawberry Streets.



**Figure 4.26** Science Museum & Allison Street: Visually Active Frontage

## SCIENCE MUSEUM OF VIRGINIA STATION AREA VISION

The significant redevelopment of low-density parcels at W. Broad Street and Boulevard creates a prominent node with signature architecture that capitalizes on this strategic gateway to the city. New, taller, mixed-use development that promotes walkability extends down the north side of W. Broad Streets toward the Science Museum's landmark public grounds and the Pulse Station from the Boulevard gateway intersection. The potential for new development across from the new Science Museum green space means a singular opportunity for a high-quality urban avenue which invites visitors to the Museum, with mixed-use infill along the south side of W. Broad Street. The preservation of historic building stock and adequate buffers to residential neighborhoods is a priority.

## ALLISON STREET STATION AREA VISION

Major redevelopment around the Allison Station breaks up superblocks by reintroducing the street grid and creating a walkable environment with high-density, mixed-use buildings on the north side of W. Broad Street; medium-density, mixed-use buildings infill the south side of W. Broad Street. As redevelopment proceeds, an infill Pulse station at Lombardy Street facilitates transit connections and access to jobs, daily shopping, and homes at this intersection. Redevelopment occurs on sites with auto-oriented uses and deep setbacks that currently disrupt the historic pattern of the street-oriented commercial corridor. The preservation of historic building stock and adequate buffers to residential neighborhoods is a priority.

## FUTURE LAND USE

The Nodal Mixed-Uses at the W. Broad Street / Boulevard gateway generate a critical mass of people at a premier entrance to the city, as shown in Figure 4.27. Low-intensity, automobile-oriented uses are replaced with a mix of uses, signature architecture, and walkable urban fabric. The Institutional land uses north of W. Broad Street enhance the cultural destinations by replacing surface parking with uses that engage pedestrians and providing connections across the large parcels. The Nodal Mixed-Uses on the north side of W. Broad Street will enable transformative redevelopment to an urban, mid-rise area. Both the Institutional and Nodal Mixed-Use areas north of W. Broad Street should be further studied through a small area plan.

The Corridor Mixed-Use area on the south side of W. Broad Street envisions more limited redevelopment at a smaller scale and height. New infill development should be limited in scope, prioritizing the preservation of significant historic buildings that embody the form and function of Corridor Mixed-Use. New development on the south side of W. Broad Street should be limited to four stories in height between Ryland and Strawberry Streets, and five stories in height between Strawberry Street and Boulevard, with the exception of key intersections, such as at W. Broad and Robinson Streets and W. Broad Street and N. Boulevard, which should be developed at a higher scale befitting their role as standout corners, with extensive discussion

with the surrounding community. In order to reduce its effect on lower-scale residential uses to the south, any new development here should employ at 20' rear yard setback from alleys, as well as massing strategies, such as a two-story stepback from the rear, that push the massing toward W. Broad Street.

## FUTURE CONNECTIONS

As this area redevelops and becomes a more cohesive commercial corridor, improvements to the transportation network allow for the safe and efficient movement of people by all modes of transportation, as shown in Figure 4.28. Improvements to the bicycle network in the form of bike lanes, shared lanes, and bike boulevards make cycling safer and more accessible to a range of riders. Improvements to the streetscape and the creation of shared-use paths allow for a more pleasant pedestrian experience. The street grid is gradually reinstituted over time, connecting portions of W. Marshall and W. Clay Streets which mostly do not exist west of N. Lombardy Street.

Bicycle infrastructure recommendations are sourced from the Richmond Bike Master Plan with some modifications from public input which includes the recommendation for bike boulevards on Mulberry Street and Davis Avenue, and the shifting of a proposed bike boulevard from Meadow Street to Allen Avenue. These recommendations will need further study and public vetting to determine their feasibility and associated trade-offs with on-street parking and travel lanes.

## STATION AREA RECOMMENDATIONS

### Compact and Mixed

- **CW.1 – CW.7** See descriptions in Chapter 3.
- **SA.21** Rezone the areas around the Science Museum of Virginia and Allison Street stations to districts that align with the Future Land Use Map, working closely with neighborhood groups to ensure that future zoning districts are sensitive to the context of the neighborhood. Neighboring civic associations express a strong preference that new development along the south side of W. Broad Street be limited in height, promotes the preservation of historic building stock, and provides adequate buffers to the residential neighborhoods to the south.
- **SA.22** Work with Sauer Properties to develop an urban form master plan. Take advantage of the large concentration of single-owner redevelopment properties north of W. Broad Street and work together towards a high-density, urban form.
- **SA.23** Re-establish the streetwall on W. Broad Street. Encourage new development to build to the street.

### Connected

- **CW.8 – CW.23** See descriptions in Chapter 3.
- **SA.24** Introduce a rectangular street grid north of W. Broad Street using complete streets guidelines. Continue Clay Street

from DMV Drive to Lombardy Street, Marshall Street from DMV Drive to Bowe Street, Meadow Street from Clay Street to Leigh Street, and Allison Street to Clay Street as redevelopment occurs.

- **SA.25** Improve north-south crossings of Broad Street for pedestrians and cyclists in the general vicinity of Hermitage and Lombardy Streets.
- **SA.26** Explore the creation of an east-west bike route between Belvidere Street and Boulevard.
- **SA.27** Improve intersection at Stuart Circle to accommodate cyclists.
- **SA.28** Prioritize the segment of W. Broad Street from Lombardy Street to Boulevard for streetscape improvements.

### Thriving & Equitable

- **CW.24 – CW.35** See descriptions in Chapter 3.
- **SA.29** Work with the Commonwealth to retain state employees and improve existing development, including looking at opportunities for repurposing large amounts of surface parking at the DMV Headquarters.



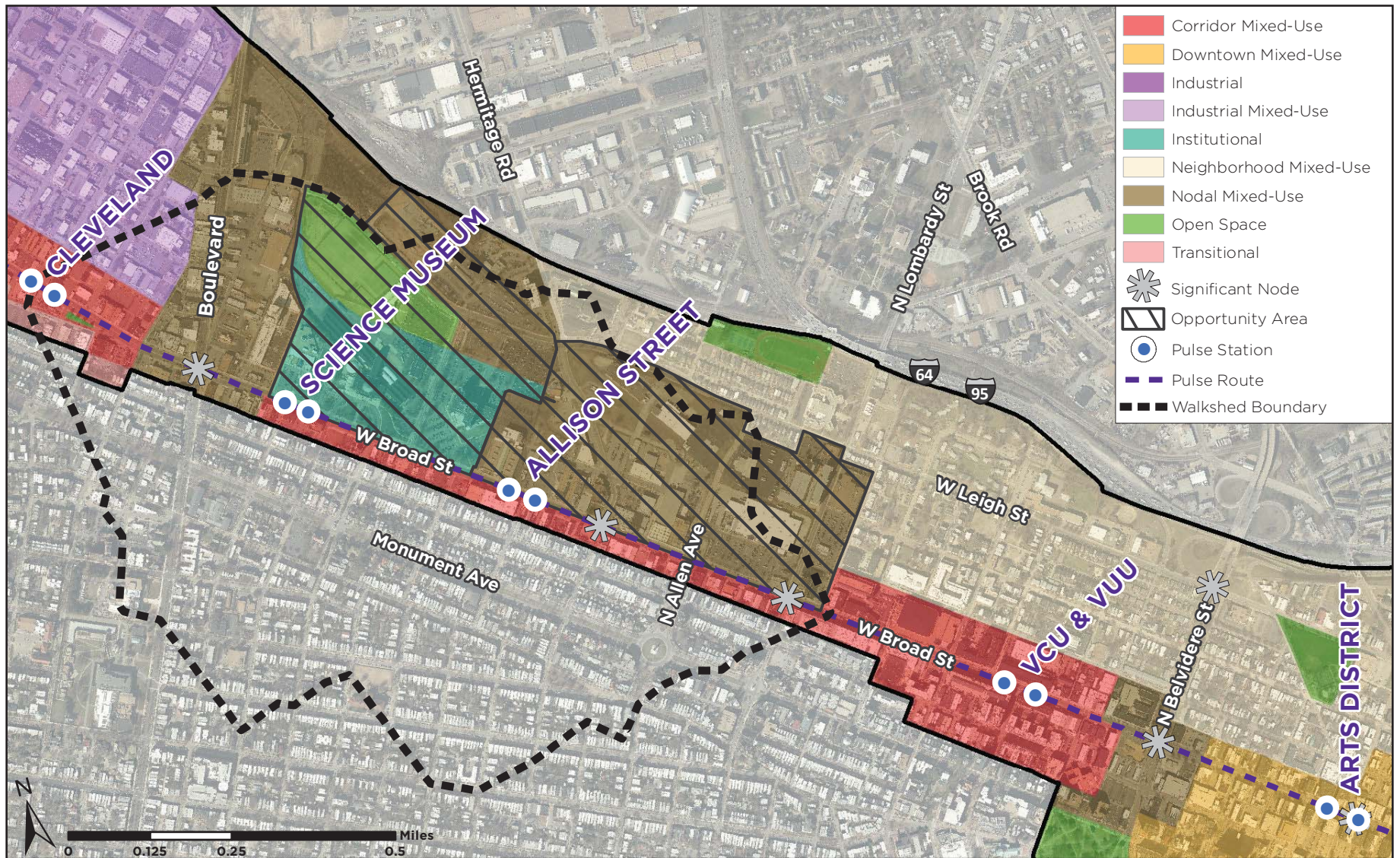


Figure 4.27 Science Museum & Allison Street: Future Land Use Map



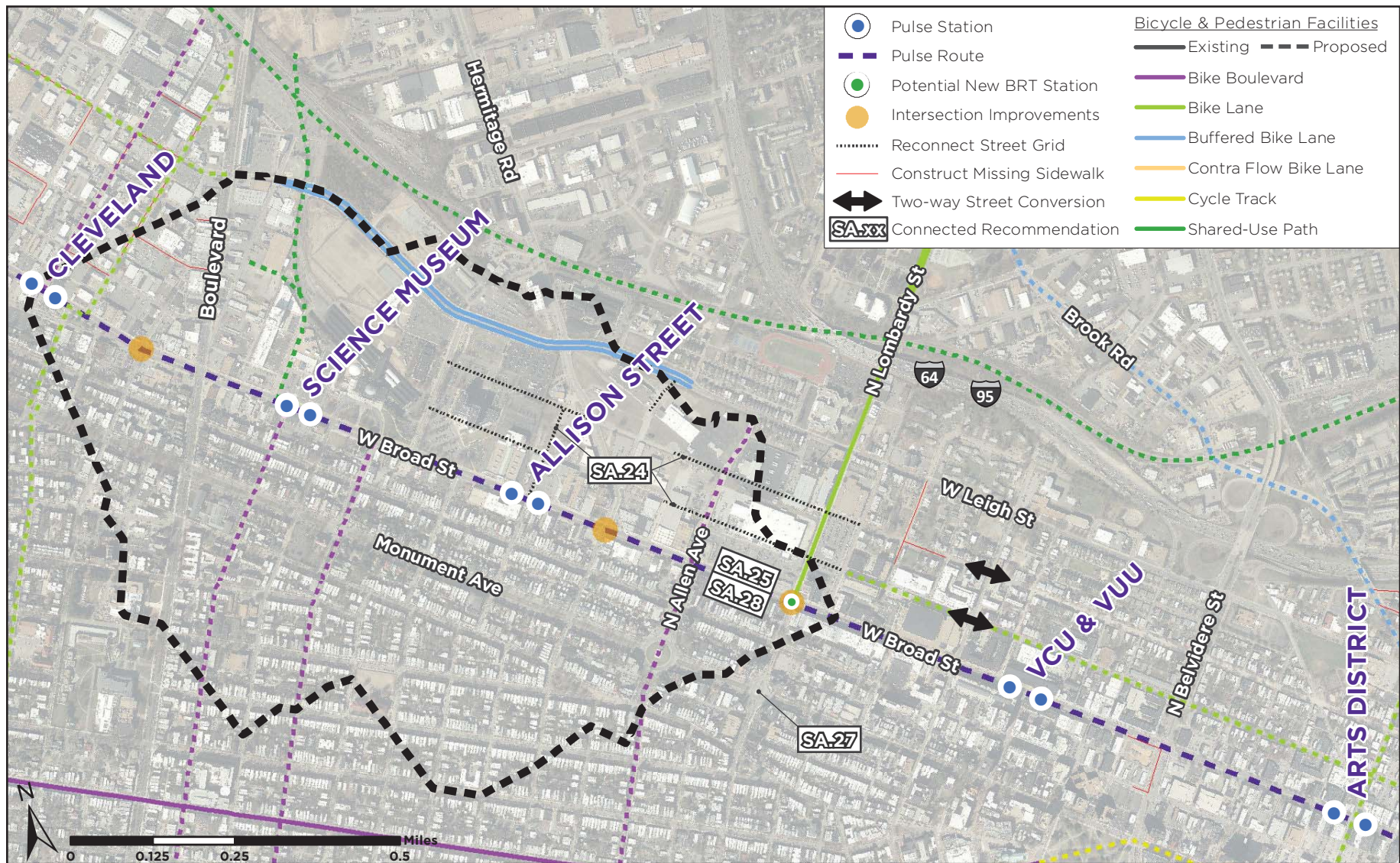


Figure 4.28 Science Museum & Allison Street: Future Connections Map

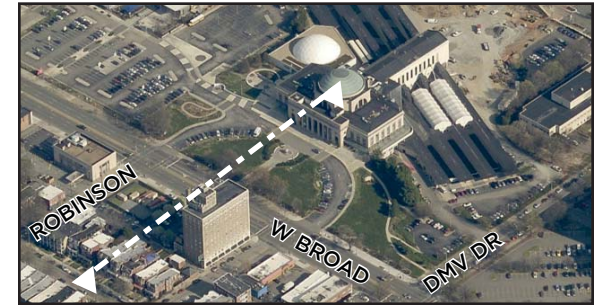


## RECOMMENDATION VISUALIZATION

### SCIENCE MUSEUM SECTIONS

The streetscape varies along this portion of W. Broad Street, but generally lacks mature shade trees - a condition that exacerbates areas with deep setbacks. The cross sections below illustrate two differing setback situations (please see Figure 4.29 and Figure 4.30). The Science Museum of Virginia's setback features a landscaped buffer between W. Broad Street and the entrance to the grand building. On the other side of the street is a tall mixed-use building with no setback from the sidewalk. This condition helps foster a feeling of enclosure. The potential future section shows the Museum's plans for the removal of parking and the creation of more open space. The envisioned addition of street trees and enhanced streetscape on either side of W. Broad Street makes the area more walkable and pleasant, especially in hotter weather. It also creates an opportunity to have new buildings fronting onto the greenspace framing the space - creating a unique urban "avenue" effect.

Please note that this section drawing is an illustration of how new development may appear at specific heights and forms. Please refer to the Future Land Use map and the Station Area Vision for the land use policy for this area.



Section cut-through line

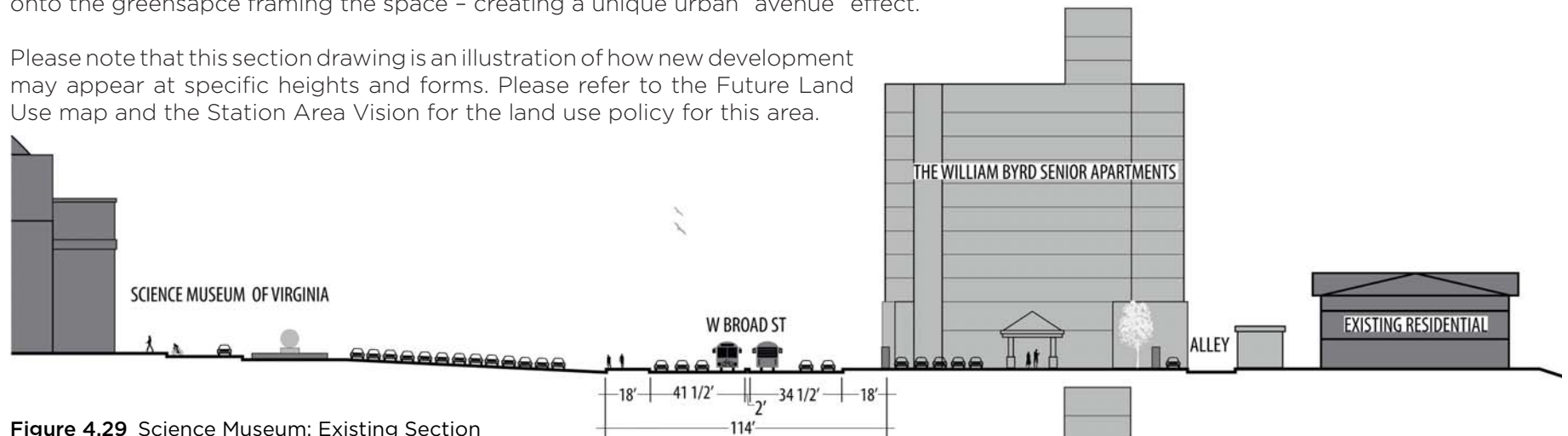


Figure 4.29 Science Museum: Existing Section

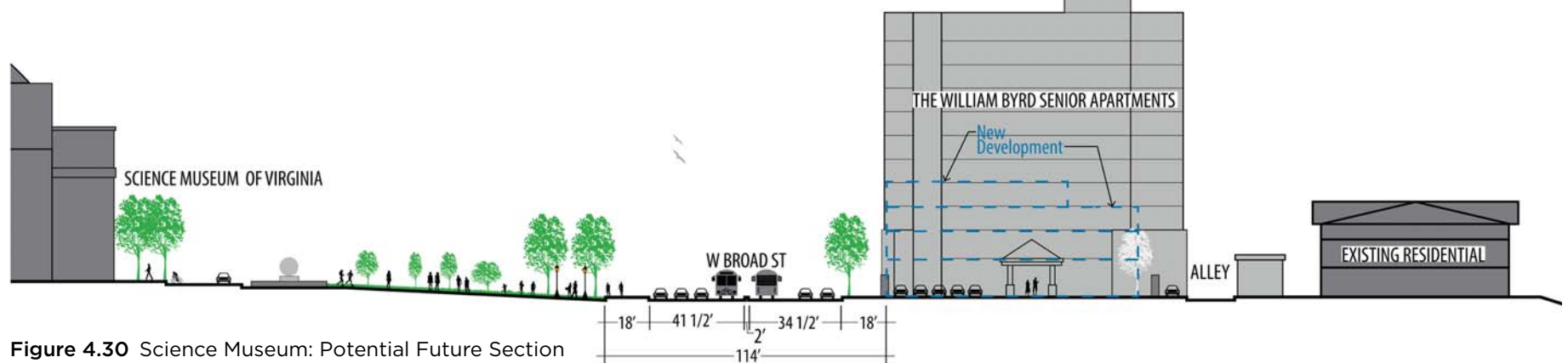


Figure 4.30 Science Museum: Potential Future Section

## LOWE'S SECTIONS

The existing section in Figure 4.31 illustrates the condition along W. Broad Street with Lowe's and its parking lot to the north, and a two-story commercial structure to the south. The potential future section in Figure 4.32 imagines the redevelopment of the parking lot to a mixed-use building with underground parking, as well as a new residential infill building with ground floor commercial uses on a surface parking lot.

Please note that this section drawing is an illustration of how new development may appear at specific heights and forms. Please refer to the Future Land Use map and the Station Area Vision for the land use policy for this area.



Section cut-through line

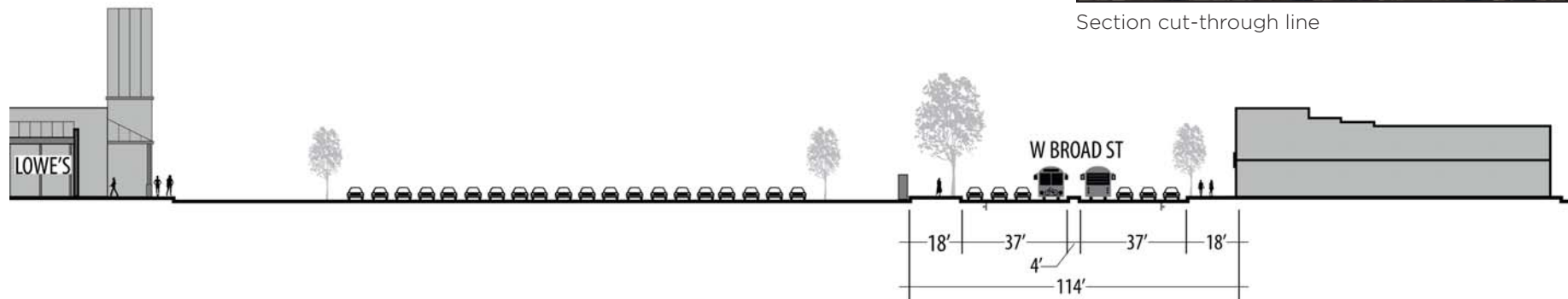


Figure 4.31 Lowe's: Existing Section

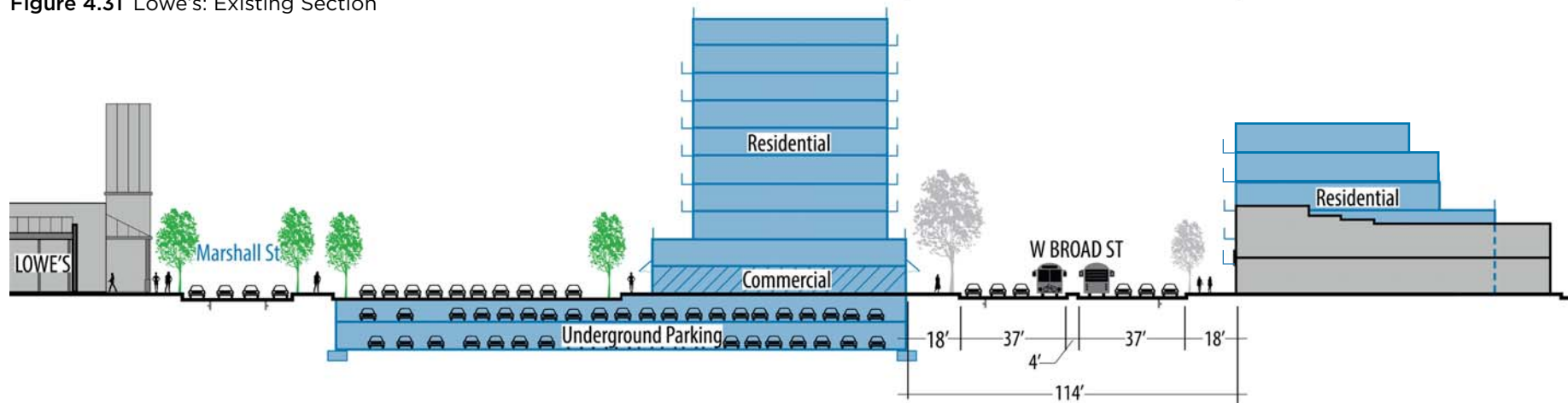


Figure 4.32 Lowe's: Potential Future Section



### POTENTIAL DEVELOPMENT SCENARIO

Figure 4.33 shows a concentration of density around the Science Museum Station. This potential scenario:

- Creates an urban green space in front of the Science Museum.
- Respects and preserves historic buildings.
- Completes the W. Broad Street street wall.
- Creates a strong identifiable gateway at the W. Broad/Boulevard intersection.

Please note that this drawing is an illustration of how new development may appear at specific heights and forms. Please refer to the Future Land Use map and the Station Area Vision for the land use policy for this area.



**Figure 4.33** Science Museum: Potential Development Scenario

## VCU & VUU STATION AREA

### EXISTING CONDITIONS

The VCU & VUU Station area is an “Emerging Station.” The area, located at the center of the 7.6-mile Pulse line, is growing in terms of jobs and employment, has moderate land costs, low office rents, and high permit activity, indicating a developing market. The area around the VCU & VUU Station is one of the densest areas in both population and employment, being third out of all station areas for employment density, and has a very walkable, connected street grid with a Walk Score® of 95 out of 100. The area as a whole is not zoned for high-density development and most new development is attributed to VCU. There are redevelopment opportunities in the area, but only a moderate amount.

#### MARKET CONDITIONS: MEDIUM-HIGH

##### HOUSEHOLD GROWTH • • • • •

2000-2013 household growth: 11.79%

##### EMPLOYMENT GROWTH • • • • •

2008-2012 employment growth: -3.76%

##### PROPERTY VALUES • • • • •

Walkshed property total: \$1.5 billion +

##### OFFICE RENT SCORE • • • • •

Office rent per sq ft: \$13.93

##### RETAIL RENT SCORE • • • • •

Retail rent per sq ft: \$16.66

##### COMMERCIAL PERMITS • • • • •

2010-2015 permit activity: \$170 million +

##### RESIDENTIAL PERMITS • • • • •

2010-2015 permit activity: \$60 million +

#### DEVELOPMENT READINESS: MEDIUM-LOW

##### BY-RIGHT ZONING • • • • •

Land coverage allowing TOD: 16.14%

##### PARCELIZATION • • • • •

Parcels per acre: 7

##### VACANT LAND • • • • •

Acres of vacant land: 8.2

##### UNDERPERFORMING LAND • • • • •

Acres of redevelopment land: 53.4

#### PEDESTRIAN ORIENTATION: MEDIUM-HIGH

##### POPULATION DENSITY • • • • •

People per acre: 48.6

##### EMPLOYMENT DENSITY • • • • •

Jobs per acre: 41

##### BUS FREQUENCY • • • • •

Average wait time: 37 minutes

##### BLOCK PATTERN • • • • •

Percent of blocks greater than 4 acres: 11%

##### INTERSECTION DENSITY • • • • •

Amount of intersections: 239

##### BIKE LANE ACCESS • • • • •

Linear feet of bike lanes in walkshed: 211'

##### CAR-FREE HOUSEHOLDS • • • • •

Households without a car: 14%

##### PARKS ACCESS • • • • •

Miles from station to greenspace: 0.27

##### WALKSCORE® • • • • •

Walkscore.com score at station: 95

## NEIGHBORHOODS

The VCU & VUU Station is situated between Carver and the VCU Monroe Park campus, with easy access to the lower Fan District, as shown in Figure 4.34. Carver is primarily a residential area with corner commercial uses and multi-family buildings dispersed throughout. The epicenter of the VCU Monroe Park campus is Linden Street, a 10-minute walk from the Pulse Station, where Cabell Library, the Student Union, and various academic buildings are located. W. Broad Street is home to several large anchor institutions – the Seigel Center and the Institute for Contemporary Art (tentative opening in early 2018) – and many small footprint retail amenities.

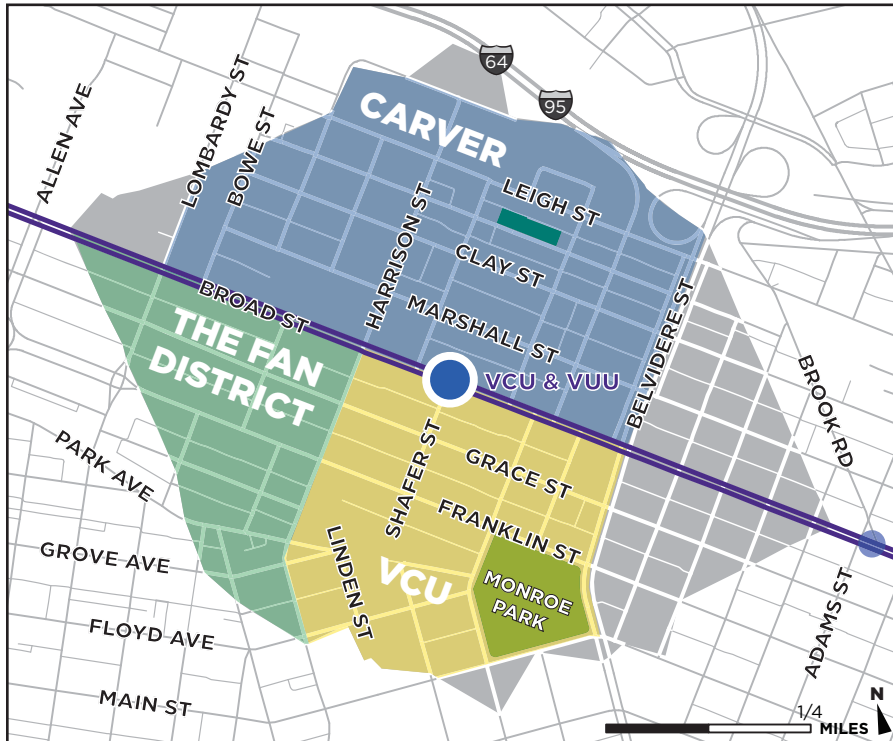


Figure 4.34 VCU & VUU: Neighborhoods

## EXISTING LAND USE

The VCU & VUU walkshed features a great mix of uses surrounding and supporting a major activity hub – VCU. About 40% of existing land use is multi-family residential, followed by institutional at 19.6%, commercial at 13.7% and single-family residential at 12.1%, as shown in Figure 4.35.

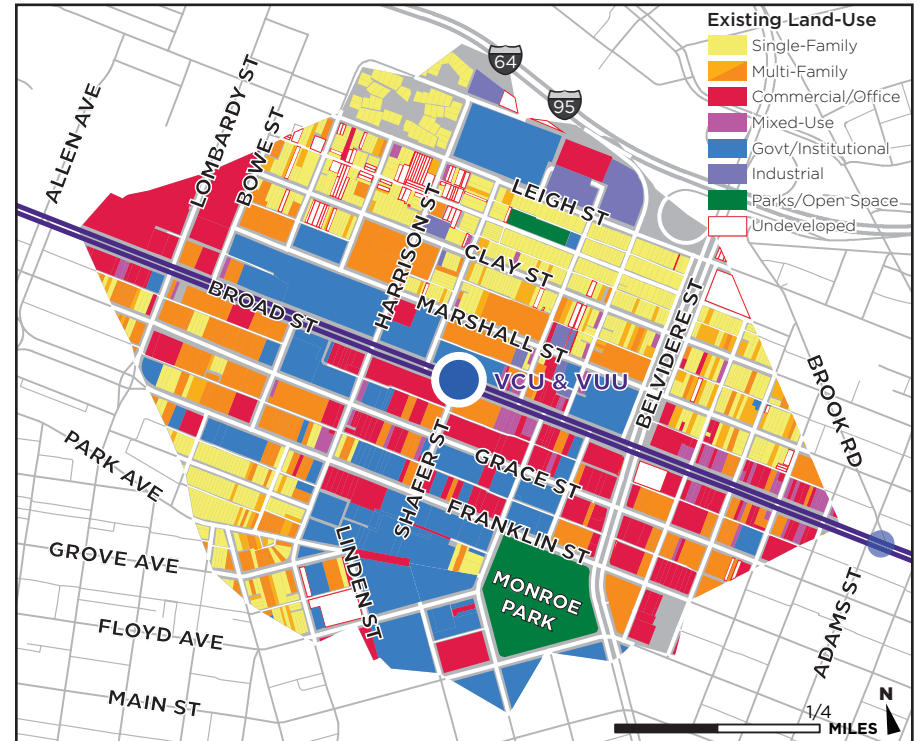


Figure 4.35 VCU & VUU: Existing Land Use



## SURFACE PARKING

Surface parking lots occupy 22% of the walkshed, as shown in Figure 4.36. Parking lots around the VCU & VUU Station are usually small-scale, but there are occurrences where half, or more, of an entire block is a parking lot.

## VCU OWNERSHIP

Figure 4.37 shows the distribution of land owned by Virginia Commonwealth University – comprising its Monroe Park Campus. Because VCU is a state university, City land use controls do not apply to most of their parcels (there are some exceptions). However, through collaboration, the City and the University can work together to accomplish a cohesive vision for the area.

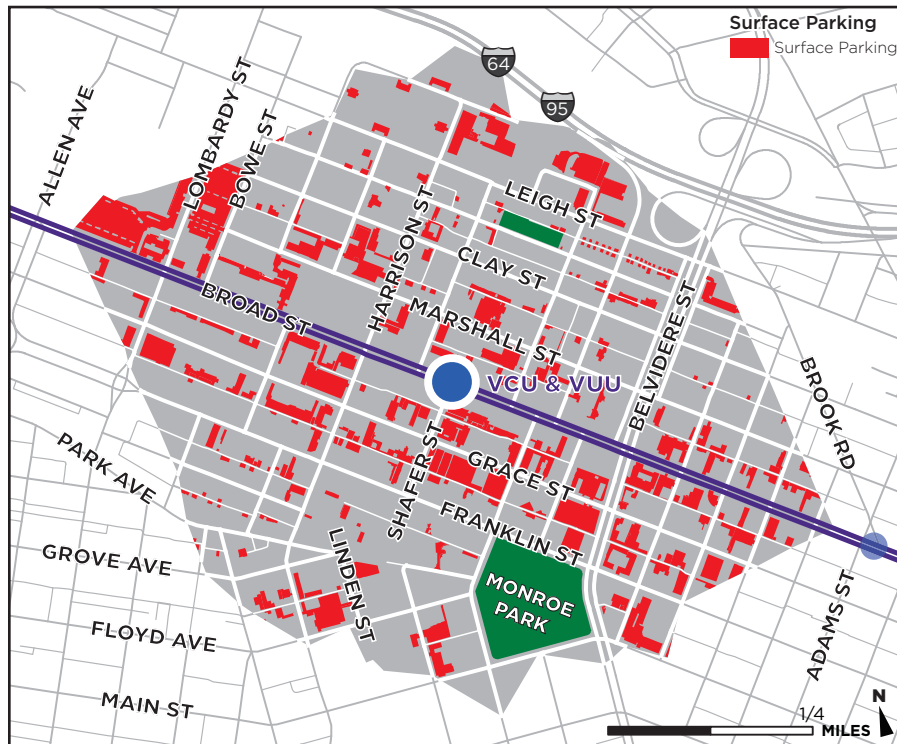


Figure 4.36 VCU & VUU: Surface Parking

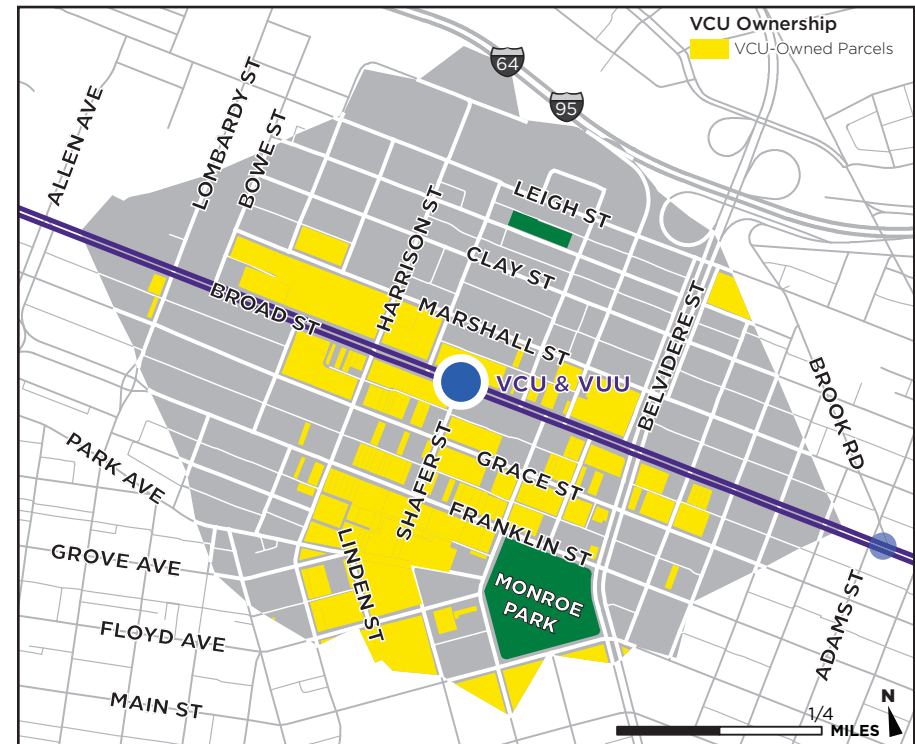


Figure 4.37 VCU & VUU: VCU Ownership



## HISTORIC DISTRICTS

A large portion of this station area is located in a National Register Historic District, while portions of Franklin and Broad Streets are located in City Old & Historic Districts, as shown in Figure 4.38. City Old & Historic Districts require exterior changes to buildings to go through the City's Commission of Architectural Review while National Register Historic Districts provide federal and state historic tax credits for historic renovations which are reviewed by the National Park Service.

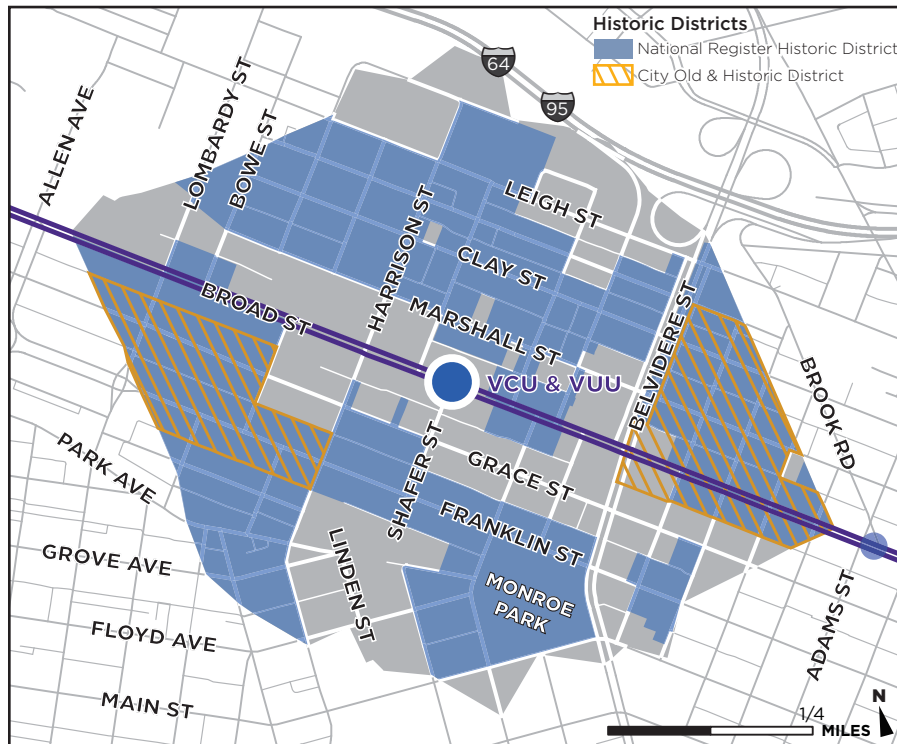


Figure 4.38 VCU & VUU: Historic Districts

## VISUALLY ACTIVE FRONTAGE

Visually active frontages (commercial storefronts that engage the street) line the majority of W. Broad Street, reflecting the urban character of this station area, as shown in Figure 4.39.

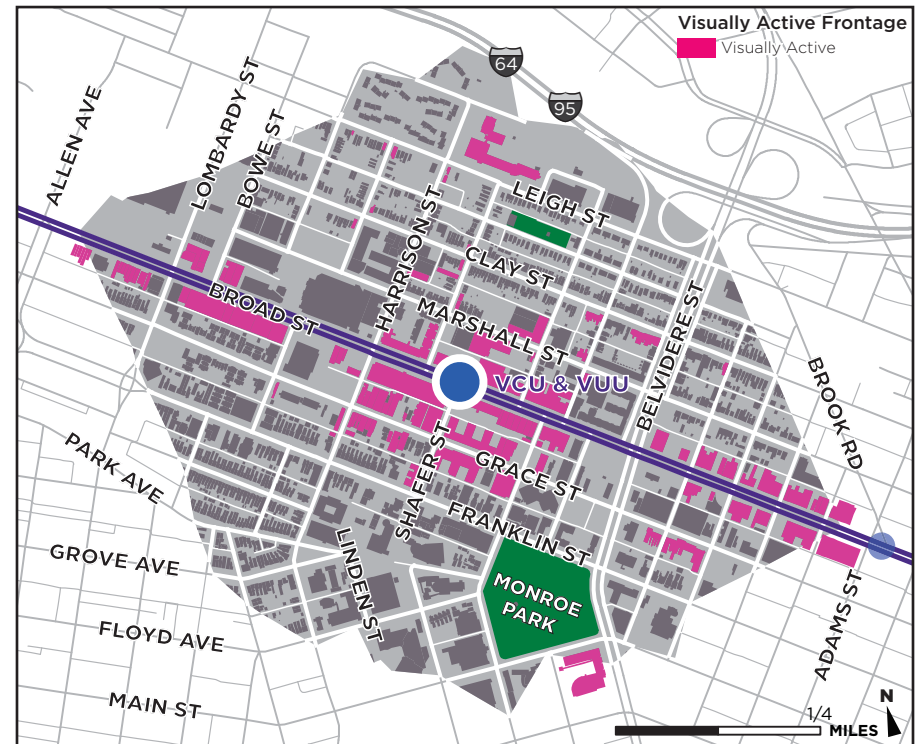


Figure 4.39 VCU & VUU: Visually Active Frontage

## VCU & VUU STATION AREA VISION

The area around the VCU & VUU Station continues to develop as a street-oriented commercial corridor and urban avenue, providing shopping, dining, and housing for students and neighborhood residents alike. The station area continues to benefit from its proximity to the VCU Monroe Park campus and continues to be a job center and nexus of activity with services and cultural attractions for the region. The intersection of Belvidere and W. Broad Streets becomes a signature intersection with new development complementing the VCU Institute for Contemporary Art with prominent architecture.

### FUTURE LAND USE

The Corridor Mixed-Uses along W. Broad Street encourage the continued development of pedestrian-oriented commercial uses on the ground floors and allow taller building heights that continue to add residential and employment density near the Pulse station, as shown in Figure 4.40. The Nodal Mixed-Uses at the intersection of Belvidere and W. Broad Streets permit the development of tall, signature buildings at a very prominent entrance to the city of Richmond. Neighborhood Mixed-Uses in Carver support the existing medium-density residential development while allowing corner commercial and multi-family residential uses where appropriate.

### FUTURE CONNECTIONS

Improvements to the transportation network and streetscape complement future development, as shown in Figure 4.41. The installation of missing sidewalks in portions of the Carver neighborhood, coupled with streetscape improvements, make the area more walkable, while the installation of new bicycle facilities make cycling a safer and more viable transportation option. The re-establishment of an urban street grid where W. Clay and W. Marshall Streets currently end west of N. Lombardy Street improves overall connectivity, while the conversion of one-way streets to two-way slows traffic and creates a more neighborhood-oriented transportation network.

Bicycle infrastructure recommendations are sourced from the Richmond Bike Master Plan with some modifications from public input which includes the recommendation for a bike lane on Marshall

Street. These recommendations will need further study and public vetting to determine their feasibility and associated trade-offs with on-street parking and travel lanes.

### STATION AREA RECOMMENDATIONS

#### Compact and Mixed

- **CW.1 – CW.7** See descriptions in Chapter 3.
- **SA.30** Rezone the area around the VCU & VUU Station to districts that align with the Future Land Use Map.

#### Connected

- **CW.8 – CW.23** See descriptions in Chapter 3.
- **SA.31** Reconnect the street grid as redevelopment occurs.

#### Thriving & Equitable

- **CW.24 – CW.35** See descriptions in Chapter 3.
- **SA.32** Form a TOD committee between VCU, the City, and the broader community. Collaborate with VCU through regular meetings to discuss, plan, and implement a unified vision for the station area.





Figure 4.40 VCU & VUU: Future Land Use Map



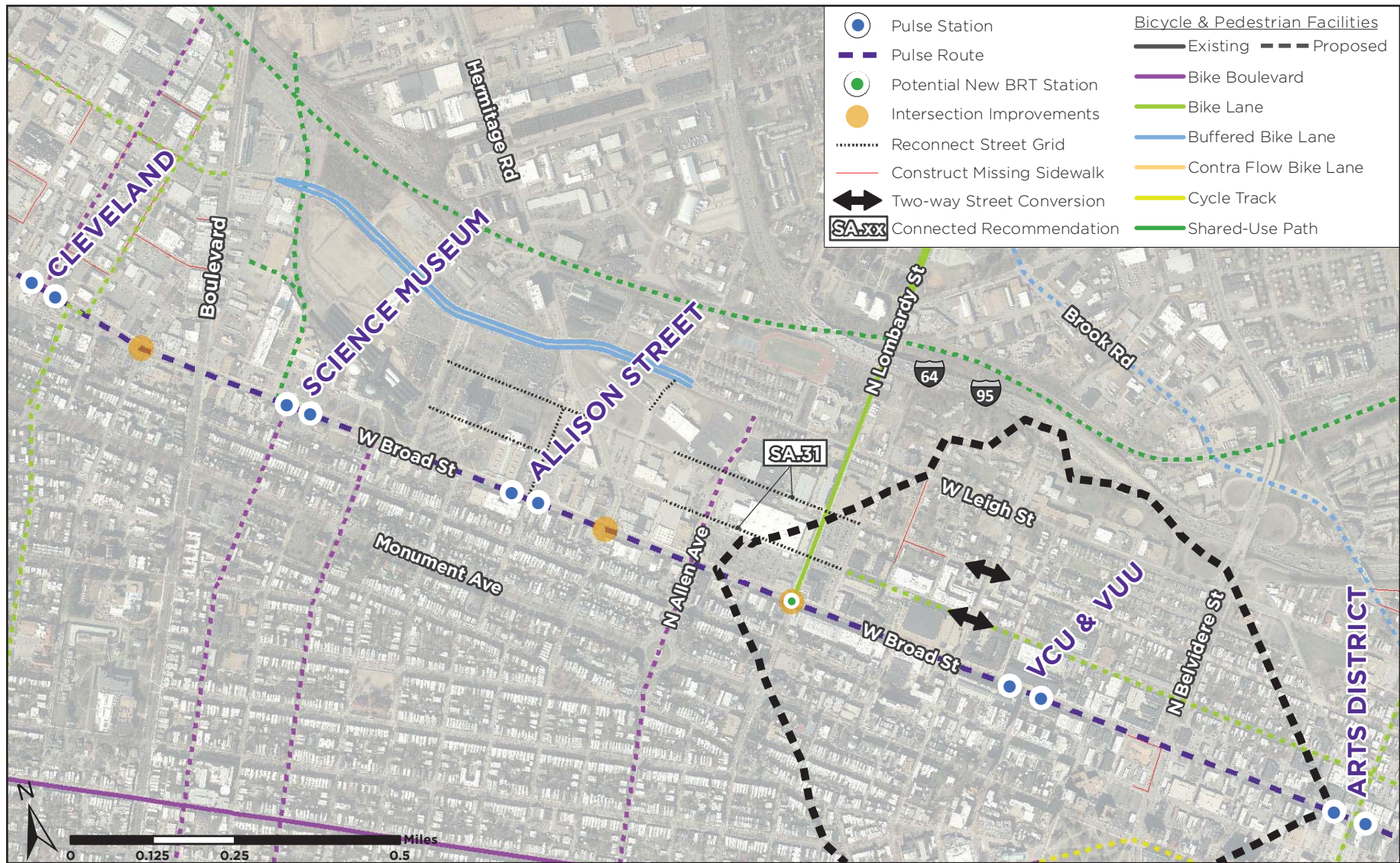


Figure 4.41 VCU & VUU: Future Connections Map



## RECOMMENDATION VISUALIZATION

### GOSHEN SECTIONS

The cross section at Goshen Street shows the typical form of development along W. Broad Street in this portion of the Corridor. Most buildings are around two stories – a step down in height from the denser section of W. Broad Street east of Belvidere Street as shown in Figure 4.42. The potential future section, as shown in Figure 4.43, envisions residential building additions to low-scale structures and the improvement of the streetscape with the addition of street trees and other pedestrian amenities.

Please note that this section drawing is an illustration of how new development may appear at specific heights and forms. Please refer to the Future Land Use map and the Station Area Vision for the land use policy for this area.



Section cut-through line

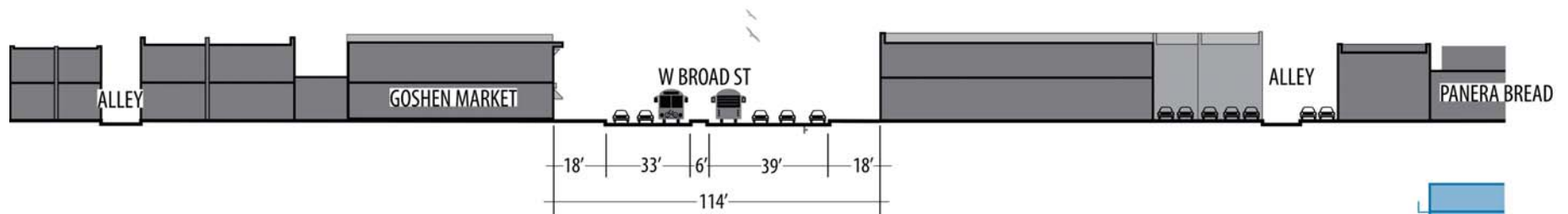


Figure 4.42 Goshen St: Existing Section

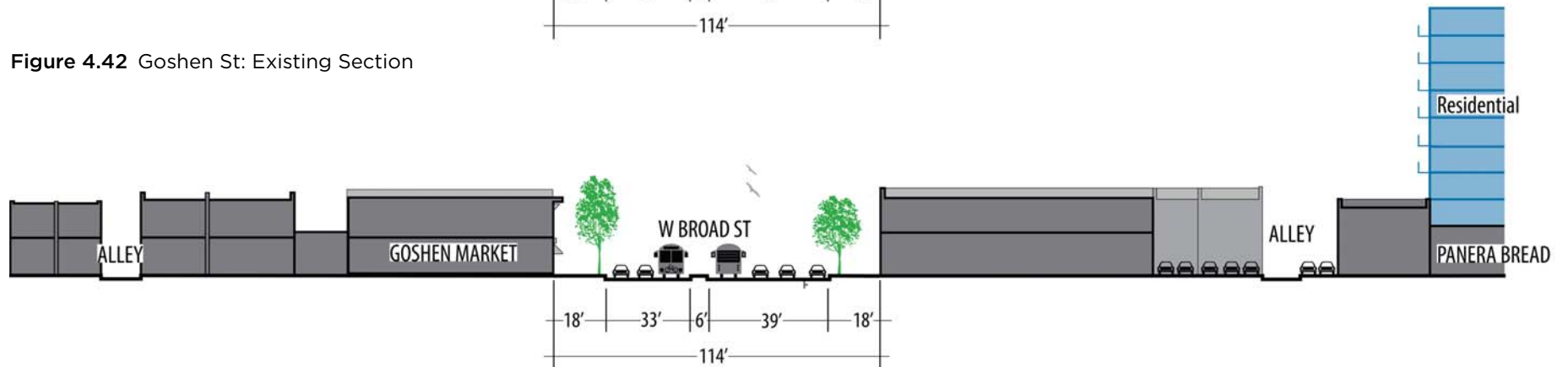


Figure 4.43 Goshen St: Potential Future Section

## POTENTIAL DEVELOPMENT SCENARIO

While a good portion of the area around the VCU & VUU Station is developed, there are opportunities for infill development on surface parking lots, as shown in Figure 4.44. Infill development could:

- Add over 380,000 square feet of additional floor space.
- Add 0.11 acres of open space on both ground-level and rooftops.
- Complete the W. Broad Street street wall.
- Ensure fine-grained development that respects the Carver and Fan neighborhoods.



**Figure 4.44** VCU & VUU: Potential Infill Development Potential



## ARTS DISTRICT STATION AREA **PRIORITY STATION**

### EXISTING CONDITIONS

The Arts District Station area is an “Emerging Station.” This station area has the highest population density in the Corridor. Though jobs are growing, the area still has a small employment density relative to other stations. Land costs are more affordable than other portions of the Corridor. Rents are higher in this station area, but the area is seeing a growth in commercial development. Much of the area allows high-density development by-right and is attracting larger developments. The many nearby amenities and the strong street grid translate to a Walk Score® of 95 out of 100.

#### MARKET CONDITIONS: HIGH

**HOUSEHOLD GROWTH** • • • • •  
2000-2013 household growth: 77%

**EMPLOYMENT GROWTH** • • • • •  
2008-2012 employment growth: 11.45%

**PROPERTY VALUES** • • • • •  
Walkshed property total: \$1.5 billion +

**OFFICE RENT SCORE** • • • • •  
Office rent per sq ft: \$13.93

**RETAIL RENT SCORE** • • • • •  
Retail rent per sq ft: \$14.96

**COMMERCIAL PERMITS** • • • • •  
2010-2015 permit activity: \$147 million +

**RESIDENTIAL PERMITS** • • • • •  
2010-2015 permit activity: \$50 million +

#### DEVELOPMENT READINESS: MEDIUM-HIGH

**BY-RIGHT ZONING** • • • • •  
Land coverage allowing TOD: 34%

**PARCELIZATION** • • • • •  
Parcels per acre: 2.98

**VACANT LAND** • • • • •  
Acres of vacant land: 10.2

**UNDERPERFORMING LAND** • • • • •  
Acres of redevelopment land: 80.1

#### PEDESTRIAN ORIENTATION: MEDIUM-HIGH

**POPULATION DENSITY** • • • • •  
People per acre: 68.3

**EMPLOYMENT DENSITY** • • • • •  
Jobs per acre: 24.3

**BUS FREQUENCY** • • • • •  
Average wait time: 37 minutes

**BLOCK PATTERN** • • • • •  
Percent of blocks greater than 4 acres: 9.2%

**INTERSECTION DENSITY** • • • • •  
Amount of intersections: 313

**BIKE LANE ACCESS** • • • • •  
Linear feet of bike lanes in walkshed: 0'

**CAR-FREE HOUSEHOLDS** • • • • •  
Households without a car: 24.4%

**PARKS ACCESS** • • • • •  
Miles from station to greenspace: 0.19

**WALKSCORE®** • • • • •  
Walkscore.com score at station: 95

## NEIGHBORHOODS

The Arts District station serves both the Jackson Ward and Monroe Ward neighborhoods, as shown in Figure 4.45. Development patterns in these two neighborhoods differ greatly. Jackson Ward is primarily a fine-grained, single-family residential neighborhood with corner commercial and multi-family residential uses scattered throughout. Compared to Monroe Ward, Jackson Ward maintains a strong historic character, has a less-varied mix of architecture, and fewer parking lots. Monroe Ward features a wide range of styles and buildings heights, but has lost much of its neighborhood character to large surface parking lots. W. Broad Street creates a natural dividing line between the two neighborhoods; however, the new Maggie L. Walker

plaza at Broad and Adams Streets will offer a break in the street wall and create a natural flow point between the neighborhoods right at the new Pulse Station.

## EXISTING LAND USE

Land uses are well mixed with commercial uses accounting for 34% of the area, as shown in Figure 4.46. Multi-family residential uses follow at 16%, office uses at 9%, single-family residential uses at 9%, and institutional uses at 9%. This use mix shows Jackson and Monroe Wards' historic character of walkable centers of population and commerce.

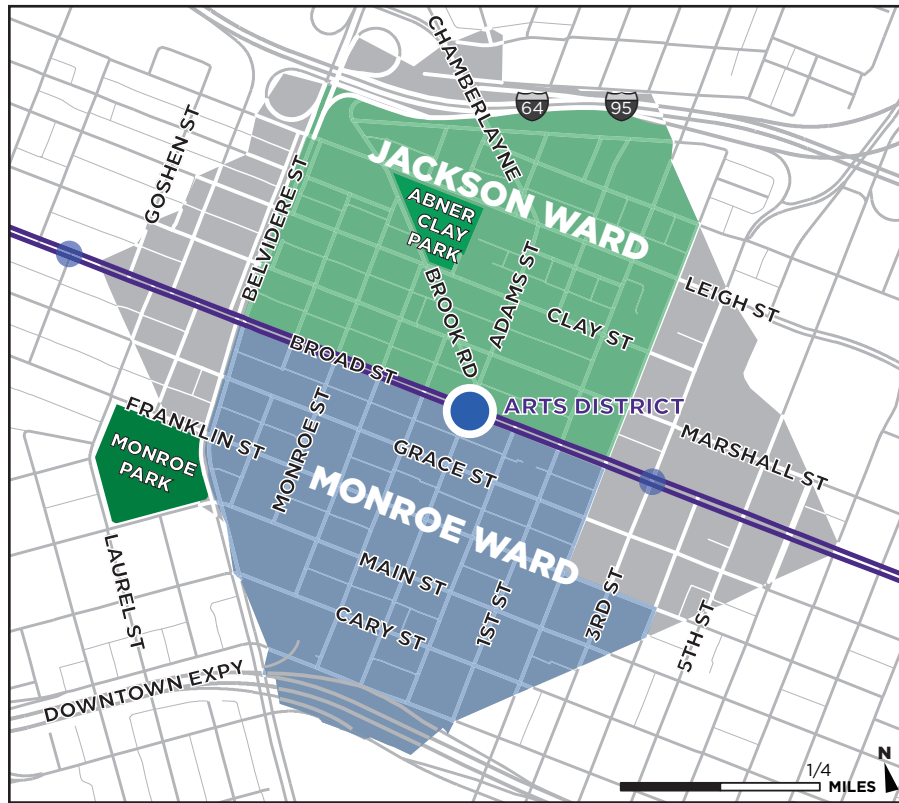


Figure 4.45 Arts District: Neighborhoods

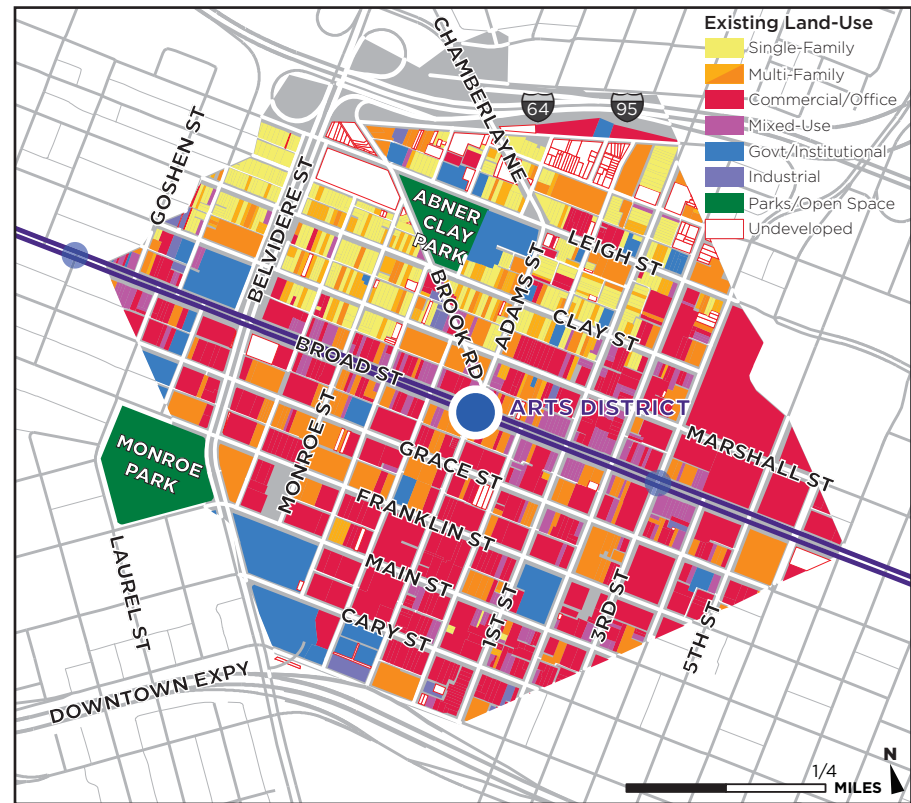


Figure 4.46 Arts District: Existing Land Use



## SURFACE PARKING

Surface parking lots occupy 42% of the walkshed, primarily serving adjacent uses, as shown in Figure 4.47. These lots spread through both sides of W. Broad Street, but are most concentrated in Monroe Ward where 38% of land area is surface parking. Of all the Pulse Corridor Stations, the Arts District Station has the most surface parking within the half-mile walkshed.

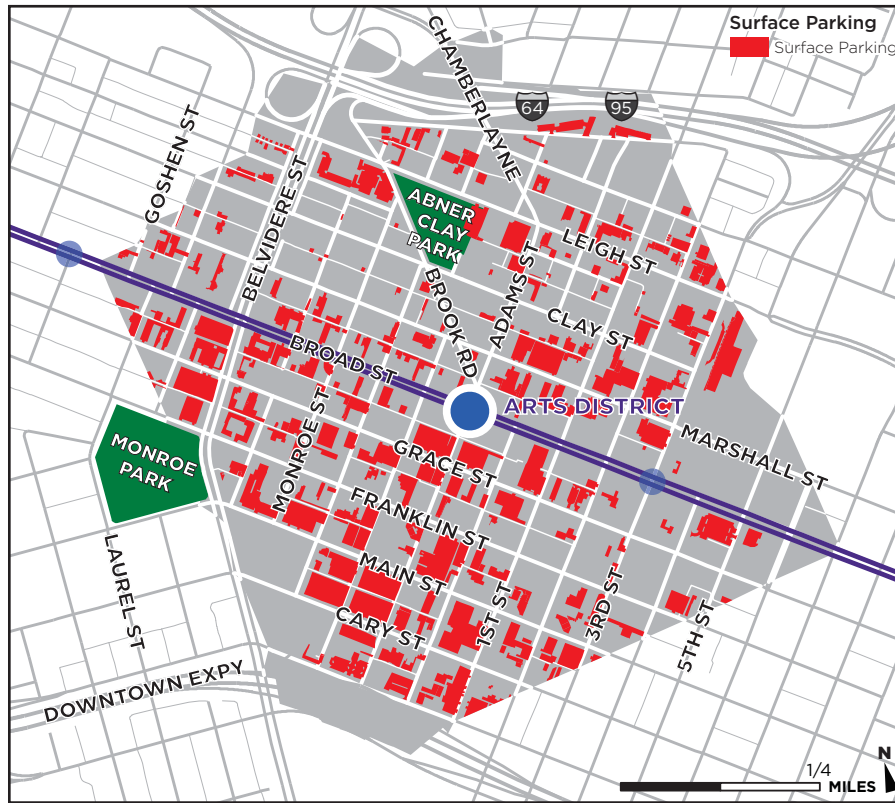


Figure 4.47 Arts District: Surface Parking

## HISTORIC DISTRICTS

Jackson Ward and Monroe Ward are both covered by City Old & Historic Districts and National Register Historic Districts, as shown in Figure 4.48. Much of W. Broad Street and Historic Jackson Ward fall into both. City Old & Historic Districts require exterior changes to buildings to go through the City's Commission of Architectural Review while National Register Historic Districts provide federal and state historic tax credits for historic renovations which are reviewed by the National Park Service.

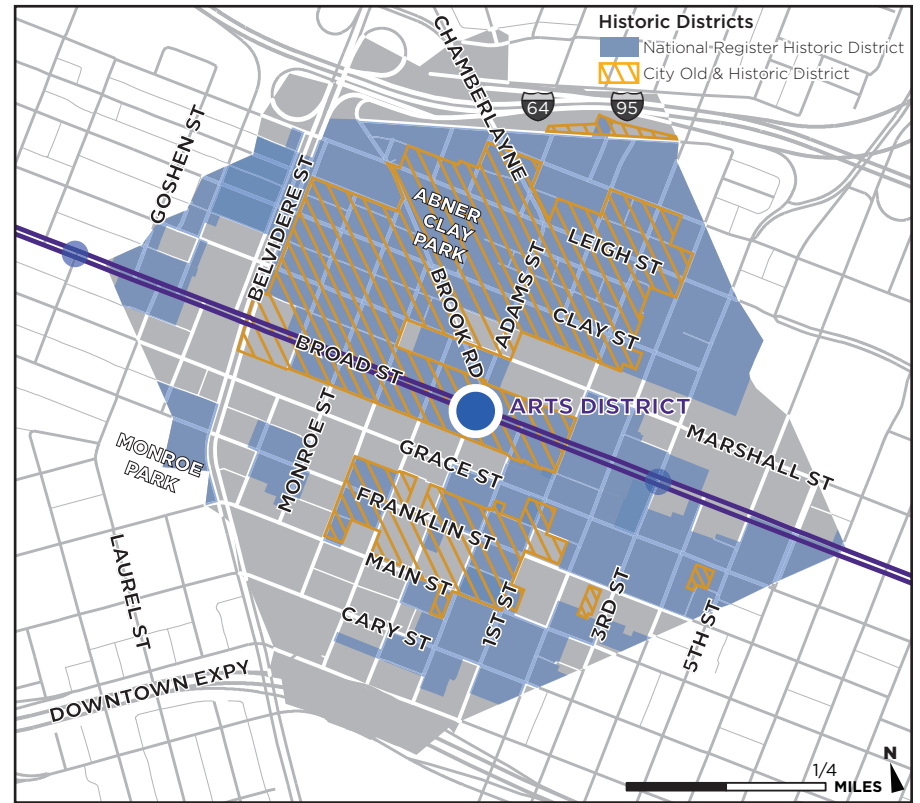
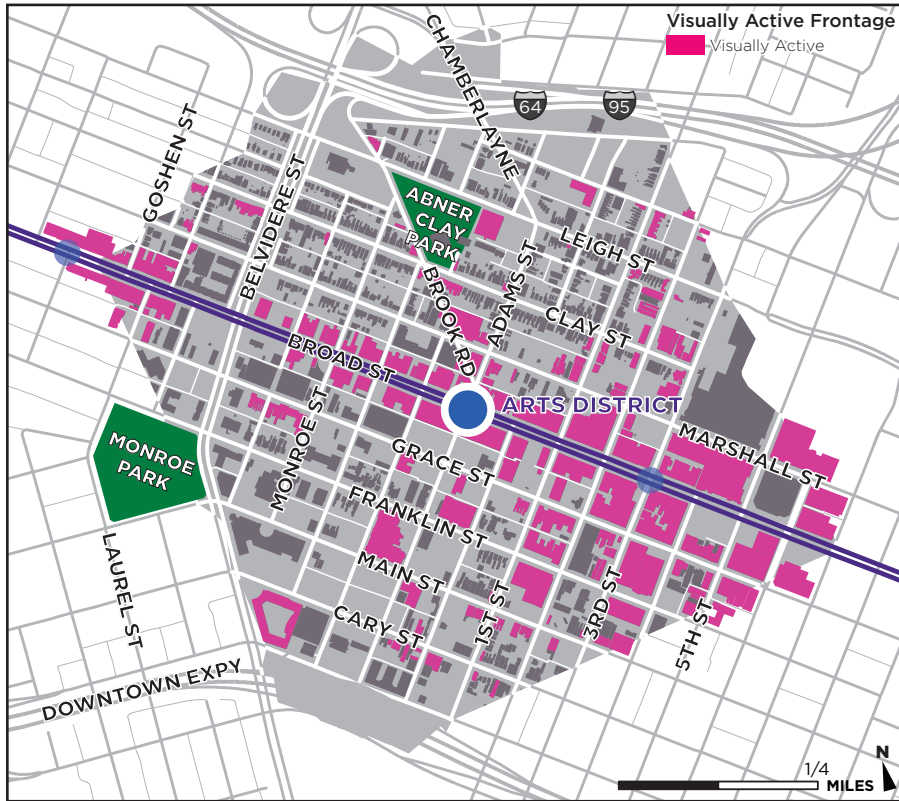


Figure 4.48 Arts District: Historic Districts

## VISUALLY ACTIVE FRONTAGE

A large majority of structures in this section of the W. and E. Broad Street Corridor have visually active frontages (commercial storefronts that engage the street), reflecting its historic, commercial character, as shown in Figure 4.49. Buildings with visually active frontages are scattered throughout this station areas as well, and help form the potential for a cohesive and visually-active neighborhood, despite the abundance of surface parking lots.



**Figure 4.49** Arts District: Visually Active Frontage





## ARTS DISTRICT STATION AREA VISION

Located at the heart of the Downtown Arts District, this Pulse Station creates a hub of activity at the newest urban plaza on the Pulse Corridor, Maggie L. Walker Plaza. Historic buildings are preserved and complemented by denser development on vacant lots that generates more activity through a greater concentration of residents, shoppers, workers, and tourists who are attracted to the residential options, retail and restaurant destinations, jobs, and cultural attractions, including galleries, parks, museums, theaters, and other such destinations throughout Jackson Ward, Monroe Ward, and along W. Broad Street.

### FUTURE LAND USE

The Nodal Mixed-Uses at the intersection of Belvidere and W. Broad Street permit the development of tall signature buildings at a very prominent entrance to the City of Richmond, as shown in Figure 4.50. The Downtown Mixed-Uses along W. Broad Street and throughout Monroe Ward encourage the redevelopment of surface parking lots and underutilized buildings into high-density buildings that focus on creating walkable environments with active ground floors, appropriate streetscape, and minimal driveway entrances. The future land use for Monroe Ward builds on the incredibly dynamic and diverse existing building stock, creating a truly eclectic urban neighborhood. Neighborhood Mixed-Uses in Jackson Ward support the existing medium-density residential development while allowing corner commercial and multi-family residential uses where appropriate.

### FUTURE CONNECTIONS

While this station area is already highly connected and has a more developed streetscape, especially along Broad Street, improvements to the transportation network can further enhance the quality of transportation options, as shown in Figure 4.51. Planned bicycle improvements, such as buffered bike lanes on N. 1st and 2nd Streets, as well as a cycle track along Franklin Street will make cycling through the area safer and more accessible to all cyclists. The conversion of one-way streets to two-way for Grace, Clay, and Marshall Streets will further enhance the cohesiveness and connectivity of this area.

Bicycle infrastructure recommendations are sourced from the Richmond Bike Master Plan with some modifications from public input which includes the recommendation for bike lanes on Marshall

and Adams Streets. These recommendations will need further study and public vetting to determine their feasibility and associated trade-offs with on-street parking and travel lanes.

### STATION AREA RECOMMENDATIONS

#### Compact and Mixed

- **CW.1 – CW.7** See descriptions in Chapter 3.
- **SA.33** Rezone Monroe Ward to districts that align with the Future Land Use Map.
- **SA.34** Encourage and support the redevelopment of surface parking lots into uses that support transit.
- **SA.35** Develop a public and green space plan for Monroe Ward.
- **SA.36** Fully implement the Abner Clay Park plan: Beautify and activate this park in accordance with community needs and desires. Add active uses to attract residents and Pulse BRT riders into this nearby asset. Orient any new development to the park.

#### Connected

- **CW.8 – CW.23** See descriptions in Chapter 3.
- **SA.37** Construct protected bike lanes on 1st and 2nd streets.

#### Thriving & Equitable

- **CW.24 – CW.35** See descriptions in Chapter 3.
- **SA.38** Redevelop City-owned land near the Arts District Station to include affordable housing.
- **SA.39** Work with RRHA to ensure that mixed-use, mixed-income developments with a TOD form are developed in Jackson Ward.



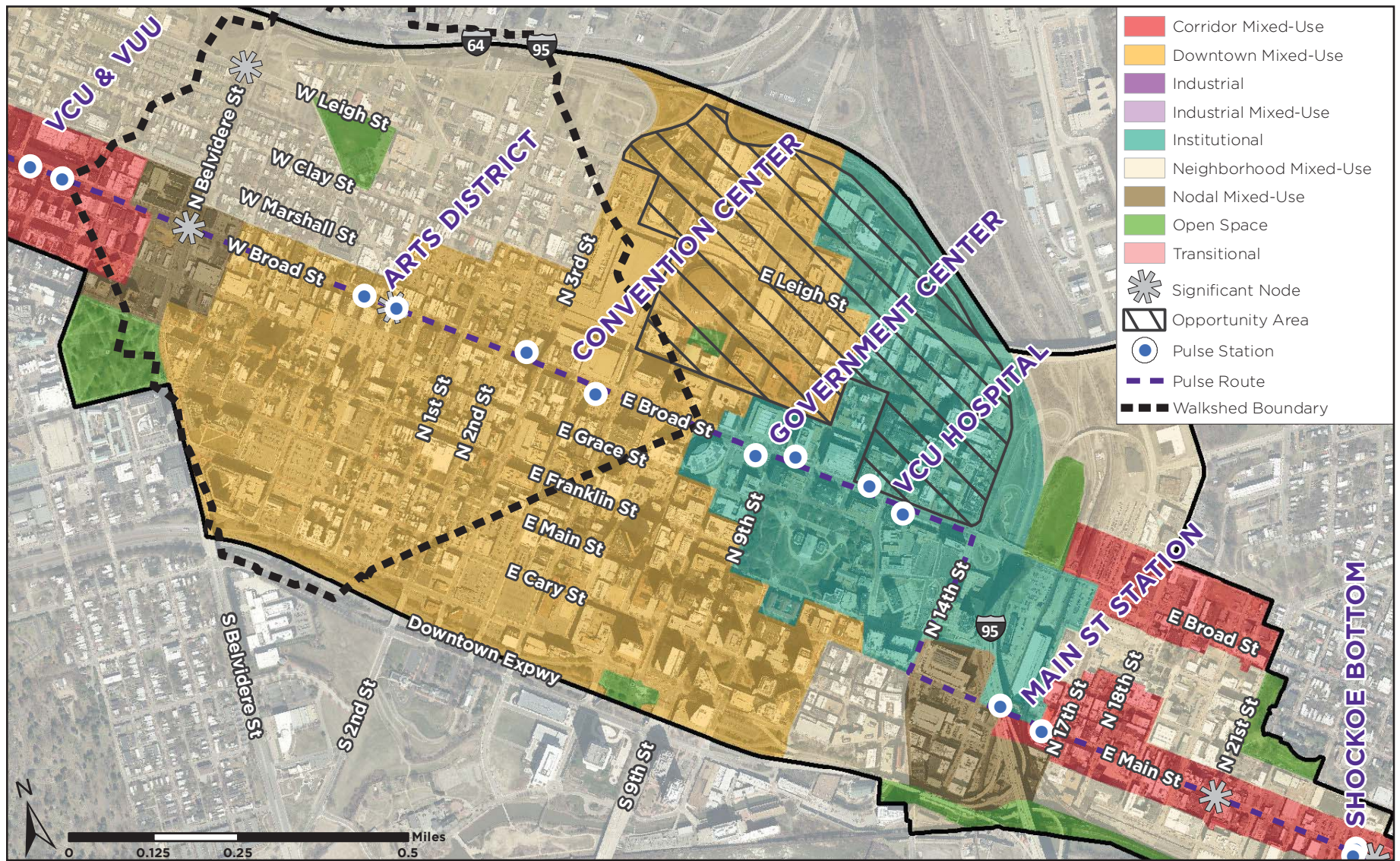


Figure 4.50 Arts District: Future Land Use Map



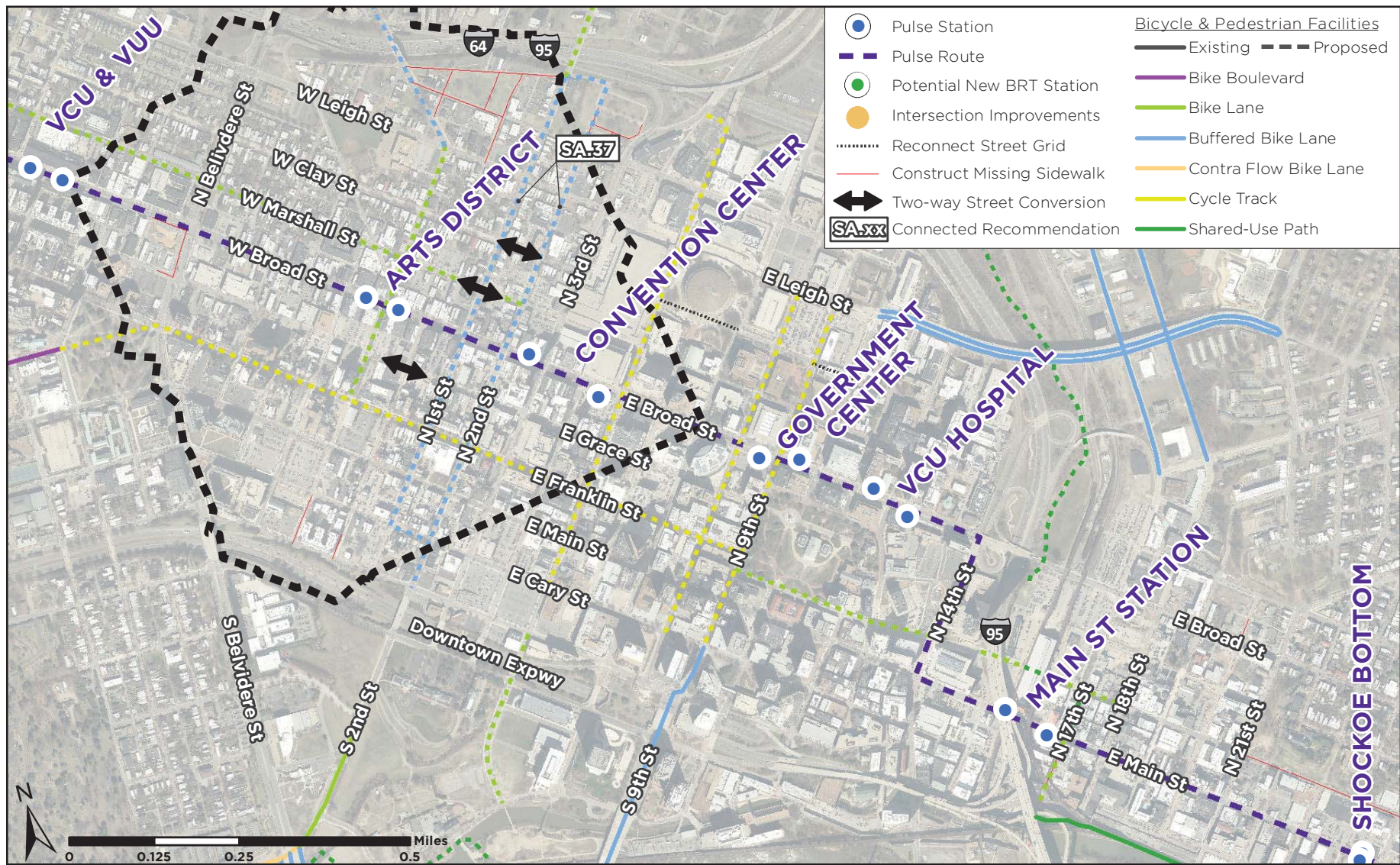


Figure 4.51 Arts District: Future Connections Map

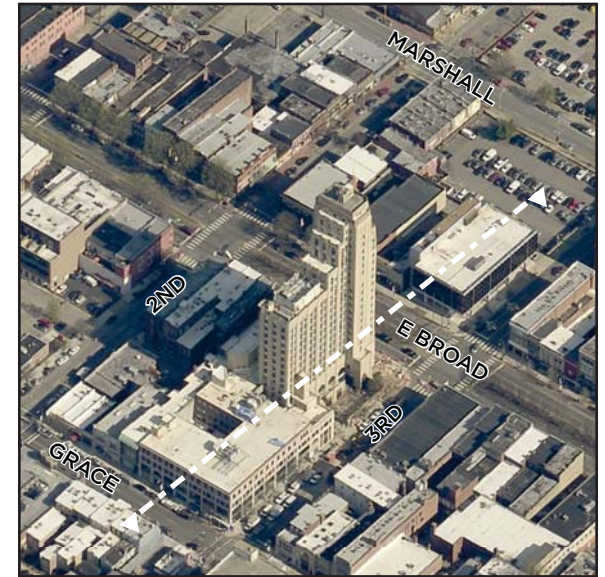


## RECOMMENDATION VISUALIZATION

### SECTIONS

The E. Broad and N. 3rd Street intersection exemplifies the variation in building heights in this station area. The tallest building on Broad Street near the Arts District Station is the Central National Bank (CNB) Building, which rises 24 stories. The CNB is the tallest building allowed under the current zoning. New infill, particularly at prominent locations on Broad Street, should be larger in scale than some of the three-story historic building stock and use step-backs to other narrower streets like the CNB does along Grace Street. As with other sites along the Corridor, the size of the parcel, its relationship to surrounding buildings, and the pushing of its mass towards the widest of its surrounding streets, the CNB building presents good lessons for new structures along the Corridor. Along Broad Street in the City Old & Historic District, subordinate additions and additional stories that preserve and enhance the historic building stock should be allowed. The potential future section, as shown in Figure 4.52, visualizes what new infill (in blue) could look like fronting on W. Marshall Street and behind the Virginia Federal Saving & Loan Building.

Please note that this section drawing is an illustration of how new development may appear at specific heights and forms. Please refer to the Future Land Use map and the Station Area Vision for the land use policy for this area.



Section cut-through line

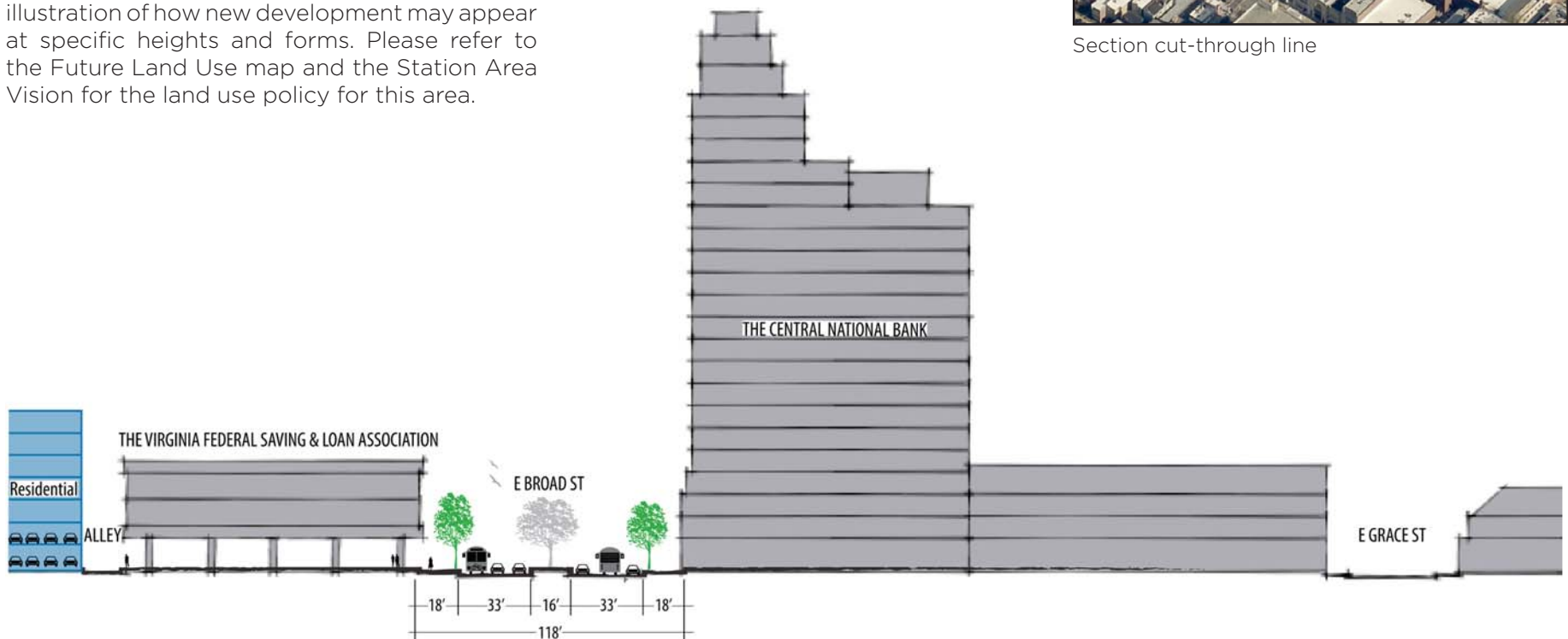


Figure 4.52 CNB: Potential Future Section

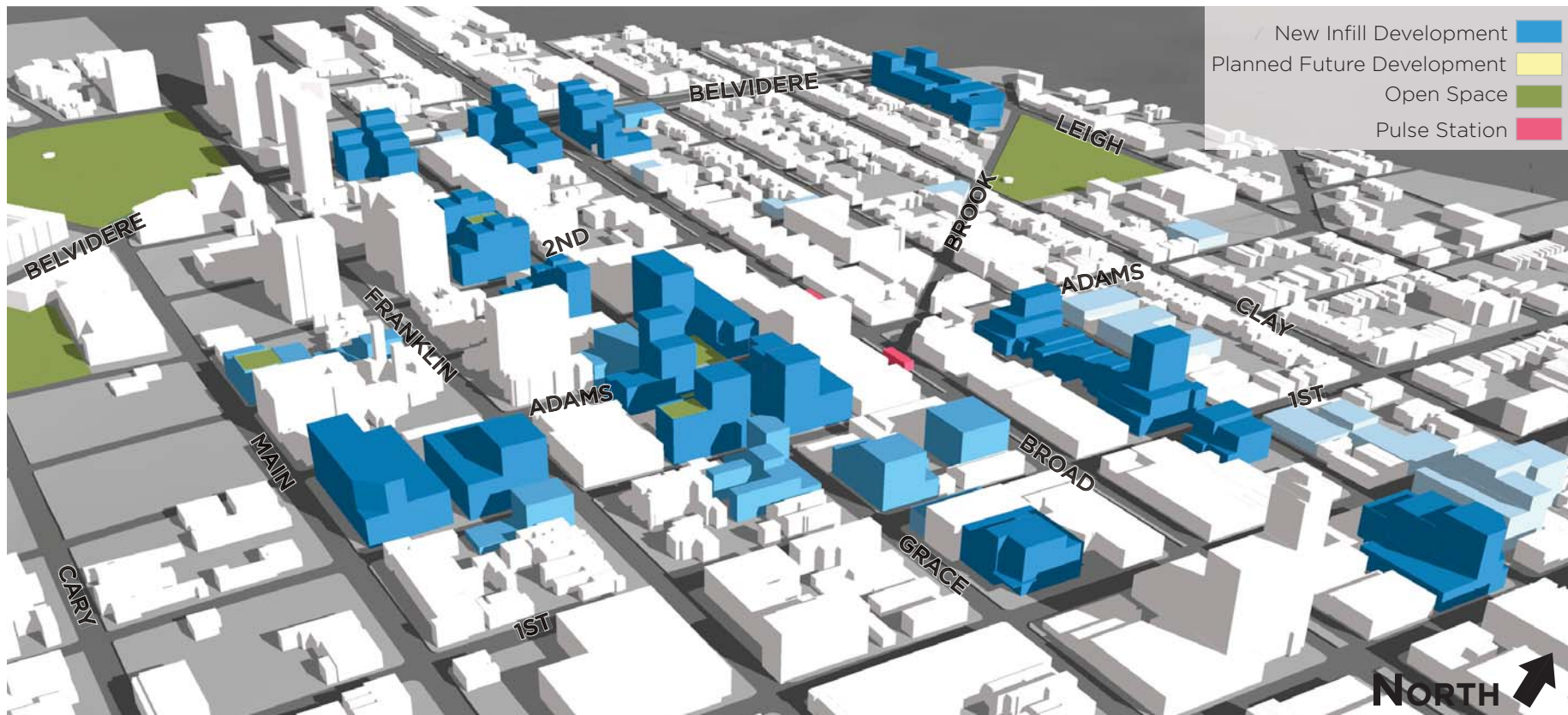


## POTENTIAL DEVELOPMENT SCENARIO

Figure 4.53 shows a concentration of density around the Arts District Station. Jackson Ward features contextual infill where Monroe Ward is intensified with an eclectic mix of styles, types, heights, and uses. Darker buildings suggest higher density. Open space is added through rooftop development. Using open space as an organizing element for redevelopment would be supported. This scenario:

- Adds nearly 4 million square feet of additional floor space.
- Adds 2.5 acres of open space on both ground-level and rooftops.
- Respects and preserves historic buildings.
- Takes advantage of the hill in southern Monroe Ward through step-backs.

Please note that this drawing is an illustration of how new development may appear at specific heights and forms. Please refer to the Future Land Use map and the Station Area Vision for the land use policy for this area.



**Figure 4.53** Arts District: Potential Development Scenario

## DOWNTOWN STATION AREAS Convention Center, Government Center, and VCU Hospital Stations

### EXISTING CONDITIONS

All three Downtown stations are “Established Stations” and earned the highest scores out of any stations on the Pulse Corridor. Downtown’s high population and moderate employment growth is reflected in high land values, high rents, and the highest permitting activity on the Corridor. The area is mostly zoned to allow high-density development – a designation required in the core of the region. There are over 25 acres of vacant land in this combined walkshed and even more redevelopable land in the area, mostly centered on the Convention Center station. Downtown is the most job-dense area of the entire region. The area also has a well-connected street grid, giving this area a high Walkscore® and possibly contributing to a quarter of the population foregoing car-ownership.

#### MARKET CONDITIONS: MEDIUM-HIGH

**HOUSEHOLD GROWTH** • • • • •  
2000-2013 household growth: 76.7%

**EMPLOYMENT GROWTH** • • • • •  
2008-2012 employment growth: 9%

**PROPERTY VALUES** • • • • •  
Walkshed property total: \$4 billion +

**OFFICE RENT SCORE** • • • • •  
Office rent per sq ft: \$18.39

**RETAIL RENT SCORE** • • • • •  
Retail rent per sq ft: \$14.96

**COMMERCIAL PERMITS** • • • • •  
2010-2015 permit activity: \$443 million +

**RESIDENTIAL PERMITS** • • • • •  
2010-2015 permit activity: \$115 million +

#### DEVELOPMENT READINESS: HIGH

**BY-RIGHT ZONING** • • • • •  
Land coverage allowing TOD: 69%

**PARCELIZATION** • • • • •  
Parcels per acre: 3.95

**VACANT LAND** • • • • •  
Acres of vacant land: 25.4

**UNDERPERFORMING LAND** • • • • •  
Acres of redevelopment land: 159.6

#### PEDESTRIAN ORIENTATION: HIGH

**POPULATION DENSITY** • • • • •  
People per acre: 68.32

**EMPLOYMENT DENSITY** • • • • •  
Jobs per acre: 74.46

**BUS FREQUENCY** • • • • •  
Average wait time: 35.6

**BLOCK PATTERN** • • • • •  
Percent of blocks greater than 4 acres: 7%

**INTERSECTION DENSITY** • • • • •  
Amount of intersections: 379

**BIKE LANE ACCESS** • • • • •  
Linear feet of bike lanes in walkshed: 1214.4'

**CAR-FREE HOUSEHOLDS** • • • • •  
Households without a car: 24.4

**PARKS ACCESS** • • • • •  
Miles from station to greenspace: 0.05

**WALKSCORE®** • • • • •  
Walkscore.com score at station: 91

## NEIGHBORHOODS

The Downtown stations are located in and near several neighborhoods, as shown in Figure 4.54. The core neighborhoods – City Center, Virginia Biotechnology Research Park, VCU Health, Central Office, and the Capitol District – piece together to form the city’s central business district and are dominated by office uses. With a very large work day population, Downtown used to be very quiet and empty in the evening and on weekends. However, over the past ten years several commercial buildings have been repurposed to multi-family residential uses and consequently, there is more activity on the streets during non-work hours. Other neighborhoods

supporting these stations include Jackson Ward, Monroe Ward, and Shockoe Slip. Shockoe Slip is an historic neighborhood centered on E. Cary Street and featuring historic architecture and cobblestone streets.

## EXISTING LAND USE

Evidence of this collection of stations’ designation as the center of employment for the region can be found in its land use mix, where commercial/office uses comprise 43% of all uses in the station areas. Following office is multi-family residential (38%) and institutional (6%) uses, as shown in Figure 4.55.

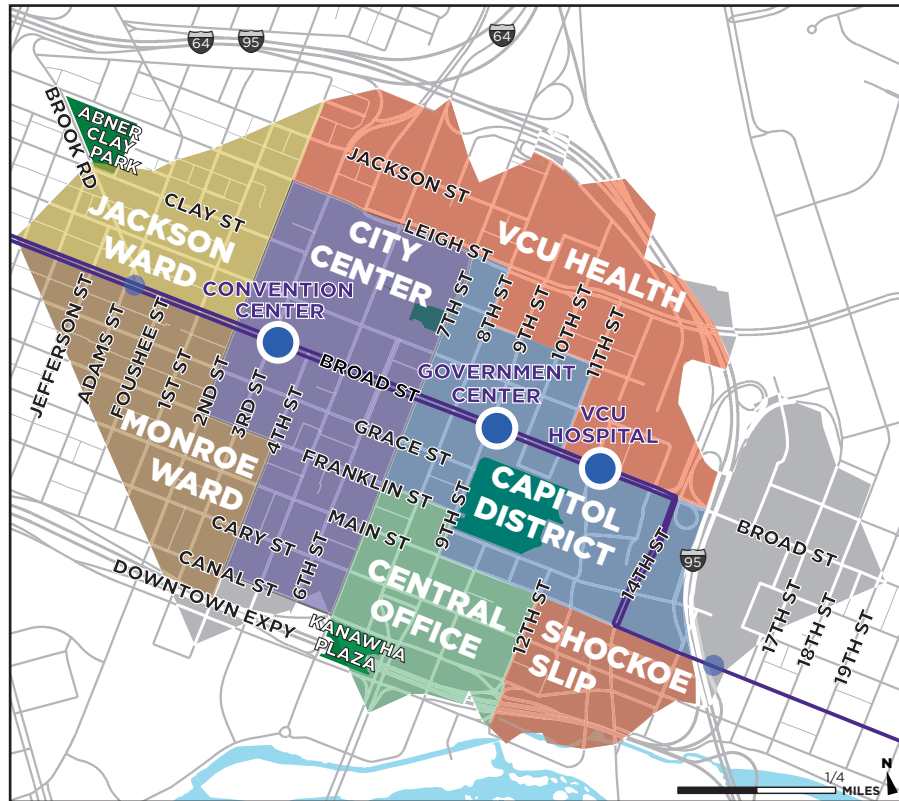


Figure 4.54 Downtown: Neighborhoods

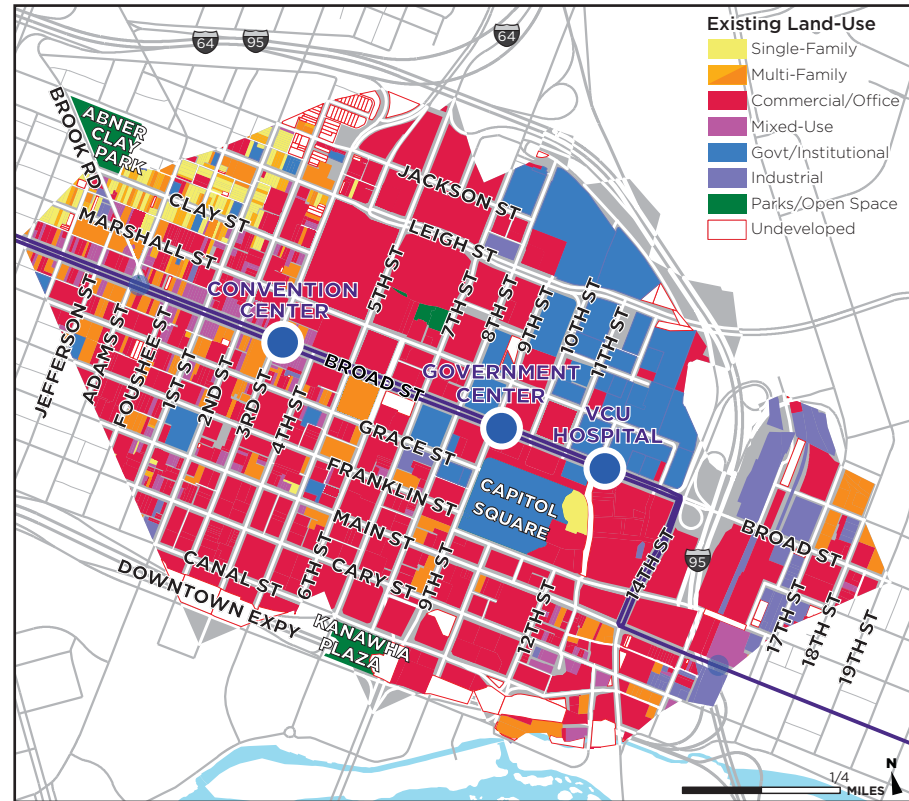


Figure 4.55 Downtown: Existing Land Use



## SURFACE PARKING

While the core of the city has a substantial amount of structured parking, areas outside are severely disrupted by surface parking lots, as shown in Figure 4.56. The half-mile area around the Convention Center Station has the largest share of this parking, being especially dominant at the intersection of Cary and 4th Streets.

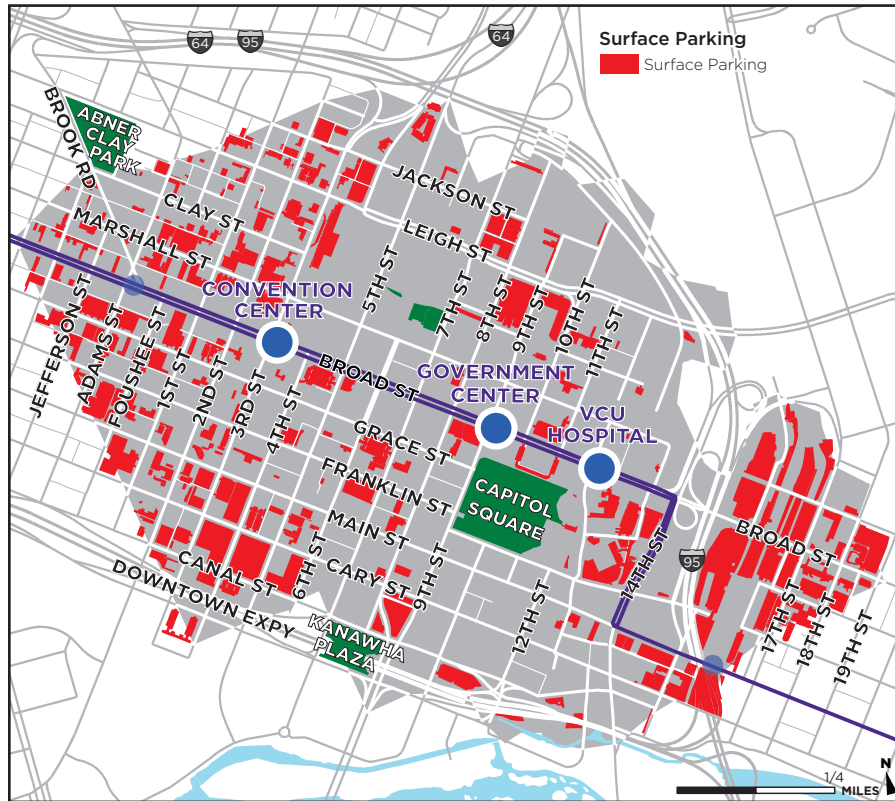


Figure 4.56 Downtown: Surface Parking

## CITY OWNERSHIP

A considerable amount of land is under City ownership in the Downtown Stations Areas, as shown in Figure 4.57. The largest concentration of this land is around the Coliseum where City-led redevelopment could spur changes in the nearby Virginia Biotechnology Research Park and VCU Health.

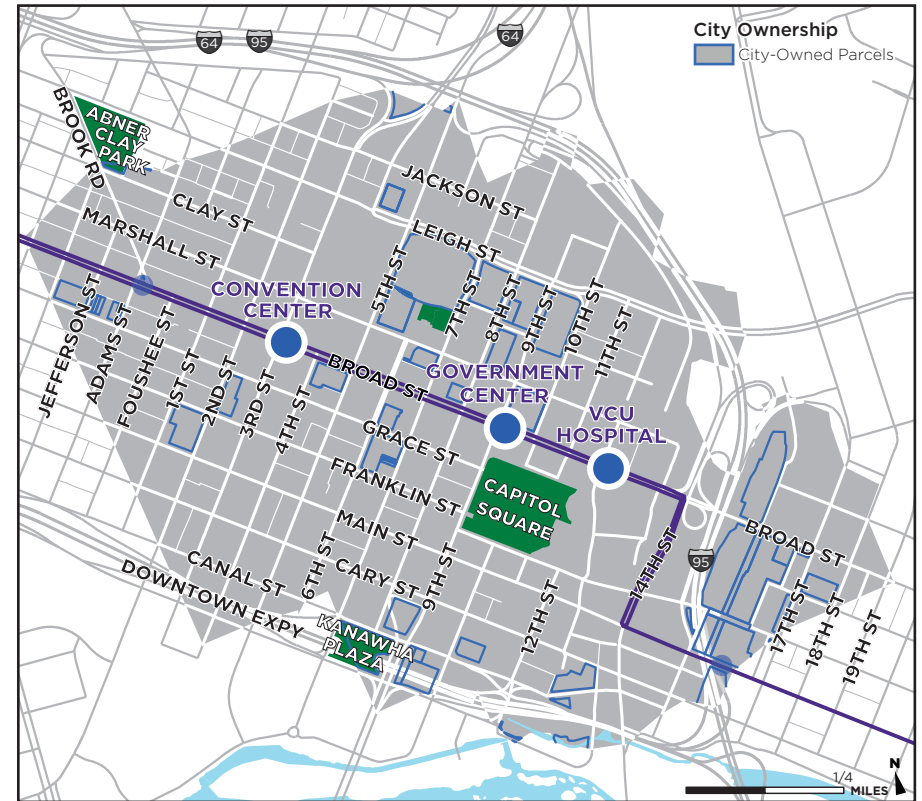


Figure 4.57 Downtown: City Ownership

## HISTORIC DISTRICTS

A significant portion of the Downtown Stations' area is part of a National Register Historic District, with the exception of areas north of Broad Street and east of 4th Street where significant redevelopment of historic areas has occurred over the years to create the VCU Medical Center and the Virginia Biotechnology Research Park, as shown in Figure 4.58. City Old & Historic Districts dot the area, mostly as single property designations, with the exception of larger districts such as Jackson Ward and Shockoe Slip. City Old & Historic Districts require that exterior changes to buildings be reviewed by the City's Commission of Architectural Review while National Register Historic Districts provide federal and state historic tax credits for historic renovations which are reviewed by the National Park Service.

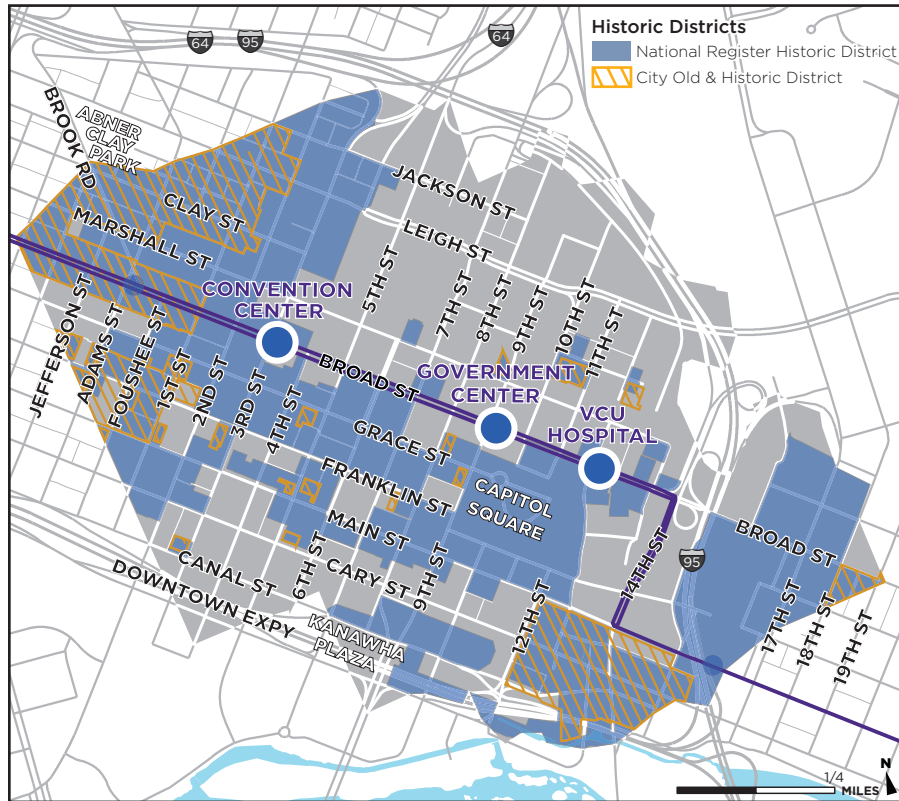


Figure 4.58 Downtown: Historic Districts

## VISUALLY ACTIVE FRONTAGE

Many buildings within these station areas have visually active frontages (commercial storefronts that engage the street) reflecting the office- and business-oriented nature of land uses, as shown in Figure 4.59. The majority of buildings without visually active frontages are institutional and government uses such as those owned and operated by the Commonwealth, the City, VCU Health, and the Virginia Biotechnology Research Park.

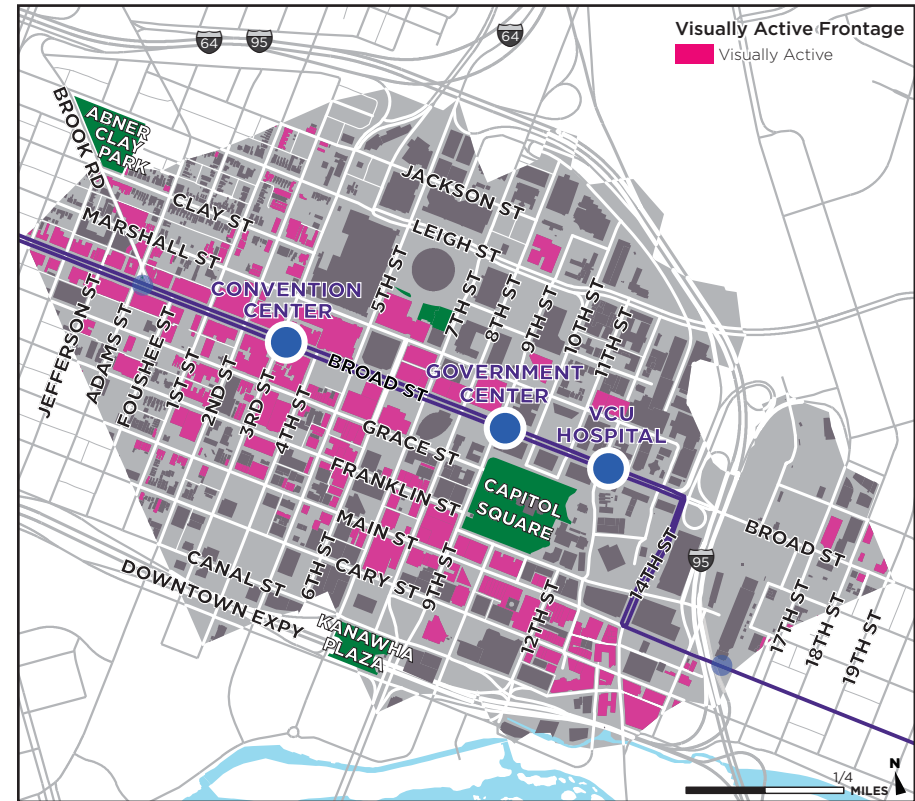


Figure 4.59 Downtown: Visually Active Frontage

## CONVENTION CENTER STATION AREA VISION

The gap in vibrant uses between the Arts District and the Government Center Stations is filled as vacant and underutilized parcels around the Convention Center are developed to include uses that enhance the Convention Center visitor experience and also provide for the daily needs of residents and workers in the area. Monroe Ward transforms into a denser, more complete neighborhood and more uses along Broad Street are created to serve these future residents. City-owned property fosters mixed-income redevelopment.

## GOVERNMENT CENTER STATION AREA VISION

The Government Center Station area continues to be one of the densest areas of the city with new development that matches the intensity of existing buildings but also includes active ground floor uses that enliven the sidewalks, and creates real opportunity to more fully engage the Virginia Biotechnology Research Park and VCU Medical Center campuses with the balance of Downtown. The area continues its evolution into a 24-hour neighborhood as more residents desire to live in the core of the city. City-owned property fosters mixed-income redevelopment.

## VCU HEALTH STATION AREA VISION

The VCU Health Station area is enhanced with improved pedestrian connections through the VCU Medical Center campus, while ground-floor uses and new public spaces generate activity at the pedestrian level. Opportunities for more residential and other uses transform the area from a medical center campus into a neighborhood in its own right.

## FUTURE LAND USE

The Downtown Mixed-Uses along E. Broad Street and throughout the City Center and Central Office districts encourage the redevelopment of surface parking lots and underutilized buildings into high-density buildings that focus on creating walkable environments with active ground floors, appropriate streetscape, and minimal driveway entrances, as shown in Figure 4.60. The Coliseum and adjacent City-owned parcels are an opportunity site that could be redeveloped into a mixed-use, mixed-income, pedestrian-friendly environment that serves as a connection block between the Convention Center, the Biotech Park, and the Capitol District. The Institutional Uses continue to exist and are encouraged to reduce driveway entrances, eliminate parking on the ground level, and incorporate active commercial uses on the ground floor.

## FUTURE CONNECTIONS

The transportation and streetscape networks of this station area are further enhanced with bicycle and pedestrian amenities, such as bike facilities and shared-use paths, which serve to make this area even more pedestrian-friendly, as shown in Figure 4.61. Opportunities for new streets to re-establish the street grid and

the conversion of one-way streets to two-way help solidify the neighborhoods throughout this area.

Bicycle infrastructure recommendations are sourced from the Richmond Bike Master Plan with some modifications from public input which includes the recommendation for bike lanes on Marshall and Adams Streets. These recommendations will need further study and public vetting to determine their feasibility and associated trade-offs with on-street parking and travel lanes.

## STATION AREA RECOMMENDATIONS

### Compact and Mixed

- **CW.1 – CW.7** See descriptions in Chapter 3.
- **SA.40** Develop a small area plan for the opportunity area around the VCU Medical Center, the Virginia Biotechnology Research Park, Blue's Armory, the Coliseum, and City-owned land. Include VCU Health and the Virginia Biotechnology Research Park in the planning process. Explore public-private-non-profit partnerships to redevelop properties to make the area a dynamic live-work environment.



### Connected

- **CW.8 – CW.23** See descriptions in Chapter 3.
- **SA.41** Build protected two-way bicycle infrastructure on Franklin Street.
- **SA.42** Improve the intersections at E. Broad Street and the ramps to I-95.
- **SA.43** Pursue two-way conversions of Grace and Marshall Streets in consultation with the City's Strategic Multimodal Transportation Plan, evaluating during implementation the balance of two-way conversion, on-street parking, and bicycle infrastructure.
- **SA.44** Reconnect the street grid as opportunities present themselves in order to establish a more fine-grained street pattern while preserving the existing gridded street network by not closing any additional streets in the Downtown core.

### Thriving & Equitable

- **CW.24 – CW.35** See descriptions in Chapter 3.
- **SA.45** Using City-owned lots, especially in the opportunity area around the Coliseum and the lot across from the Convention Center, develop affordable housing with a mix of uses.
- **SA.46** Continue to develop the Virginia Biotechnology Research Park area by attracting biotech companies to the Biotech Research Park.

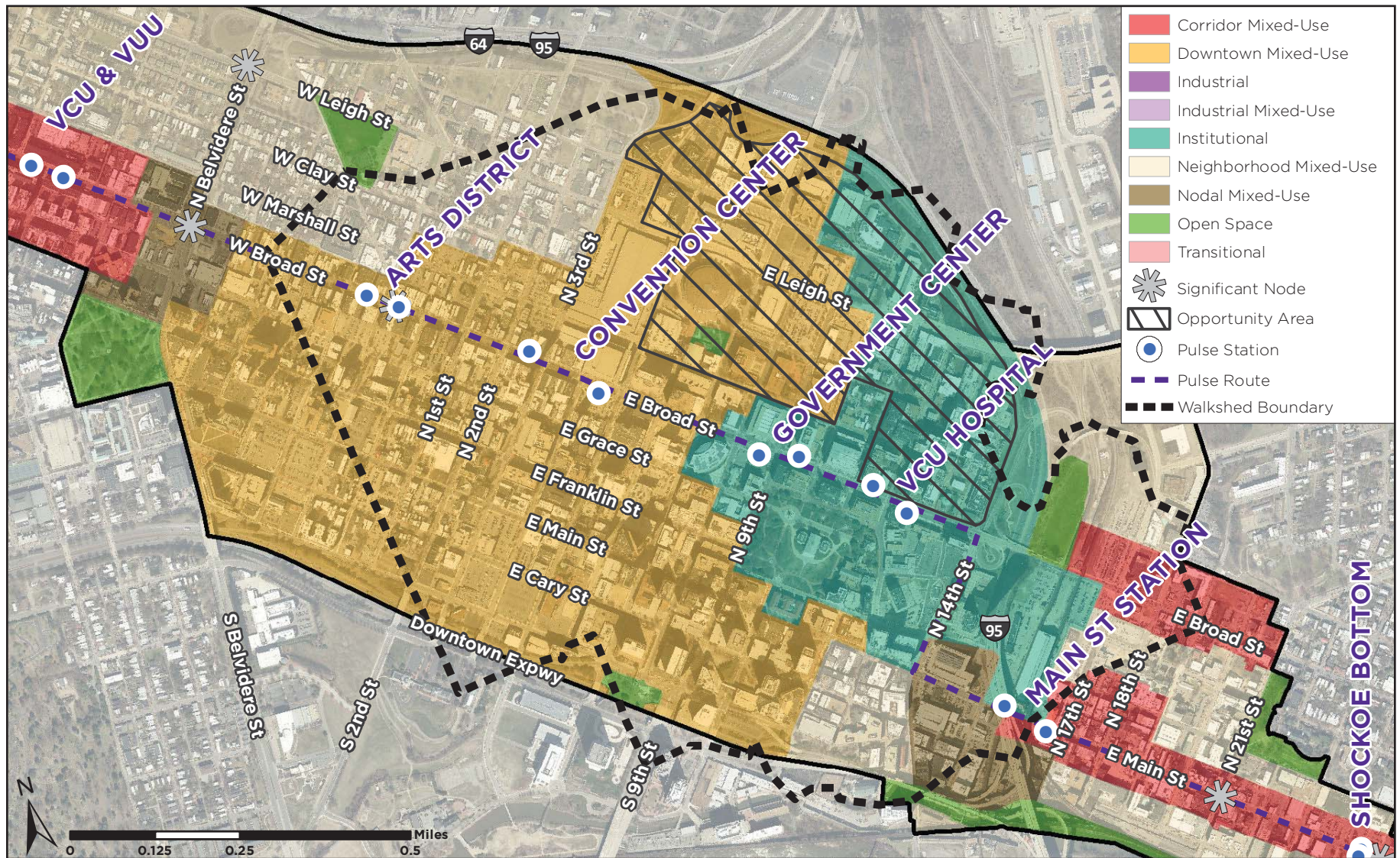


Figure 4.60 Downtown: Future Land Use Map



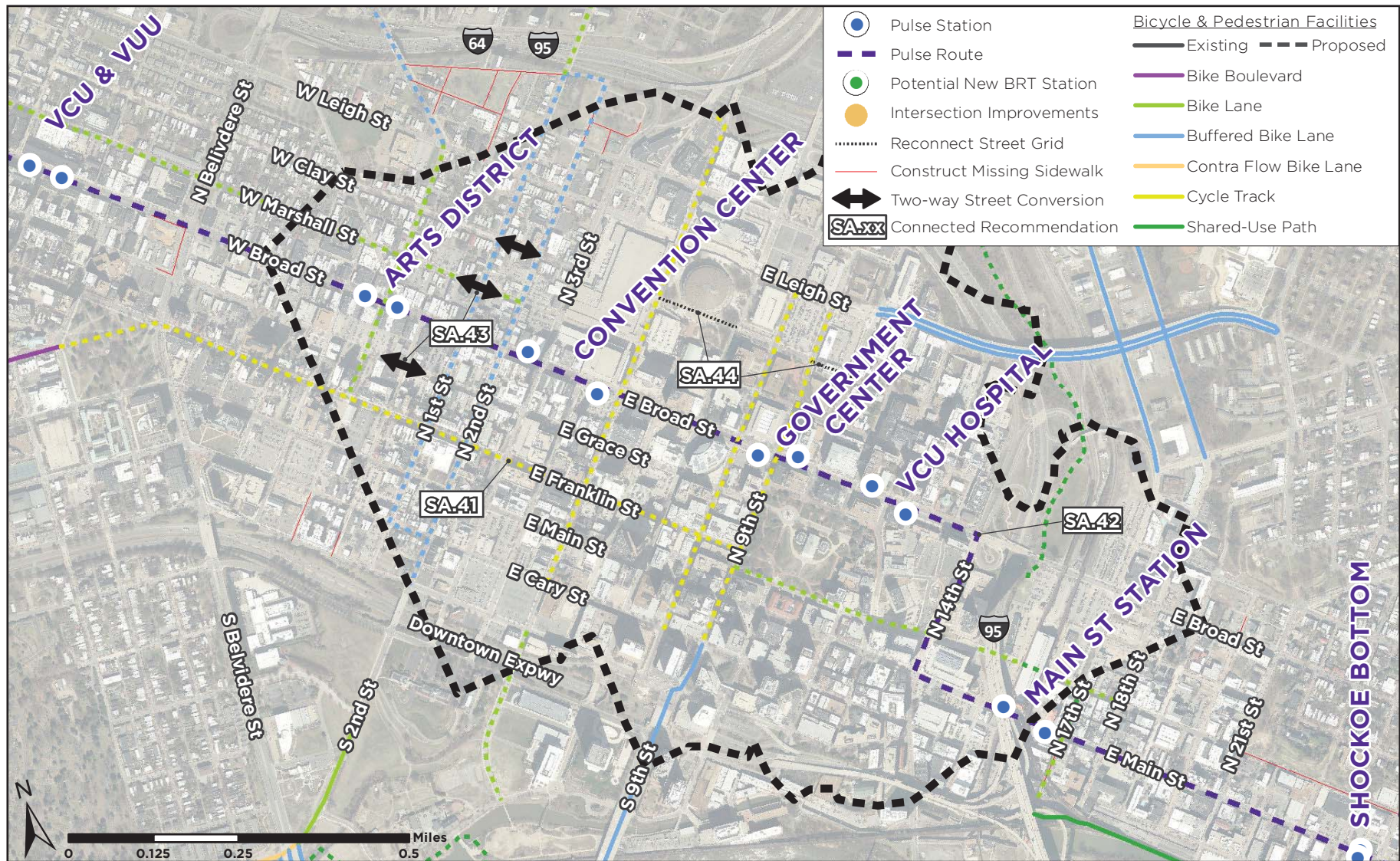


Figure 4.61 Downtown: Future Connections Map



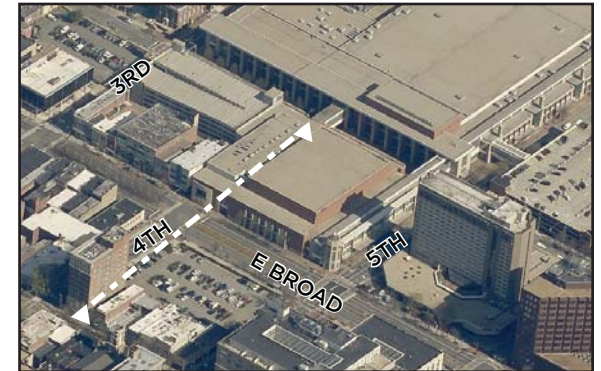
## RECOMMENDATION VISUALIZATION

### CONVENTION CENTER SECTIONS

This cross section of Broad Street between 4th and 5th Streets, as shown in Figure 4.62, illustrates the large-scale nature of buildings downtown. In these station areas are the tallest buildings in the region, many of which occupy whole blocks.

The potential future section, as shown in Figure 4.63, envisions infill of the surface parking lot with a building where active ground floor architecture is encouraged. The downtown streetscape – including trees, plantings, pedestrian lighting, and brick banding of the sidewalk – is maintained.

Please note that this section drawing is an illustration of how new development may appear at specific heights and forms. Please refer to the Future Land Use map and the Station Area Vision for the land use policy for this area.



Section cut-through line

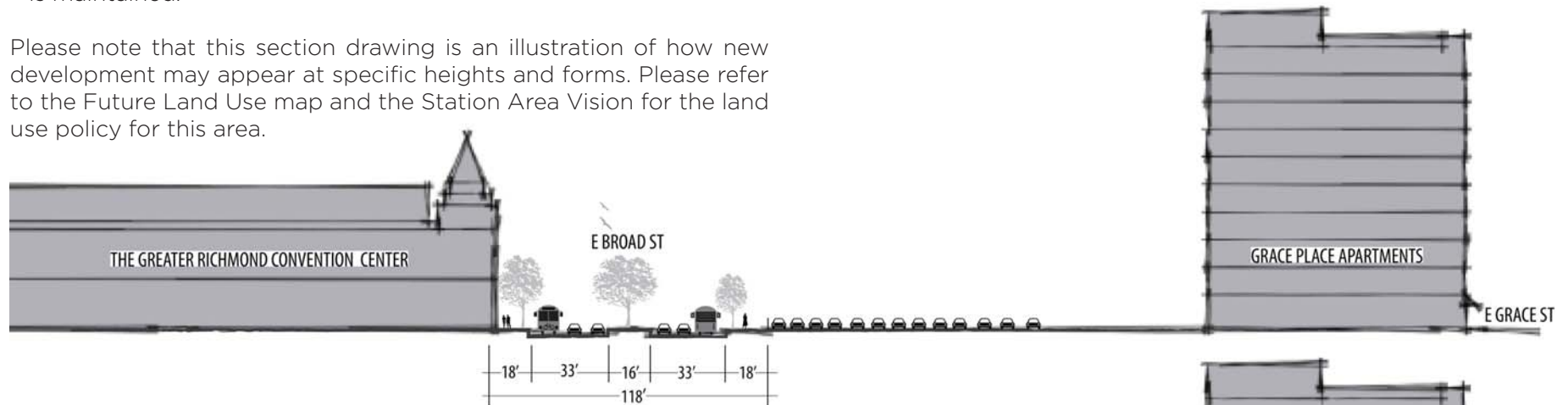


Figure 4.62 Convention Center: Existing Section

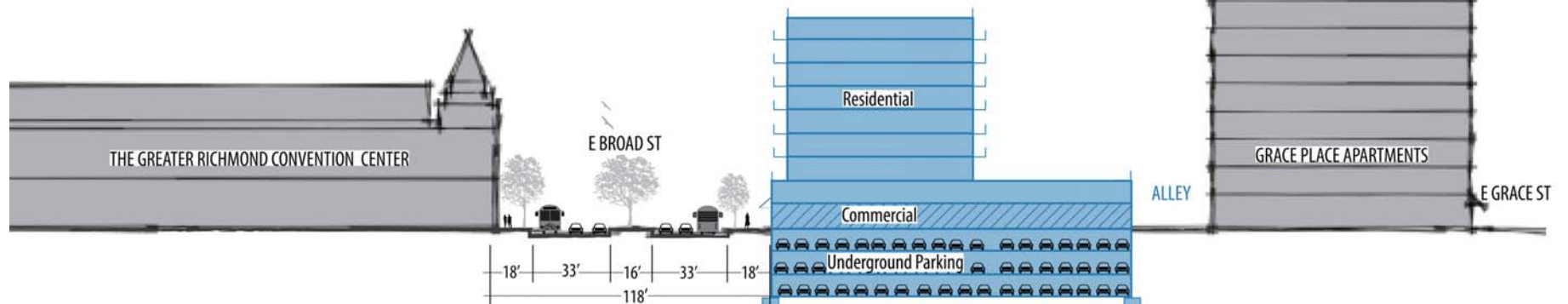
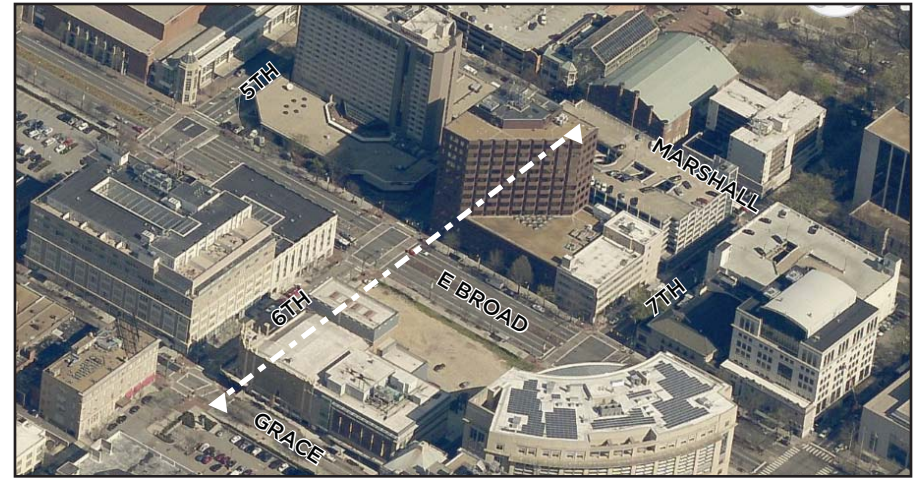


Figure 4.63 Convention Center: Potential Future Section

## DOMINION ARTS CENTER SECTIONS

This cross section of Broad Street between 6th and 7th Streets further illustrates the scale of Downtown buildings, as shown in Figure 4.64. The potential future section, as shown in Figure 4.65, envisions infill of the surface parking lot north of the Dominion Arts Center. This new structure would be mixed-use, engage with the street, and have underground parking in order to retain the dense, pedestrian-oriented character of Downtown.

Please note that this section drawing is an illustration of how new development may appear at specific heights and forms. Please refer to the Future Land Use map and the Station Area Vision for the land use policy for this area.



Section cut-through line

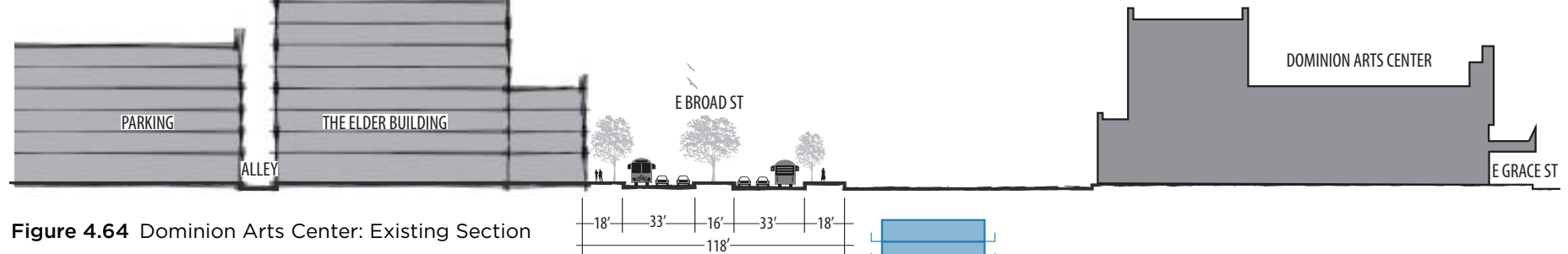


Figure 4.64 Dominion Arts Center: Existing Section

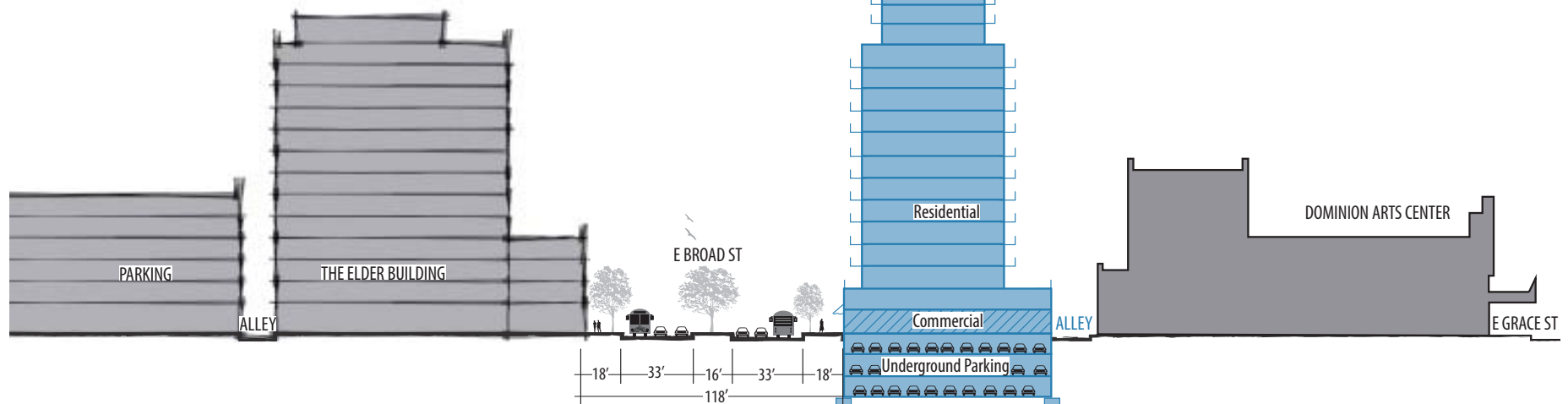


Figure 4.65 Dominion Arts Center: Potential Future Section

## MAIN STREET STATION AREA **PRIORITY STATION**

### EXISTING CONDITIONS

The Main Street Station area is one of the best-performing “Emerging Stations.” This station area features great market conditions and pedestrian-orientation, as well as excellent development readiness. The area has grown in population, though saw a decline in employment since the recession. Land costs are moderate and the area is seeing a large amount of commercial and residential development. Much of the area is zoned to allow high-density development. Low parcelization combined with large amounts of vacant and underperforming land make this station area ideal for transit-oriented development. However, the Shockoe Creek floodplain is a barrier to new development. While the area is not the densest in population or employment, it is a highly walkable area, a condition due to its placement near the original 18th century Richmond city grid.

#### MARKET CONDITIONS: MEDIUM-HIGH

##### HOUSEHOLD GROWTH • • • • •

2000-2013 household growth: 34.81%

##### EMPLOYMENT GROWTH • • • • •

2008-2012 employment growth: -13%

##### PROPERTY VALUES • • • • •

Walkshed property total: \$2 billion +

##### OFFICE RENT SCORE • • • • •

Office rent per sq ft: \$19.37

##### RETAIL RENT SCORE • • • • •

Retail rent per sq ft: \$14.96

##### COMMERCIAL PERMITS • • • • •

2010-2015 permit activity: \$249 million +

##### RESIDENTIAL PERMITS • • • • •

2010-2015 permit activity: \$93 million +

#### DEVELOPMENT READINESS: MEDIUM-HIGH

##### BY-RIGHT ZONING • • • • •

Land coverage allowing TOD: 54.87%

##### PARCELIZATION • • • • •

Parcels per acre: 1.7

##### VACANT LAND • • • • •

Acres of vacant land: 18.67

##### UNDERPERFORMING LAND • • • • •

Acres of redevelopment land: 92.32

#### PEDESTRIAN ORIENTATION: MEDIUM-HIGH

##### POPULATION DENSITY • • • • •

People per acre: 22.9

##### EMPLOYMENT DENSITY • • • • •

Jobs per acre: 56

##### BUS FREQUENCY • • • • •

Average wait time: 37 minutes

##### BLOCK PATTERN • • • • •

Percent of blocks greater than 4 acres: 9.1%

##### INTERSECTION DENSITY • • • • •

Amount of intersections: 143

##### BIKE LANE ACCESS • • • • •

Linear feet of bike lanes in walkshed: 0'

##### CAR-FREE HOUSEHOLDS • • • • •

Households without a car: 13.5%

##### PARKS ACCESS • • • • •

Miles from station to greenspace: 0.36

##### WALKSCORE® • • • • •

Walkscore.com score at station: 91



## NEIGHBORHOODS

Main Street Station is in close proximity to many diverse neighborhoods, as shown in Figure 4.66. In the direct station area are Shockoe Bottom and Shockoe Slip, both of which are historic neighborhoods with a mix of uses. Just up the hill is the Capitol District, which hosts major state-level agencies.

## EXISTING LAND USE

Shockoe Bottom and Shockoe Slip provide multi-family uses (57% of the station area) and serve to anchor the significant amount of commercial and office uses (23%), as shown in Figure 4.67. This area is also home to scattered industrial uses (8%).

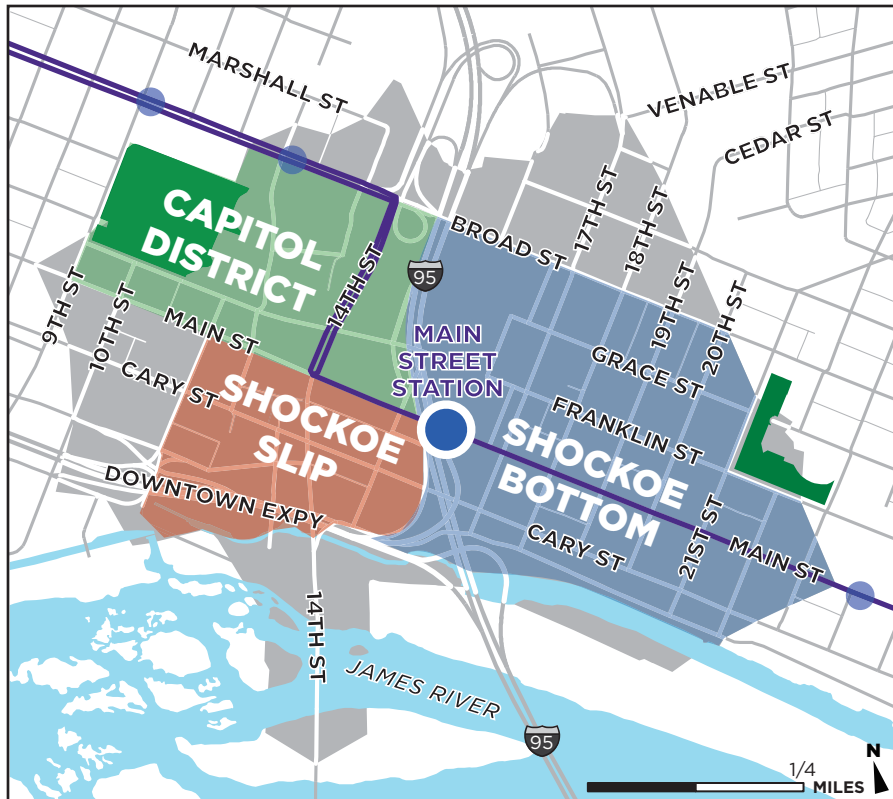


Figure 4.66 Main Street Station: Neighborhoods

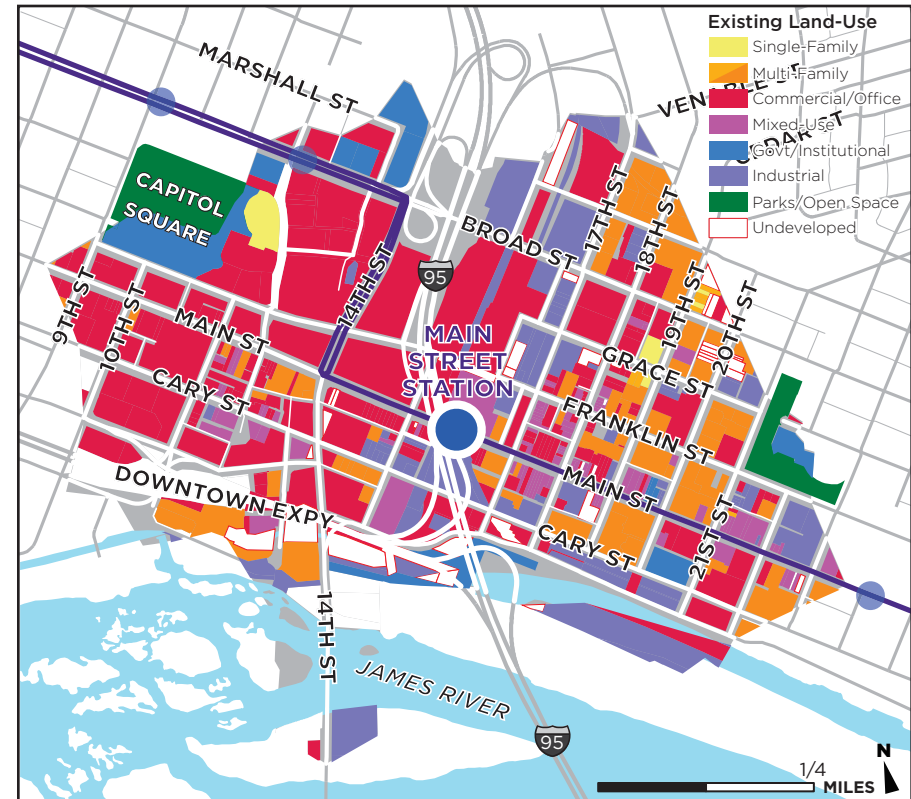


Figure 4.67 Main Street Station: Existing Land Use

## SURFACE PARKING

A large percentage of the walkshed is covered in surface parking (21%), as shown in Figure 4.68. Because of the restrictions on building in the 100-year floodplain, the presence of parking lots there is logical. However, other uses such as open space and public parks could be explored. Parking lots that break up the Main Street commercial corridor do not serve the highest and best use and are prime targets for redevelopment.

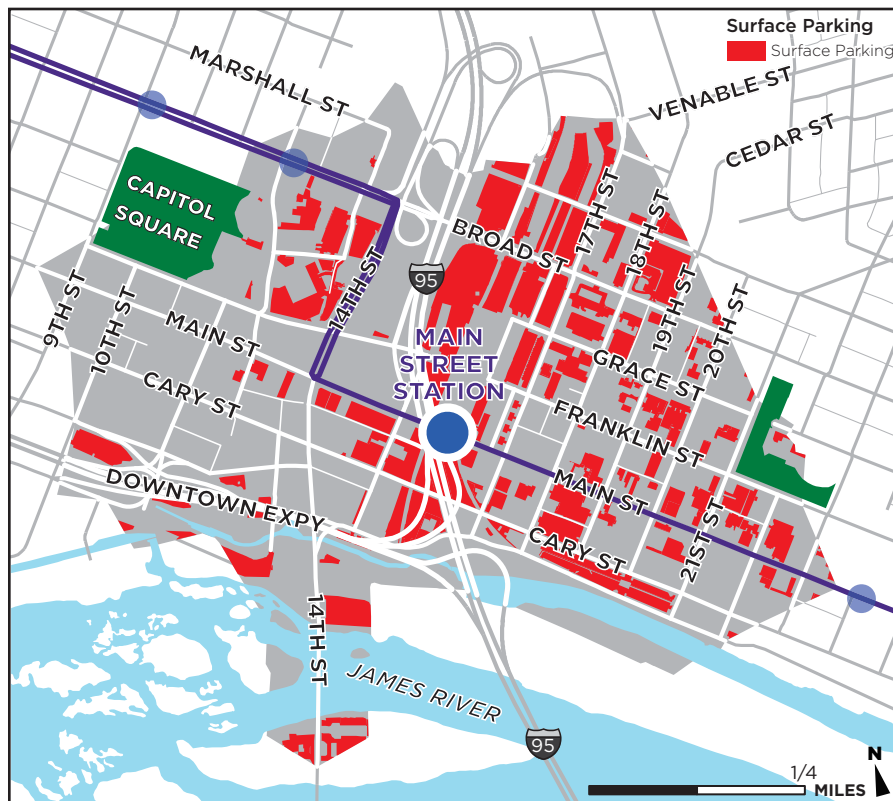


Figure 4.68 Main Street Station: Surface Parking

## FLOODPLAIN

A 100-year floodplain fills the bottom of Shockoe Valley to the flood wall, as shown in Figure 4.69. In this area is Main Street Station itself and mostly undeveloped land and surface parking lots. The floodplain restricts development possibilities and incurs high insurance premiums, making it more difficult to attract new development within the area.



Figure 4.69 Main Street Station: 100-Year Floodplain

## VISUALLY ACTIVE FRONTAGE

Situated between two major commercial centers – Downtown and Shockoe Bottom – Main Street Station is surrounded by rich, visually active frontages (commercial storefronts that engage the street) to the east and west, as shown in Figure 4.70. These frontages travel north into Shockoe Bottom.

## HISTORIC PRESERVATION

Much of the station area is covered by some form of historic district, as shown in Figure 4.71. Shockoe Bottom is part of a National Register Historic District with pockets of City Old & Historic District coverage. Shockoe Slip is covered by both National Register and a City Old & Historic Districts. Some parts of Downtown within this station area are included in a National Register Historic District. City Old & Historic Districts require that exterior changes to buildings be reviewed by the City's Commission of Architectural Review while National Register Historic Districts provide federal and state historic tax credits for historic renovations which are reviewed by the National Park Service.



Figure 4.70 Main Street Station: Visually Active Frontage



Figure 4.71 Main Street Station: Historic Preservation





## MAIN STREET STATION AREA VISION

Main Street Station continues to serve as the multi-modal transportation hub of Richmond by augmenting its offerings to include bike-share, BRT service, and high-speed rail service. Uses around Main Street Station support the bustle of a train station with amenities that serve commuters, visitors, and a growing residential and employment base. The Shockoe Bottom neighborhood better connects to amenities such as the Virginia Capital Trail and the Canal Walk, and new development supports further public space amenities like the 17th Street Farmer's Market Plaza and the Low Line. Ongoing efforts to commemorate, memorialize, and interpret the historic and cultural significance of Shockoe Bottom are supported as a key part of the neighborhood identity and are a priority for City investment.

### FUTURE LAND USE

Nodal Mixed-Uses near Main Street Station allow for intense development with active ground-floor uses near the multi-modal heart of the Richmond Region, as shown in Figure 4.72. The Corridor Mixed-Uses along E. Broad and E. Main Streets encourage the redevelopment of surface parking lots and underutilized buildings into higher-density buildings that focus on creating walkable environments with active ground floors, appropriate streetscape, and minimal driveway entrances. Neighborhood Mixed-Uses in the surrounding area help maintain the existing residential and mixed-uses found in the area, mainly in the form of repurposed warehouses, and allow for appropriate infill development.

### FUTURE CONNECTIONS

Future connections through and around the area are enhanced with a shared-use path through the Main Street Station trainshed, as well as better bicycle and pedestrian connections to access the Virginia Capital Trail and the Low Line, as shown in Figure 4.73. The conversion of one-way streets to two-way is explored and carried out where feasible in order to create a more neighborhood-focused transportation network.

Bicycle infrastructure recommendations are sourced from the Richmond Bike Master Plan with some modifications from public input. These recommendations will need further study and public vetting to determine their feasibility and associated trade-offs with on-street parking and travel lanes.

### STATION AREA RECOMMENDATIONS

#### Compact and Mixed

- **CW.1 – CW.7** See descriptions in Chapter 3.
- **SA.47** Rezone the Main Street Station Area to districts that align with the Future Land Use Map.

#### Connected

- **CW.8 – CW.23** See descriptions in Chapter 3.
- **SA.48** Improve crossing conditions along E. Broad Street between 14th Street and 17th Street.
- **SA.49** Extend the Virginia Capital Trail to reach the Capitol. Require developments along the Virginia Capital Trail to provide amenities and infrastructure supportive of cyclists and pedestrians.
- **SA.50** Work with private, state, and institutionally-owned entities to develop a shared parking strategy for the area around Main Street Station.
- **SA.51** Pursue two-way conversions of the few one-way streets in Shockoe Bottom in consultation with the City's Strategic Multimodal Transportation Plan, evaluating during implementation the balance of two-way conversion, on-street parking, and bicycle infrastructure.

#### Thriving & Equitable

- **CW.24 – CW.35** See descriptions in Chapter 3.
- **SA.52** Promote Main Street Station as the regional mass transit hub with the convergence of rail, BRT, regional bus, and GRTC local bus routes.
- **SA.53** Continue efforts to commemorate, memorialize, and interpret sites of historical and cultural significance in Shockoe Bottom and their on-going meaning to the city.



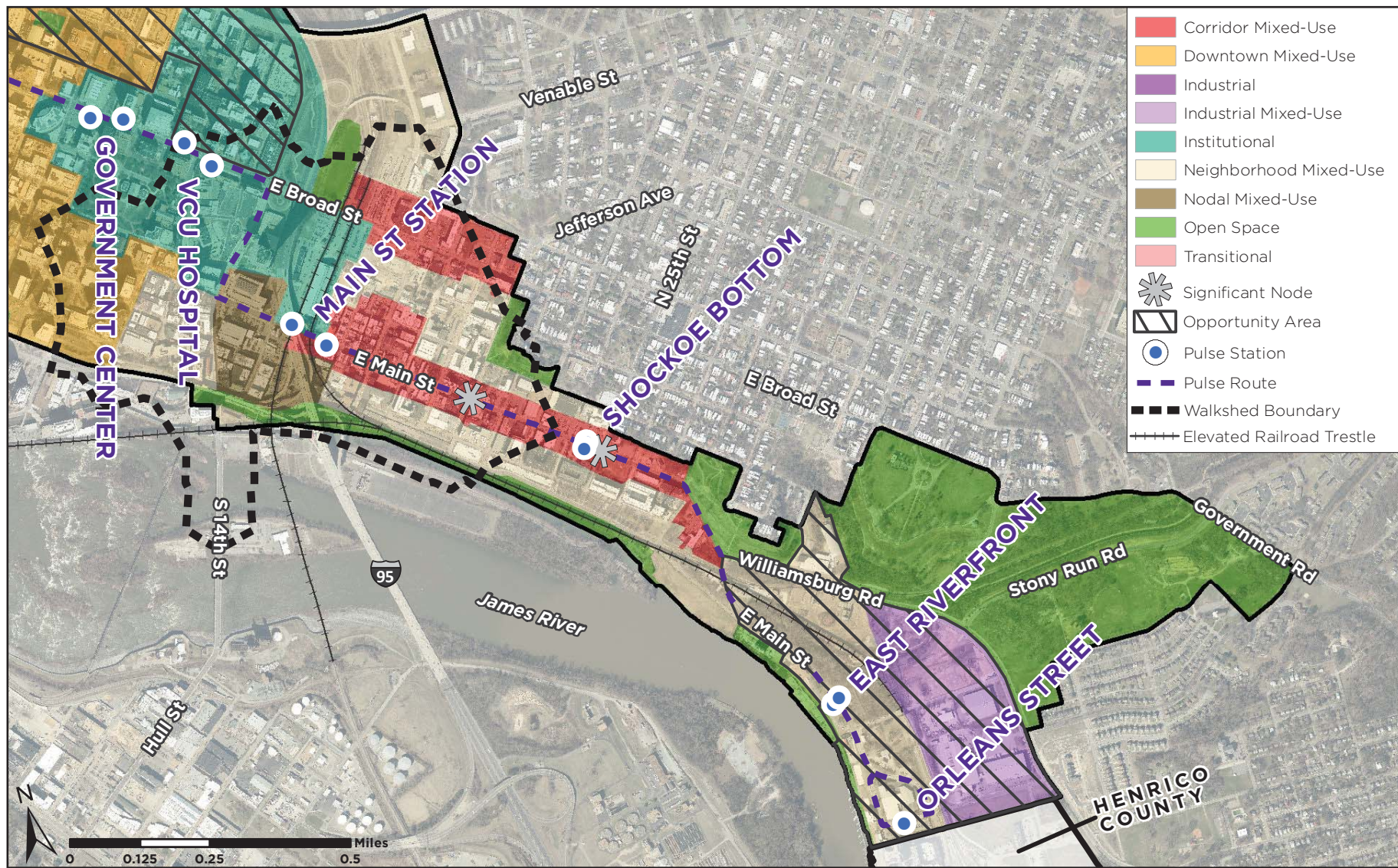


Figure 4.72 Main Street Station: Future Land Use Map



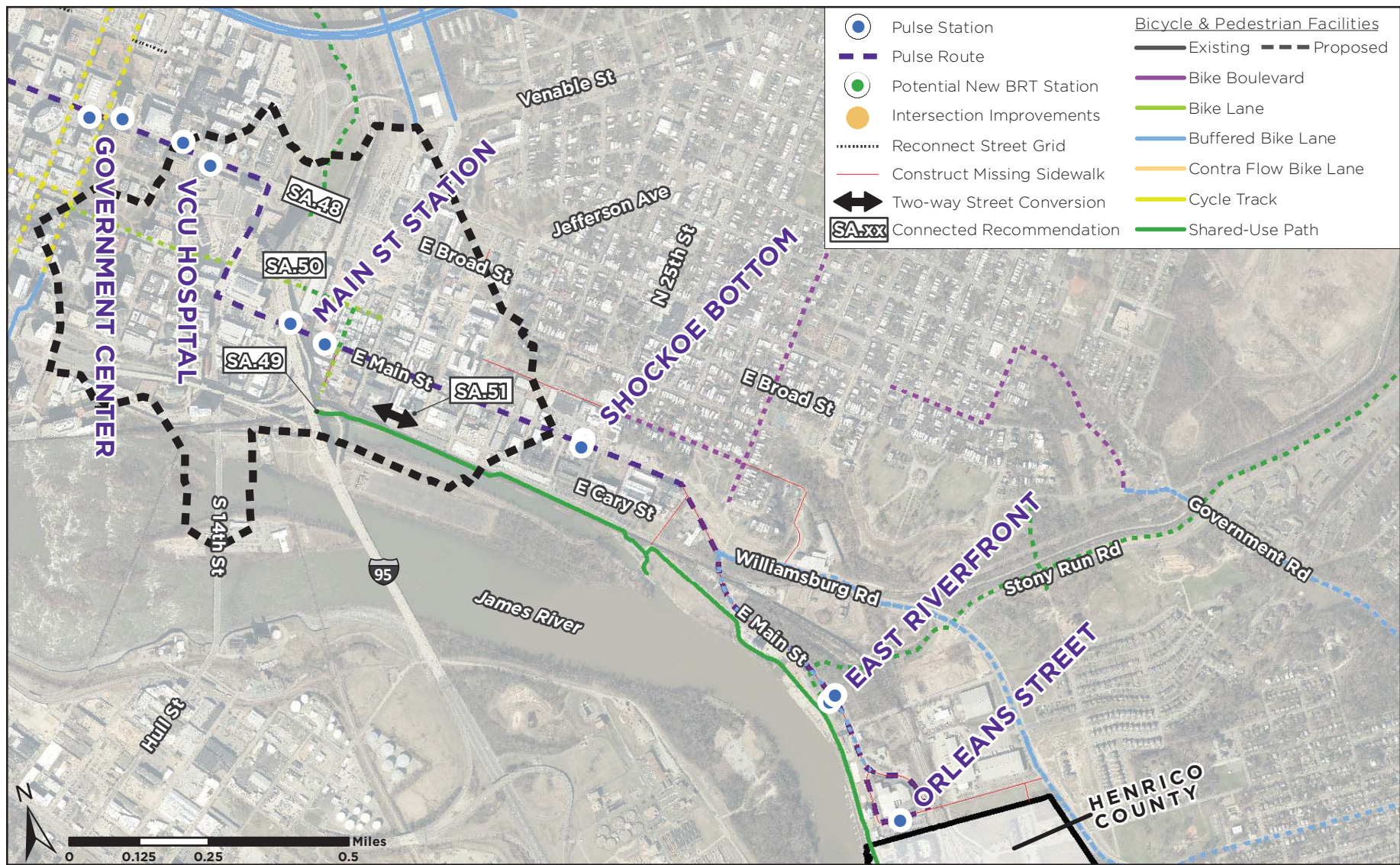


Figure 4.73 Main Street Station: Future Connections Map



## RECOMMENDATION VISUALIZATION

### HOLOCAUST MUSEUM SECTIONS

This cross section of Main Street illustrates the lower-scale development found in the Main Street Station Area, as shown in Figure 4.74. The potential future section, as shown in Figure 4.75, demonstrates the potential for new additions to existing buildings in order to add scale and enliven the area, while promoting the enhancement of the streetscape through elements such as street trees. There may be potential for some higher-intensity uses within the district too.

Please note that this section drawing is an illustration of how new development may appear at specific heights and forms. Please refer to the Future Land Use map and the Station Area Vision for the land use policy for this area.



Section cut-through line

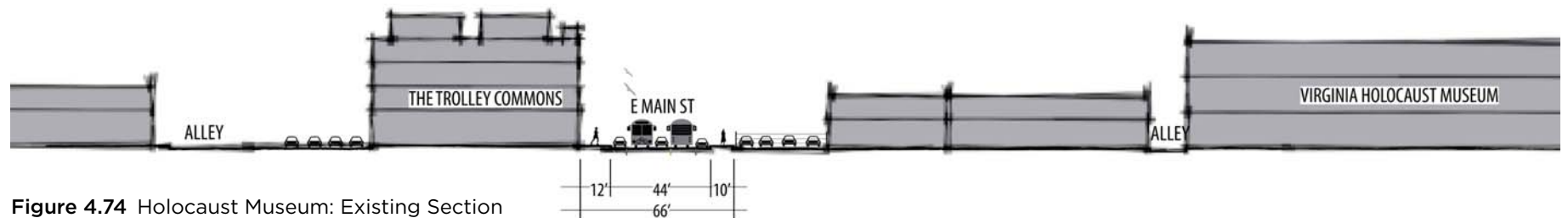


Figure 4.74 Holocaust Museum: Existing Section

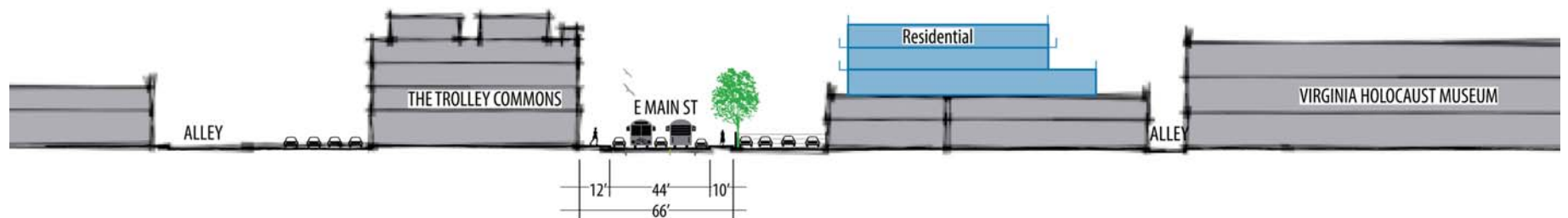


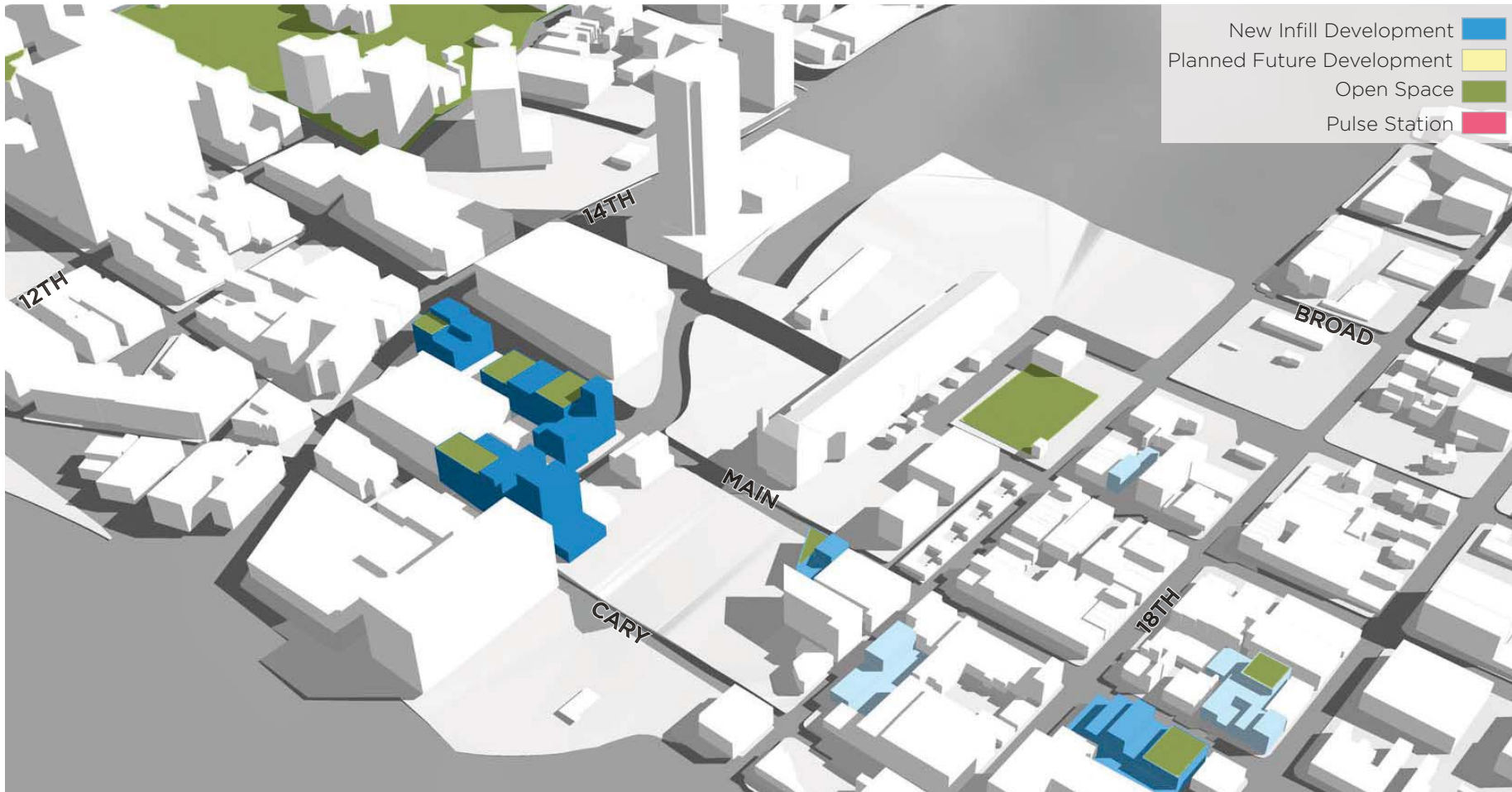
Figure 4.75 Holocaust Museum: Potential Future Section

### POTENTIAL DEVELOPMENT SCENARIO

Shockoe Bottom and Shockoe Slip are preserved, the floodplain is used for non-residential uses and density is concentrated on the opportunity block east of 14th Street. This scenario, as shown in Figure 4.76:

- Adds 850,000 square feet of additional floor space.
- Respects and preserves historic buildings.
- Pushes new development closest to the station and out of the floodplain, reducing the risks from development in floodplains.

Please note that this drawing is an illustration of how new development may appear at specific heights and forms. Please refer to the Future Land Use map and the Station Area Vision for the land use policy for this area.



**Figure 4.76** Main Street Station: Potential Development Scenario



## SHOCKOE BOTTOM STATION AREA

### EXISTING CONDITIONS

The Shockoe Bottom Station Area is an “Emerging Station” as it performs well in all three categories of analysis. The area is growing in population and employment, has low land costs, and high commercial permit activity. Overall, the area is not zoned for high-density development, though some portions of the walkshed do allow this form by-right. The area has a large amount of vacant land, but only a few vacant parcels offer large-scale redevelopment opportunities. This area is one of the least dense in jobs and population but access to a variety of businesses, a strong street grid, and proximity to City parks boosts this station’s Walkscore® to a 92 out of 100.

#### MARKET CONDITIONS: MEDIUM-HIGH

##### HOUSEHOLD GROWTH • • • • •

2000-2013 household growth: 34.81%

##### EMPLOYMENT GROWTH • • • • •

2008-2012 employment growth: 14.69%

##### PROPERTY VALUES • • • • •

Walkshed property total: \$696 million +

##### OFFICE RENT SCORE • • • • •

Office rent per sq ft: \$19.37

##### RETAIL RENT SCORE • • • • •

Retail rent per sq ft: \$14.96

##### COMMERCIAL PERMITS • • • • •

2010-2015 permit activity: \$100 million +

##### RESIDENTIAL PERMITS • • • • •

2010-2015 permit activity: \$56 million +

#### DEVELOPMENT READINESS: MEDIUM HIGH

##### BY-RIGHT ZONING • • • • •

Land coverage allowing TOD: 17.62%

##### PARCELIZATION • • • • •

Parcels per acre: 3

##### VACANT LAND • • • • •

Acres of vacant land: 16.75

##### UNDERPERFORMING LAND • • • • •

Acres of redevelopment land: 53.04

#### PEDESTRIAN ORIENTATION: MEDIUM-HIGH

##### POPULATION DENSITY • • • • •

People per acre: 22.9

##### EMPLOYMENT DENSITY • • • • •

Jobs per acre: 8.37

##### BUS FREQUENCY • • • • •

Average wait time: 37 minutes

##### BLOCK PATTERN • • • • •

Percent of blocks greater than 4 acres: 5.3%

##### INTERSECTION DENSITY • • • • •

Amount of intersections: 149

##### BIKE LANE ACCESS • • • • •

Linear feet of bike lanes in walkshed: 0'

##### CAR-FREE HOUSEHOLDS • • • • •

Households without a car: 13.5%

##### PARKS ACCESS • • • • •

Miles from station to greenspace: 0.14

##### WALKSCORE® • • • • •

Walkscore.com score at station: 92

## NEIGHBORHOODS

This station is centered between Tobacco Row and Shockoe Bottom, as shown in Figure 4.77. Tobacco Row is a collection of re-purposed warehouses, now used for multi-family residential, commercial, and office uses. Shockoe Bottom is a historic, higher-density mixed use neighborhood. This station is the closest to Church Hill, though topography is a restriction to access.

## EXISTING LAND USE

In addition to providing many entertainment options, this area is a major residential center with 61% of land uses being multi-family residential, as shown in Figure 4.78. Following multi-family is single-family (9%) and commercial (7%).

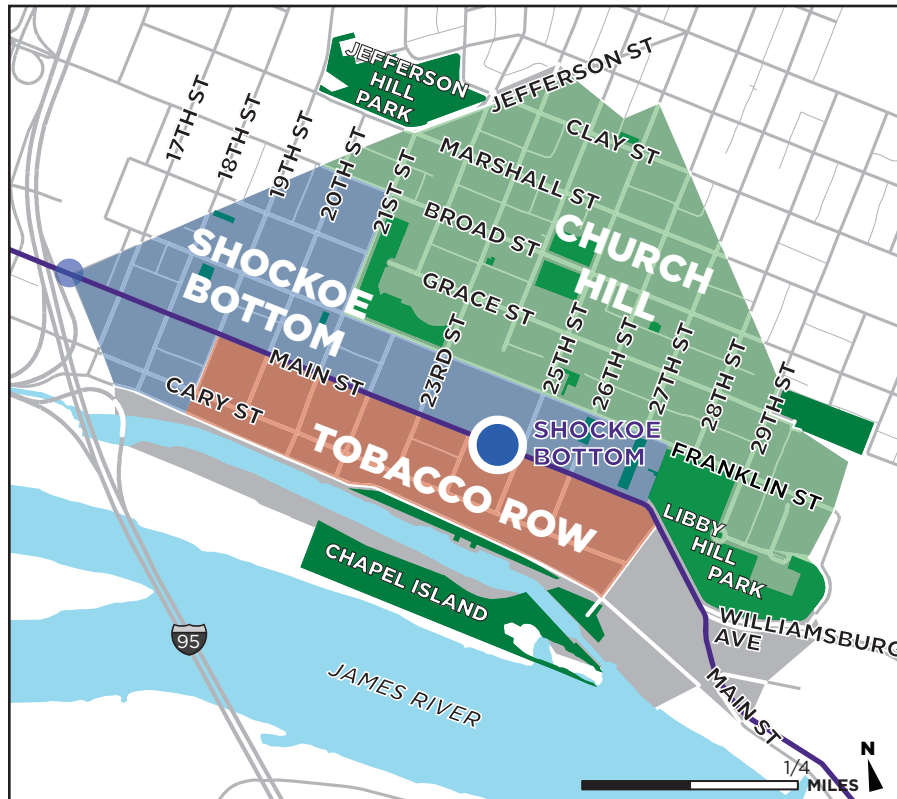


Figure 4.77 Shockoe Bottom: Neighborhoods

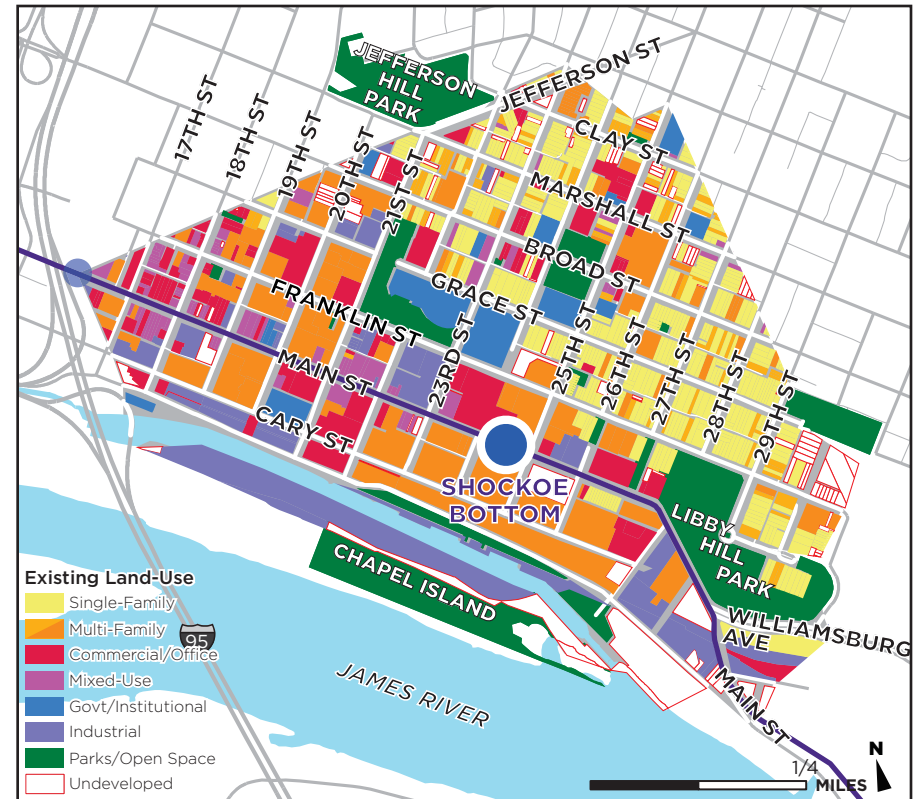


Figure 4.78 Shockoe Bottom: Existing Land Use

## SURFACE PARKING

Parking lots are scattered throughout the station area as shown in Figure 4.79. Many of these lots are behind buildings, in the center of blocks, or on streets without commercial activity. However, several surface lots disrupt the streetwall on Main Street.

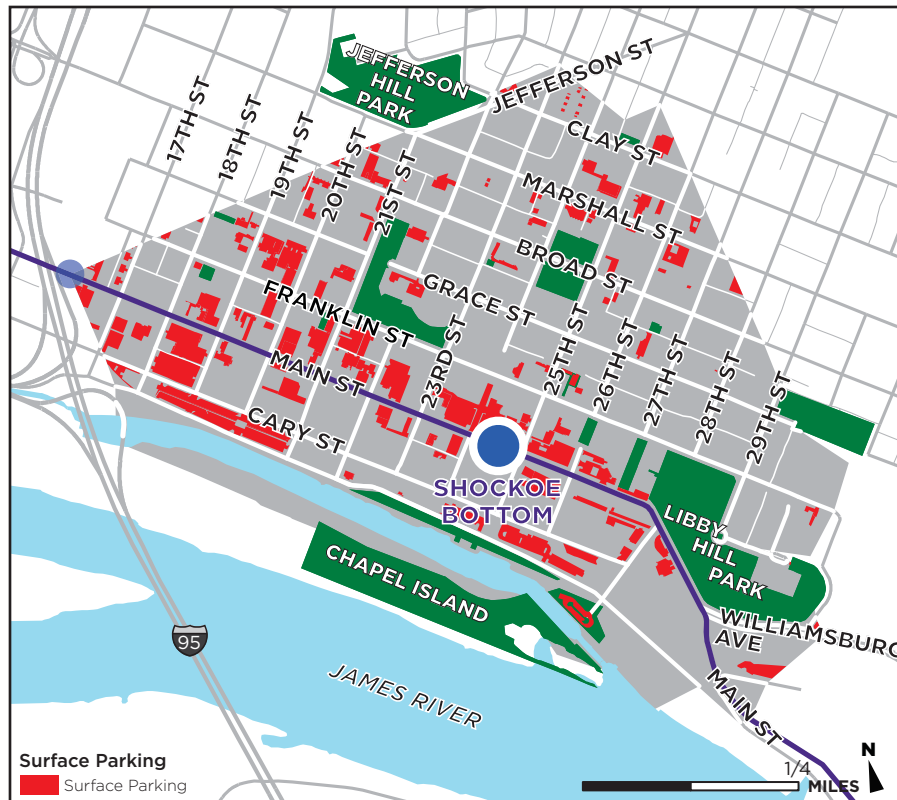


Figure 4.79 Shockoe Bottom: Surface Parking

## VISUALLY ACTIVE FRONTAGE

This station area features a significant amount of buildings with visually active frontages (commercial storefronts that engage the street), as shown in Figure 4.80. This is due to the dominance of traditional urban storefront-style development in Shockoe Bottom and on key corridors and intersections in Church Hill.

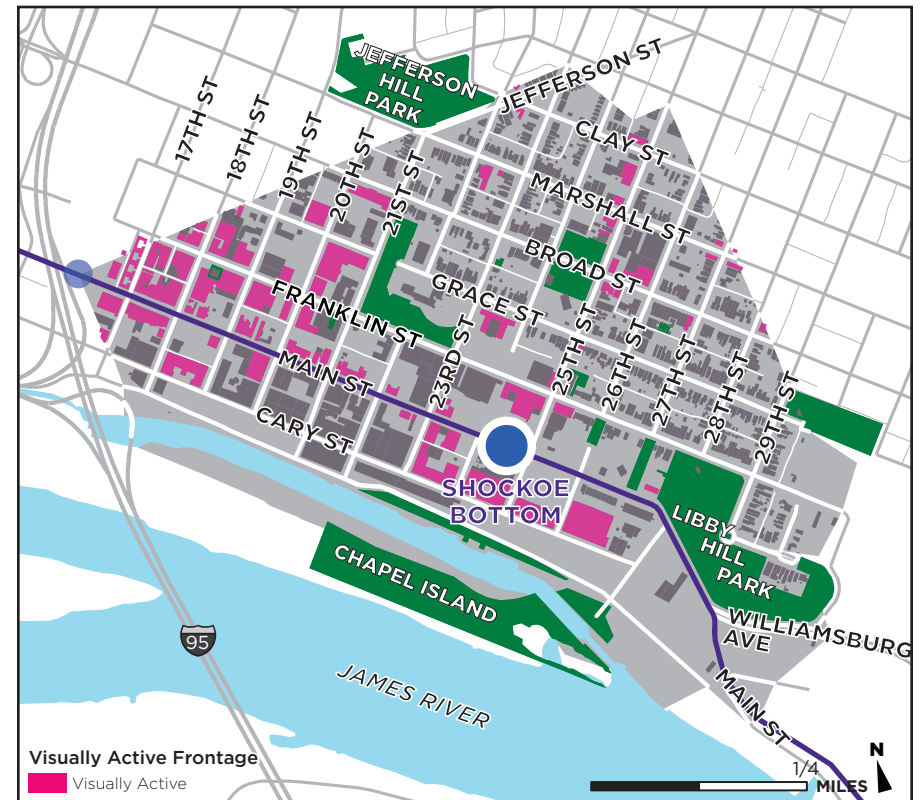
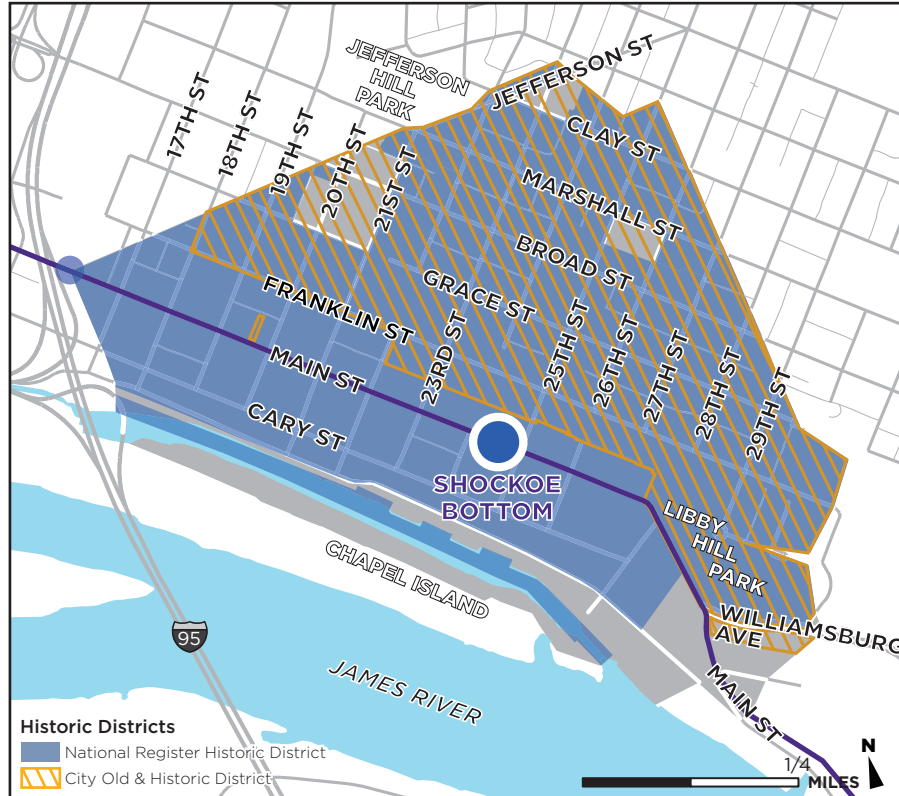


Figure 4.80 Shockoe Bottom: Visually Active Frontage



## HISTORIC PRESERVATION

This station area is almost fully covered by historic designations, as shown in Figure 4.81. The Church Hill portion of the area is entirely covered by City Old & Historic Districts and mostly covered by National Register Historic Districts. Tobacco Row is covered by National Register Historic Districts. City Old & Historic Districts require that exterior changes to buildings be reviewed by the City's Commission of Architectural Review while National Register Historic Districts provide federal and state historic tax credits for historic renovations which are reviewed by the National Park Service.



**Figure 4.81** Shockoe Bottom: Historic Preservation



## SHOCKOE BOTTOM STATION VISION

E. Main Street continues to be a primary commercial street through the East End. Existing active ground floor uses are complemented by new infill development with street-oriented commercial uses. New development promotes better connections to the Virginia Capital Trail, the Low Line, and other Riverfront amenities and public spaces, while respecting the viewshed of the “view that named Richmond” from Libby Hill Park to the James River. The historic character of the greater neighborhood continues to be a great asset that new development respects and is inspired by, continuing to attract new visitors, residents, and businesses to the area.

### FUTURE LAND USE

Corridor Mixed-Uses along E. Main Street allow for the continued development trends in Shockoe Bottom, as shown in Figure 4.82. Neighborhood Mixed-Uses throughout Shockoe Bottom and Tobacco Row allow for the continued development of multi-family residential buildings interspersed with commercial uses.

### FUTURE CONNECTIONS

Future connections through and around the area are enhanced with improved pedestrian and bicycle facilities, as shown in Figure 4.83. Missing sidewalks are completed to fully connect the pedestrian network and bicycle facilities allow for the safe and convenient movement of cyclists. Streetscape improvements increase walkability and help to soften the built environment. New connections link major parks and open space destinations.

Bicycle infrastructure recommendations are sourced from the Richmond Bike Master Plan with some modifications from public input. These recommendations will need further study and public vetting to determine their feasibility and associated trade-offs with on-street parking and travel lanes.

### STATION AREA RECOMMENDATIONS

#### Compact and Mixed

- **CW.1 – CW.7** See descriptions in Chapter 3.
- **SA.54** Rezone Shockoe Bottom to districts that align with the Future Land Use Map.
- **SA.55** Encourage and support infill development on underutilized parcels in the Shockoe Bottom Station Area by working with the Army Corps of Engineers to mitigate the floodplain.

#### Connected

- **CW.8 – CW.23** See descriptions in Chapter 3.
- **SA.56** Improve crossing conditions along Dock Street for pedestrians and cyclists going to and coming from the Capital Trail, and the Low Line.
- **SA.57** Conduct a study to provide recommendations for increasing connectivity between Libby Hill Park and the Riverfront, particularly for cyclists and pedestrians.
- **SA.58** Work with private, state, and institutionally-owned entities to develop a shared parking strategy for the Capital Trail.

#### Thriving & Equitable

- **CW.24 – CW.35** See descriptions in Chapter 3.



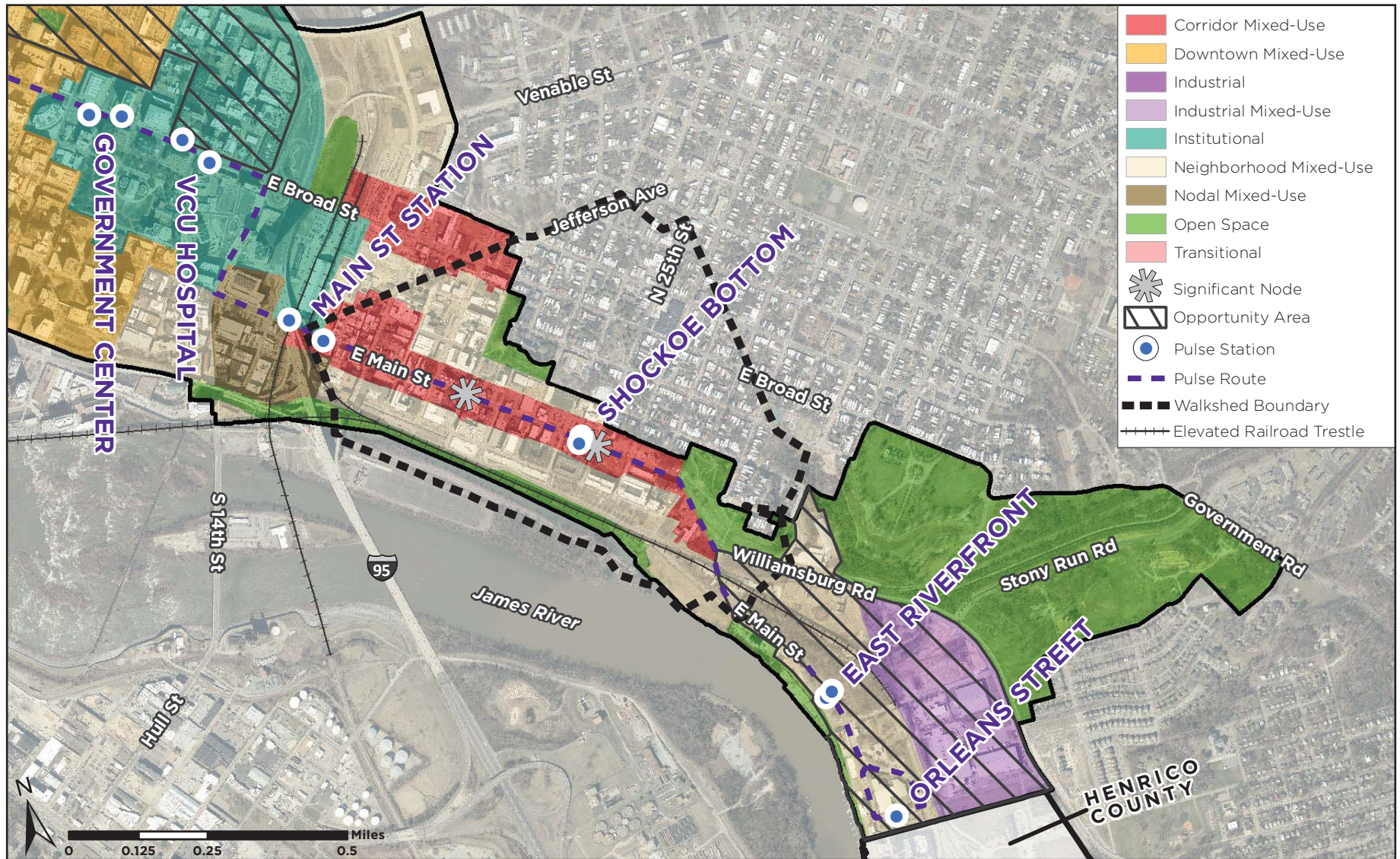
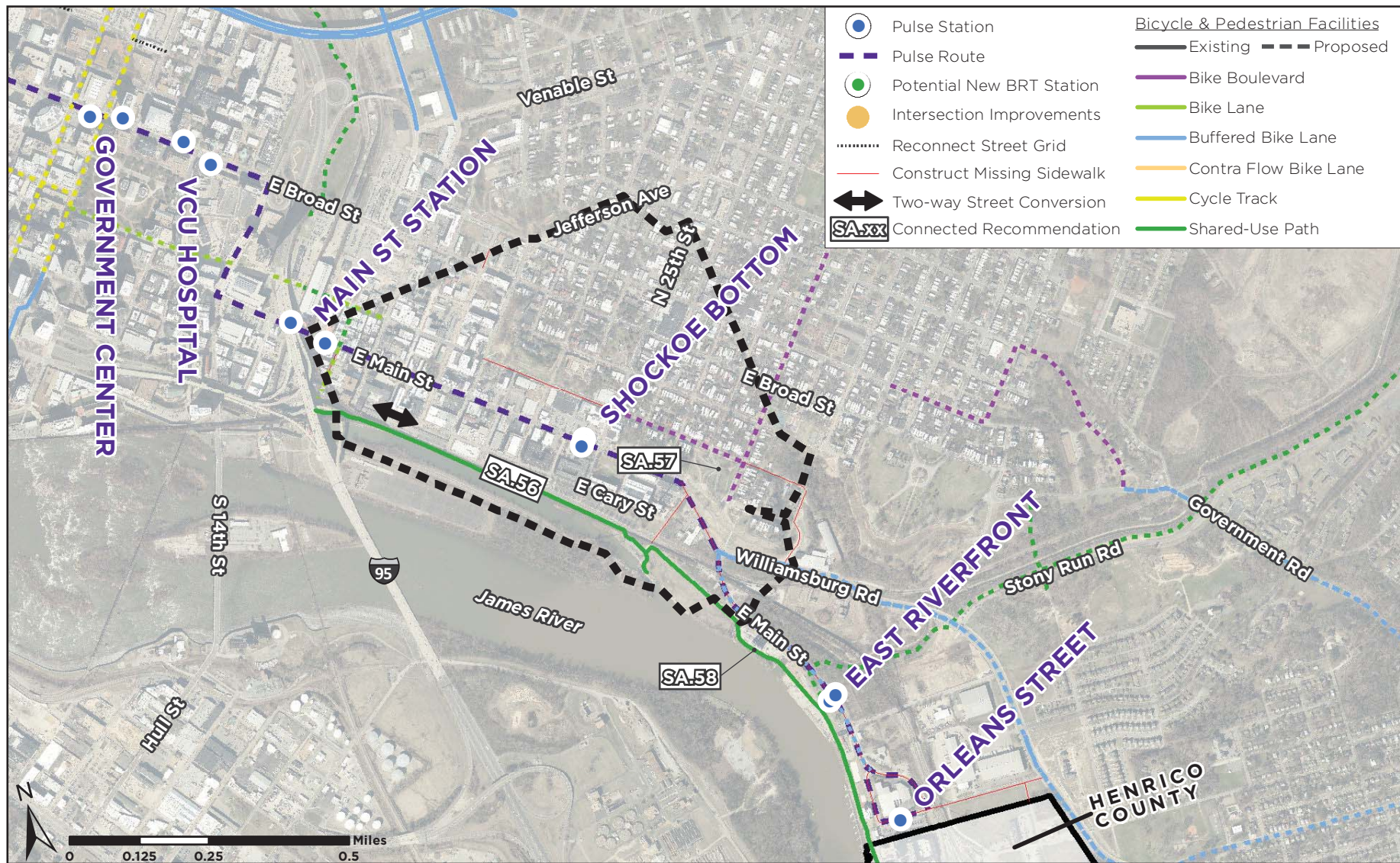


Figure 4.82 Shockoe Bottom: Future Land Use Map





**Figure 4.83** Shockoe Bottom: Future Connections Map



## RECOMMENDATION VISUALIZATION

### FARM FRESH SECTIONS

This cross section of Main Street, as shown in Figure 4.84, shows the effect that surface parking between the street and buildings can have on an area's character and form. The potential future section, as shown in Figure 4.85, illustrates how a taller, mixed-use structure with underground parking can provide a degree of enclosure to the street and create a more walkable and active area.

Please note that this section drawing is an illustration of how new development may appear at specific heights and forms. Please refer to the Future Land Use map and the Station Area Vision for the land use policy for this area.



Section cut-through line

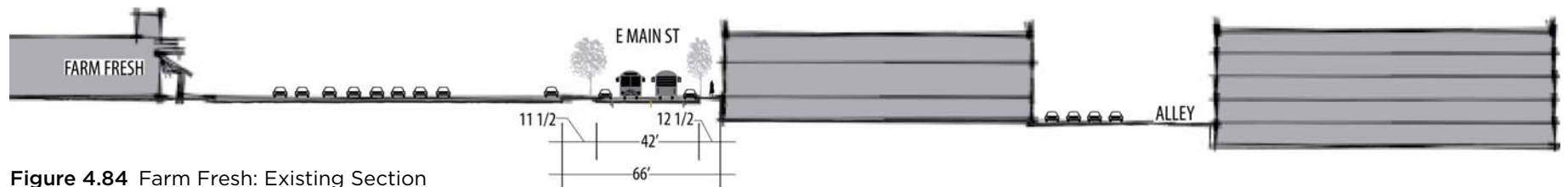


Figure 4.84 Farm Fresh: Existing Section

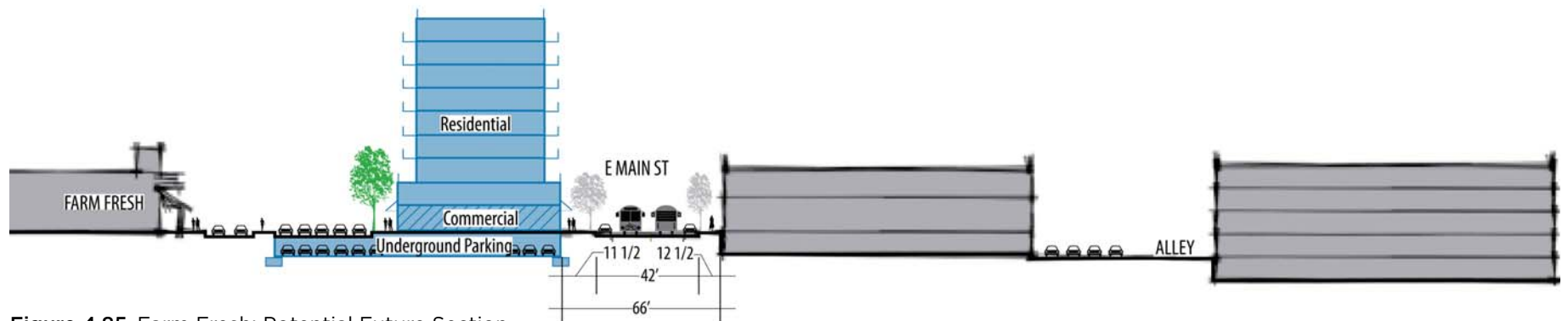


Figure 4.85 Farm Fresh: Potential Future Section



## ROW HOUSES SECTIONS

These sections, as shown in Figure 4.86 and Figure 4.87, illustrate the existing and potential future conditions along E. Main Street which has a mix of large-scale buildings and underutilized parcels. In the potential future section, the existing gas station could be redeveloped into residential uses that help frame the street, while streetscape improvements and tree plantings help create a more defined sense of place.

Please note that this section drawing is an illustration of how new development may appear at specific heights and forms. Please refer to the Future Land Use map and the Station Area Vision for the land use policy for this area.



Section cut-through line

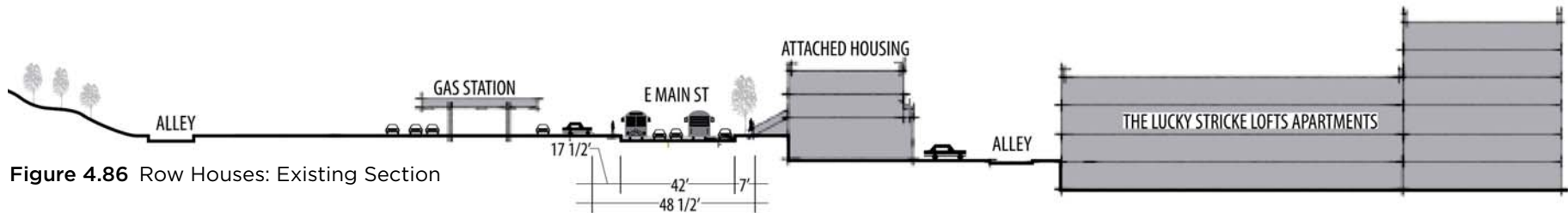


Figure 4.86 Row Houses: Existing Section

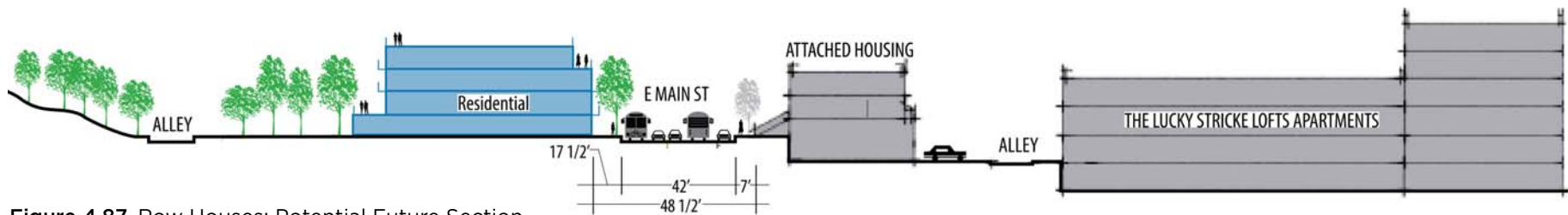


Figure 4.87 Row Houses: Potential Future Section

## EXISTING CONDITIONS

The East Riverfront and Orleans Stations are considered “Emerging Stations.” These combined station areas score well in terms of household and employment growth, have relatively low property values and rent prices, and have an abundance of vacant and underutilized property that could be ripe for redevelopment. Overall, the areas are not currently zoned for high-density development, and portions are characterized by “superblocks” which do not foster an urban environment. Walkability and the availability of attractions and businesses are currently poor, as evidenced by these station areas’ Walkscore® of only 35 out of 100.

### MARKET CONDITIONS: HIGH

#### HOUSEHOLD GROWTH • • • • •

2000-2013 household growth: 34.81%

#### EMPLOYMENT GROWTH • • • • •

2008-2012 employment growth: 27%

#### PROPERTY VALUES • • • • •

Walkshed property total: \$123 million +

#### OFFICE RENT SCORE • • • • •

Office rent per sq ft: \$12.85

#### RETAIL RENT SCORE • • • • •

Retail rent per sq ft: \$12.42

#### COMMERCIAL PERMITS • • • • •

2010-2015 permit activity: \$9 million +

#### RESIDENTIAL PERMITS • • • • •

2010-2015 permit activity: \$11 million +

### DEVELOPMENT READINESS: HIGH

#### BY-RIGHT ZONING • • • • •

Land coverage allowing TOD: 6%

#### PARCELIZATION • • • • •

Parcels per acre: 1.03

#### VACANT LAND • • • • •

Acres of vacant land: 26.8

#### UNDERPERFORMING LAND • • • • •

Acres of redevelopment land: 73.8

### PEDESTRIAN ORIENTATION: MEDIUM-LOW

#### POPULATION DENSITY • • • • •

People per acre: 22.9

#### EMPLOYMENT DENSITY • • • • •

Jobs per acre: 2.01

#### BUS FREQUENCY • • • • •

Average wait time: 41.8

#### BLOCK PATTERN • • • • •

Percent of blocks greater than 4 acres: 36%

#### INTERSECTION DENSITY • • • • •

Amount of intersections: 89

#### BIKE LANE ACCESS • • • • •

Linear feet of bike lanes in walkshed: 0'

#### CAR-FREE HOUSEHOLDS • • • • •

Households without a car: 13.5%

#### PARKS ACCESS • • • • •

Miles from station to greenspace: 0.27

#### WALKSCORE® • • • • •

Walkscore.com score at station: 35

## NEIGHBORHOODS

The station areas have two identifiable neighborhoods – Rocketts Landing and Greater Fulton, as shown in Figure 4.88. Rocketts Landing, with a presence in both Richmond and Henrico County, features dense, higher-income housing units and is still developing. Once completed, the area will have a mix of uses. Greater Fulton nearest the station is a single-family, low-density neighborhood. In between these two neighborhoods is an industrial park.

## EXISTING LAND USE

Uses are rigidly separated around the station areas, as shown in Figure 4.89. Most of the accessible area is industrial with a few commercial and residential uses in Greater Fulton and Rocketts Landing.

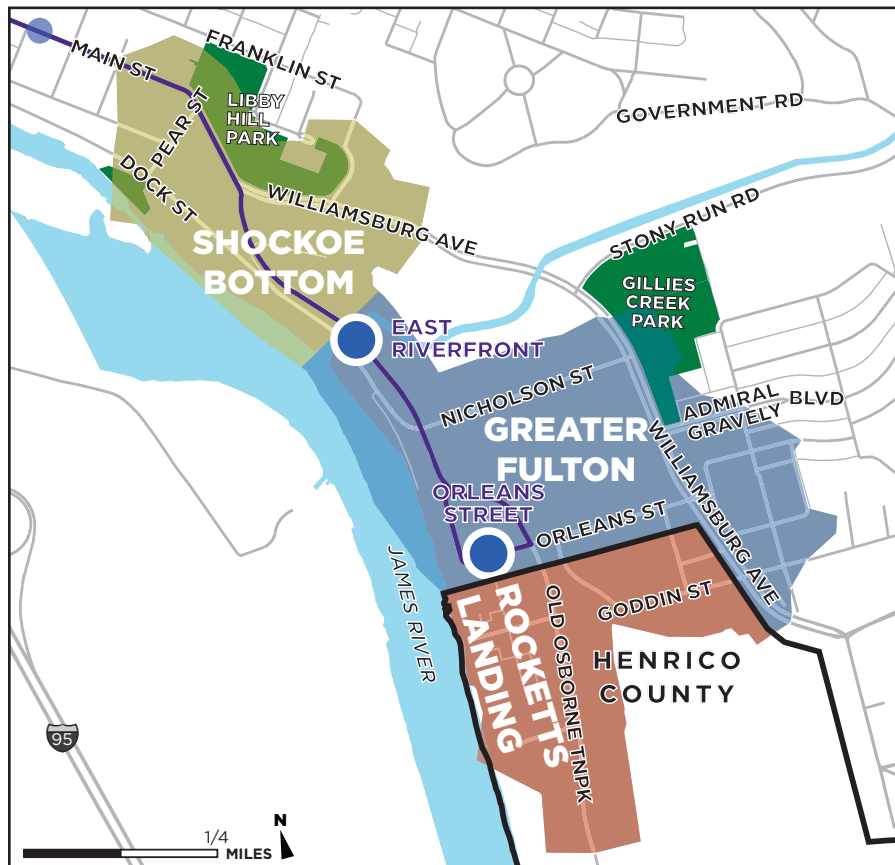


Figure 4.88 Riverfront: Neighborhoods

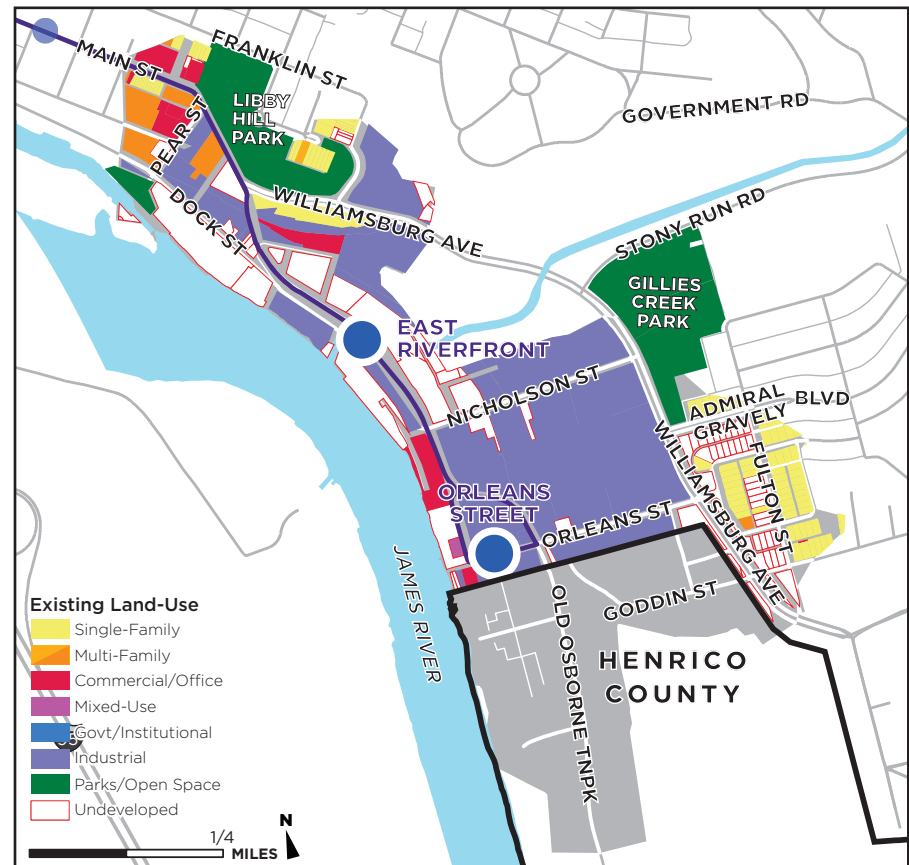


Figure 4.89 Riverfront: Existing Land Use



## SURFACE PARKING

The industrial nature of the area gives need for surface parking lots, as shown in Figure 4.90. These lots are concentrated in the block between Nicholson and Orleans Streets. The redevelopment of the Intermediate Terminal building by Stone Brewing will include additional surface parking. Shared parking arrangements should be explored as redevelopment proceeds.

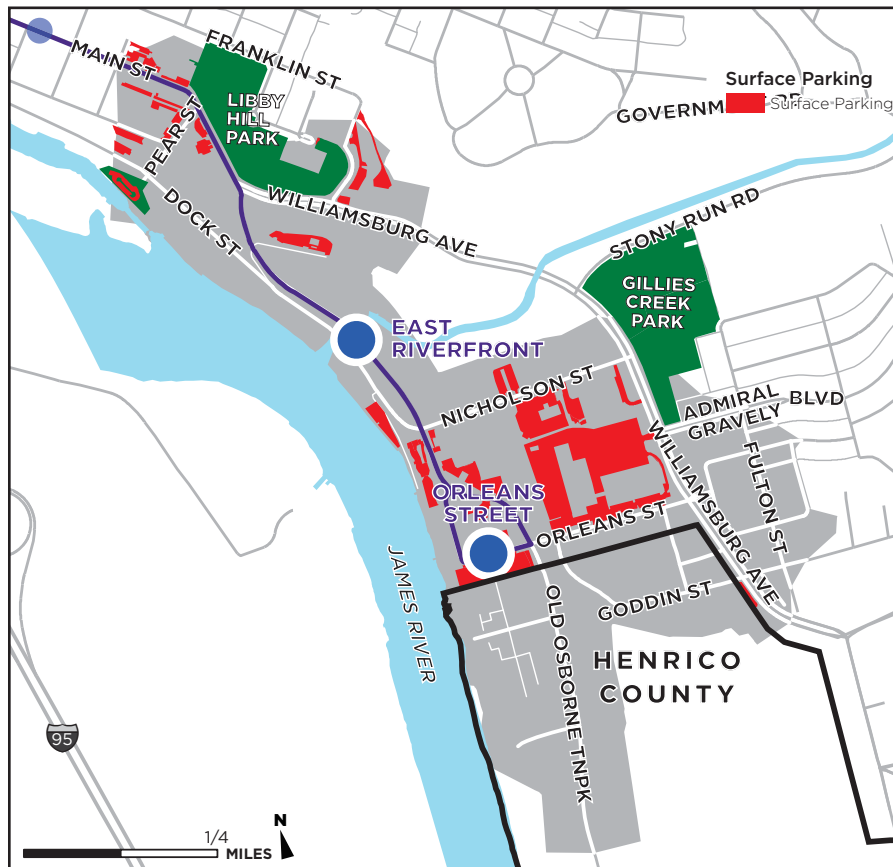


Figure 4.90 Riverfront: Surface Parking

## FLOODPLAIN

The stations' proximity to the River and Gillies Creek results in high floodplain coverage, as shown in Figure 4.91. This area is mostly occupied by Gillies Creek Park and industrial uses. The James River in this area is paralleled by the Virginia Capital Trail, a major recreational and active transportation amenity. The redevelopment of the Intermediate Terminal dock to receive boat traffic is on-going and future park space is proposed on City-owned property by the Gillies Creek outfall. The City's Riverfront Plan guides redevelopment of these open spaces and amenities.

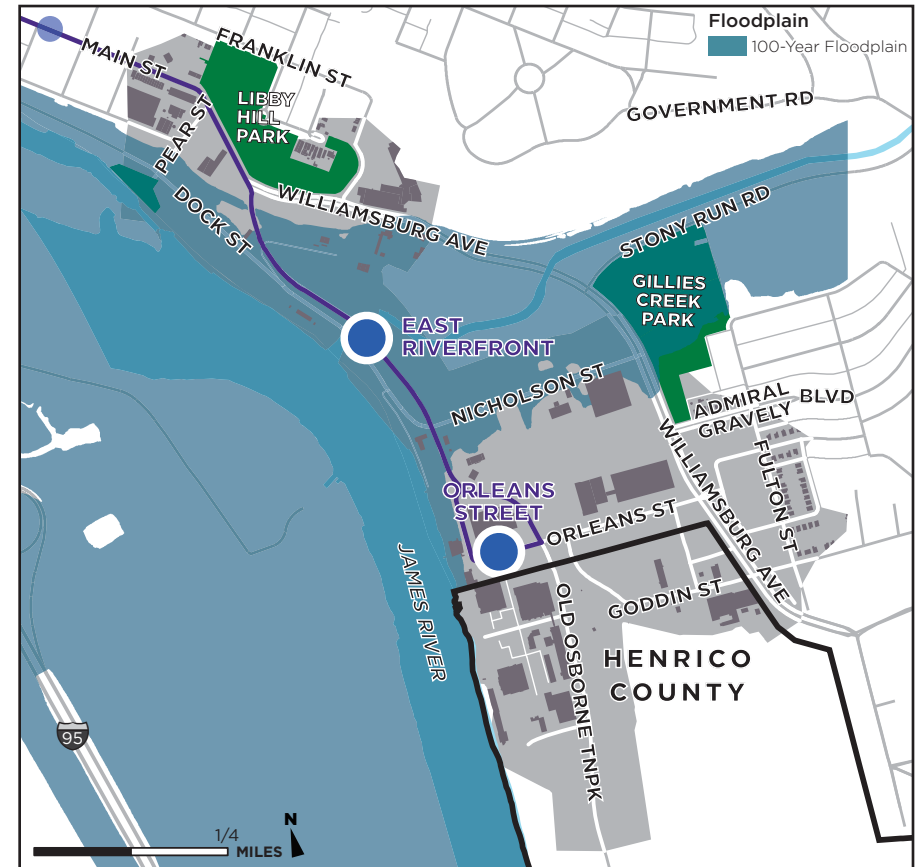


Figure 4.91 Riverfront: 100-Year Floodplain

## VISUALLY ACTIVE FRONTAGE

These stations are lacking in visually active frontages (commercial storefronts that engage the street), as shown in Figure 4.92. No active frontages exist at the East Riverfront Station, though Stone Brewing plans to modify the Intermediate Terminal- potentially adding visually active frontage at this station. At Orleans, two restaurants provide visually active frontages adjacent to the station.

## HISTORIC PRESERVATION

While there are no local or federal historic districts in the immediate vicinity of these station areas, City Old & Historic Districts and National Register Historic Districts are located to the north, encompassing much of the Church Hill neighborhood and Libby Hill and Chimborazo Parks, as shown in Figure 4.93. City Old & Historic Districts require that exterior changes to buildings be reviewed by the City's Commission of Architectural Review while National Register Historic Districts provide federal and state historic tax credits for historic renovations which are reviewed by the National Park Service.

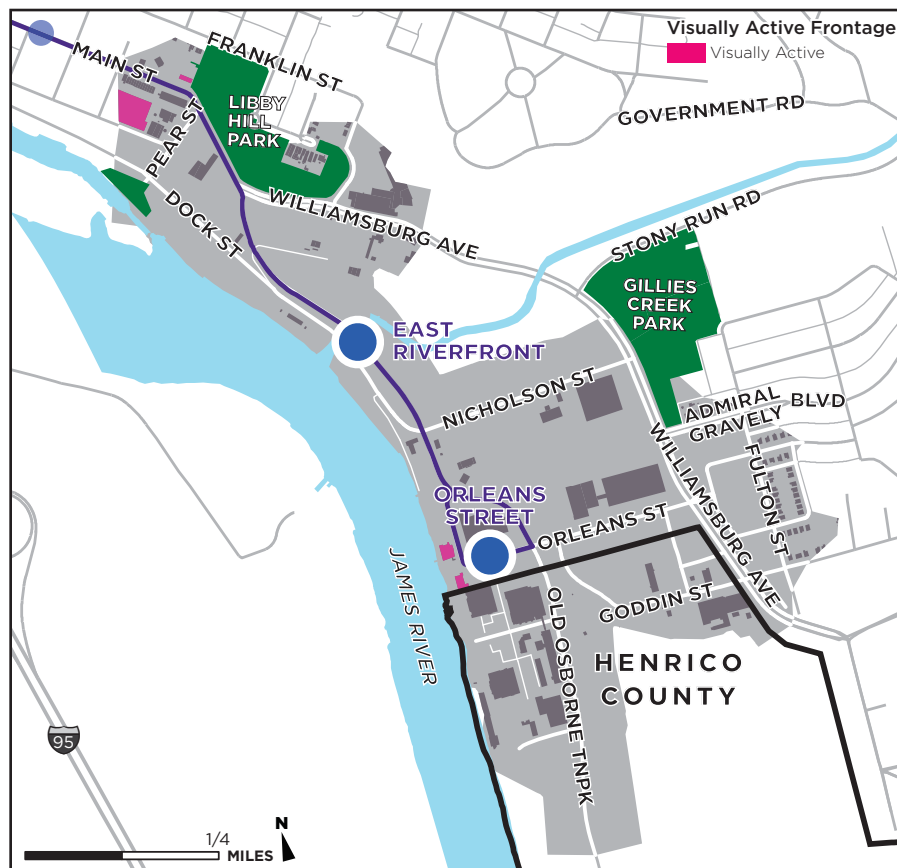


Figure 4.92 Riverfront: Visually Active Frontage

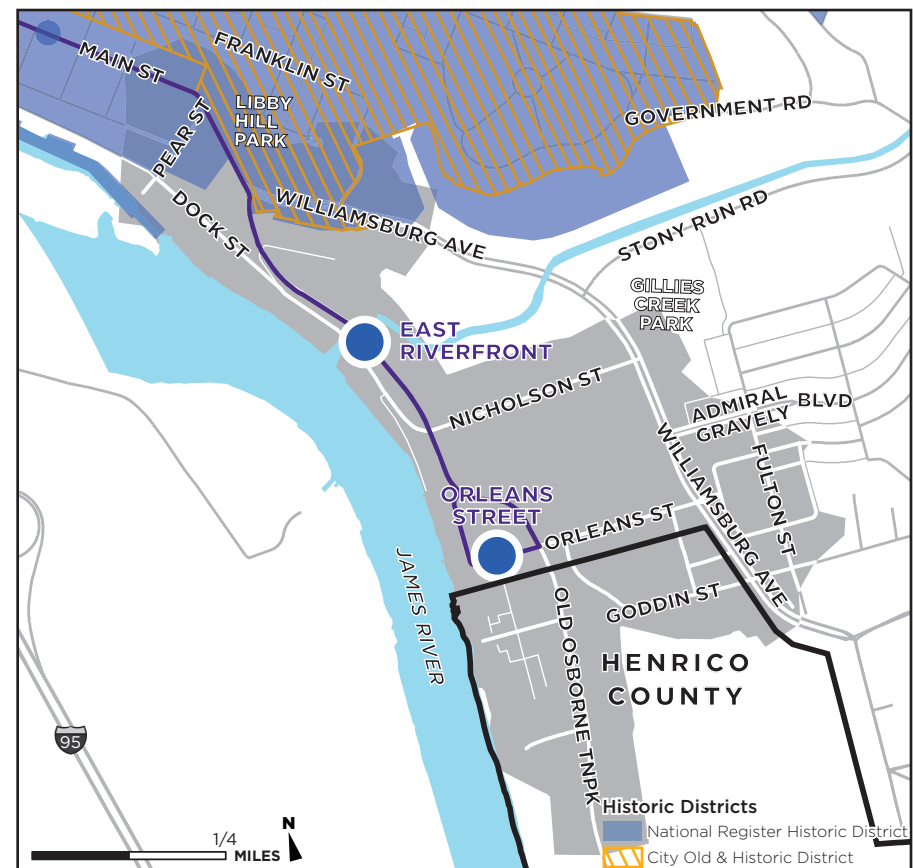


Figure 4.93 Riverfront: Historic Preservation





## RIVERFRONT STATION VISION

The East Riverfront Station area provides easy access to the James River and amenities that support the Riverfront. Fulton Gasworks is remediated and redeveloped as part of a much larger revitalization along the entire East Riverfront. Future development along the Riverfront embraces the values of river views while facilitating appropriate development. The Orleans Station area is a dense, walkable destination for workers, residents, and visitors. Residents of Greater Fulton easily access the terminus station via Orleans Street which is a “great street” featuring active ground floor uses and a walkable environment.

### FUTURE LAND USE

Nodal Mixed-Uses encourage the development of pedestrian-oriented commercial uses that support Riverfront activity and establish a sense of place in this under-developed area as shown in Figure 4.94. New development will need to comply with flood zone regulations. Industrial Mixed-Uses in Historic Fulton accommodate the existing light industrial uses while allowing for new residential and commercial uses.

### FUTURE CONNECTIONS

Pedestrian and bicycle facilities, as well as streetscape improvements, help to tie the area together and make a cohesive sense of place, as shown in Figure 4.95. Missing sidewalks are created where necessary, and access to the Virginia Capital Trail and Low Line is enhanced. The Gillies Creek Greenway is constructed and allows for recreational opportunities as well as alternative routes of travel to Church Hill and Chimborazo Park.

Bicycle infrastructure recommendations are sourced from the Richmond Bike Master Plan with some modifications from public input which includes the recommendation for buffered bike lanes on E. Main Street, Williamsburg Avenue, and Government Road. These recommendations will need further study and public vetting to determine their feasibility and associated trade-offs with on-street parking and travel lanes.

### STATION RECOMMENDATIONS

#### Compact and Mixed

- **CW.1 - CW.7** See descriptions in Chapter 3.
- **SA.59** Coordinate with Henrico County to create a cohesive approach for development around Orleans Station.
- **SA.60** Create a small area plan for the East Riverfront Station area.
- **SA.61** Improve the former Lehigh Cement property as the next phase of the Riverfront Plan implementation.
- **SA.62** Encourage and support infill development on underutilized

parcels in the East Riverfront and Orleans Station Areas.

- **SA.63** Develop the Historic Fulton Memorial Park at the foot of Powhatan Hill.

#### Connected

- **CW.8 - CW.23** See descriptions in Chapter 3.
- **SA.64** Construct the Gillies Creek Greenway.
- **SA.65** Recreate a street grid in the industrial area. Add new roads as development occurs in the block bound by the CSX railroad, Williamsburg Avenue, Nicholson Street, and Orleans Street.
- **SA.66** Add traffic signals at Williamsburg Avenue/Orleans Street and Orleans Street/Route-5.
- **SA.67** Investigate installing a pedestrian bridge over the Norfolk-Southern at-grade rail line and Gillies Creek that connects Fulton Street to the bottom of Chimborazo Park.
- **SA.68** Improve pedestrian connections throughout the neighborhood with paths connecting Fulton Hill to Historic Fulton and pedestrian access to the waterfront at the end of Orleans Street and Nicholson Street.
- **SA.69** Improve public art in this section of the Corridor, such as at the Dock & E. Main Streets roundabout, the CSX overpass at Orleans Street, or other locations as they become available.
- **SA.70** Require developers to improve the streetscape of Orleans Street, per the streetscape design guidelines, as parcels redevelop.

#### Thriving & Equitable

- **CW.24 - CW.35** See descriptions in Chapter 3.
- **SA.71** Redevelop the Fulton Gas Works site and preserve the historic gasometer and the Fulton Works building. Continue the brownfield clean-up on this Utilities-owned site to prepare it for higher and better uses once regulatory items have been addressed, such as environmental remediation and Section 106 review for historic resources.



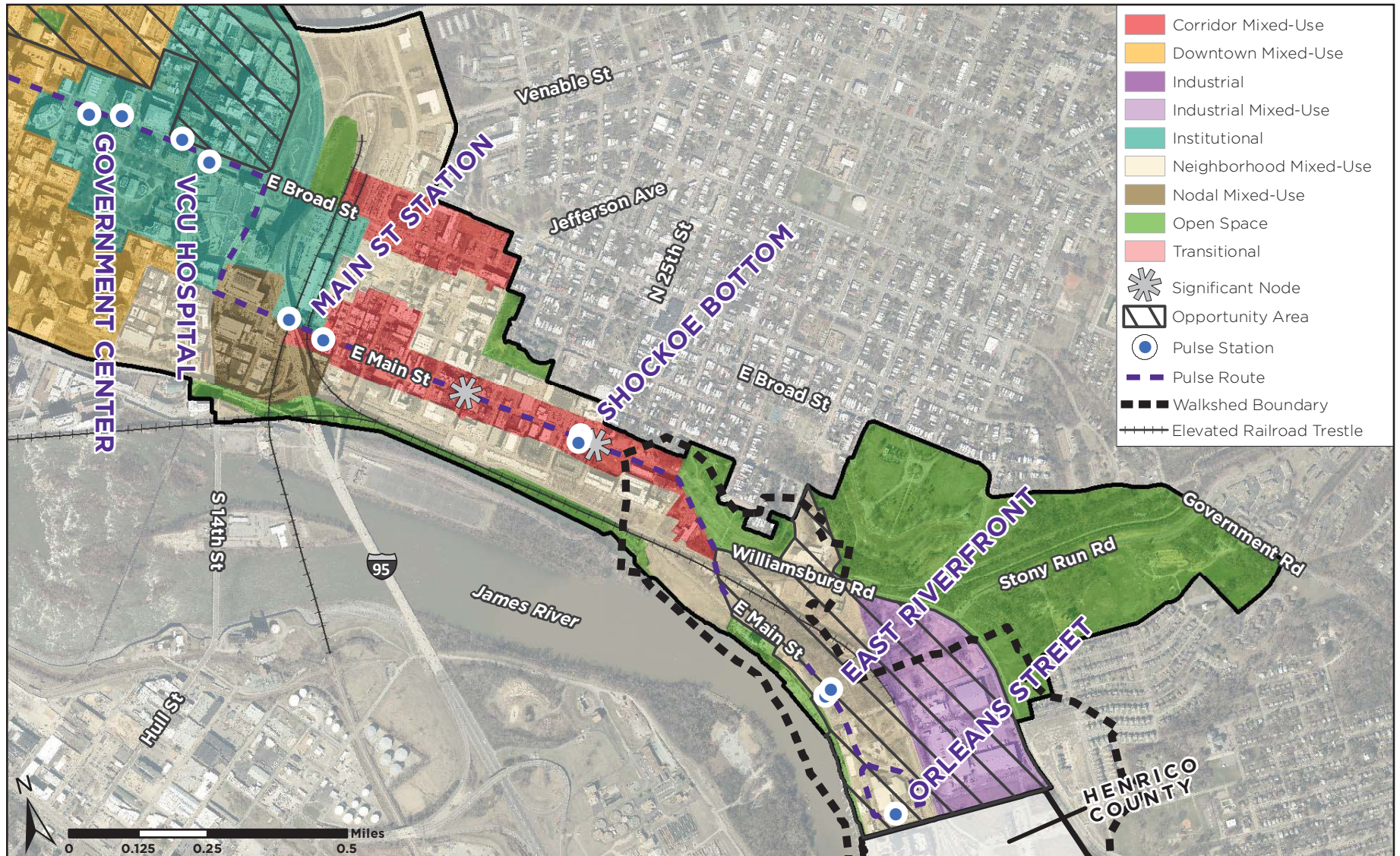


Figure 4.94 Riverfront: Future Land Use Map



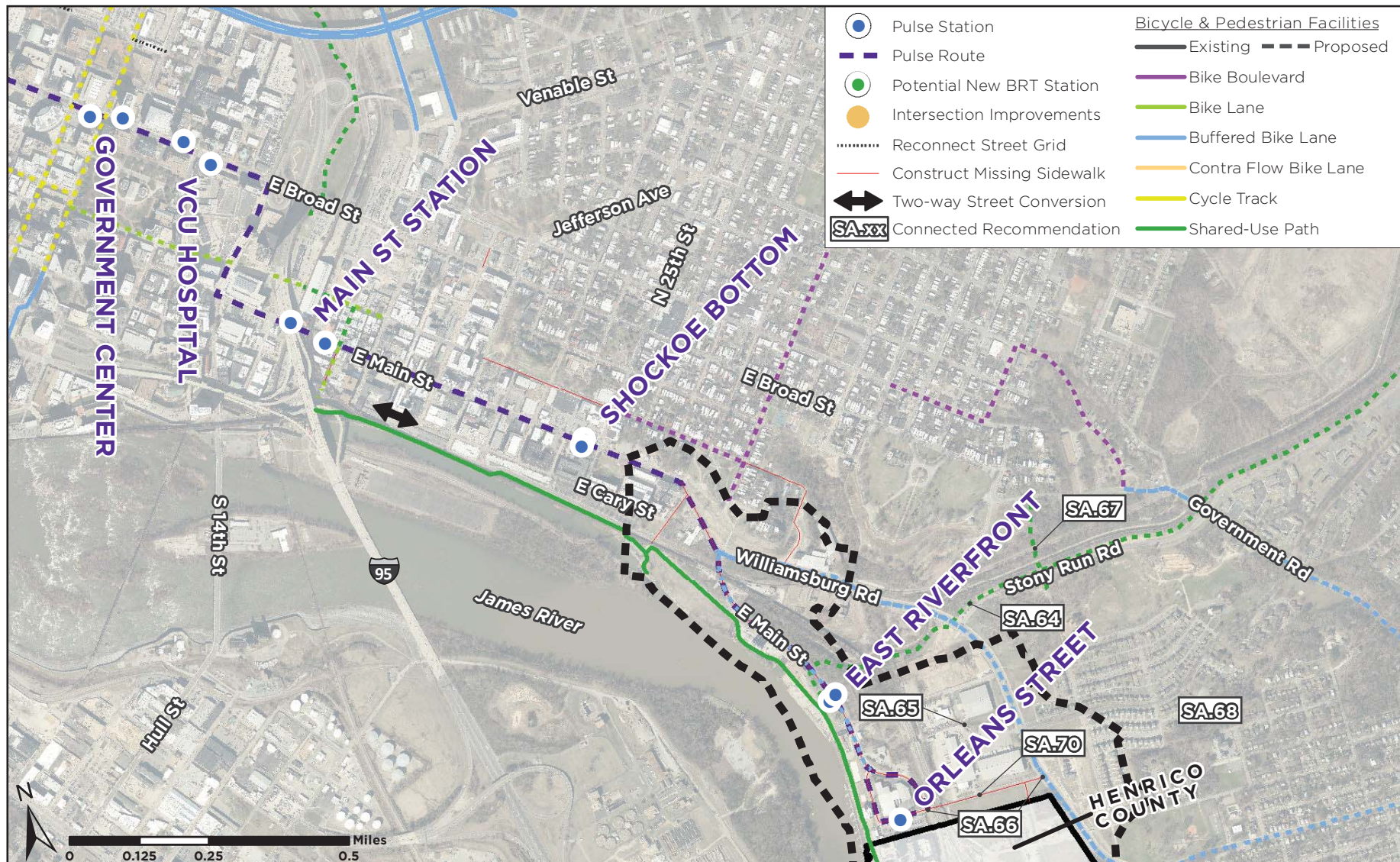


Figure 4.95 Riverfront: Future Connections Map



## RECOMMENDATION VISUALIZATION

### INTERMEDIATE TERMINAL SECTIONS

The sections shown in Figure 4.96 and Figure 4.97 illustrate the topographical and environmental challenges of development in the downriver portion of the Corridor. However, the potential future section illustrates that potential for new development exists, which can be urban in form and help create a new sense of place in an area largely viewed as floodplain for the James River and Gillies Creek and defunct industrial uses.

Please note that this section drawing is an illustration of how new development may appear at specific heights and forms. Please refer to the Future Land Use map and the Station Area Vision for the land use policy for this area.



Section cut-through line

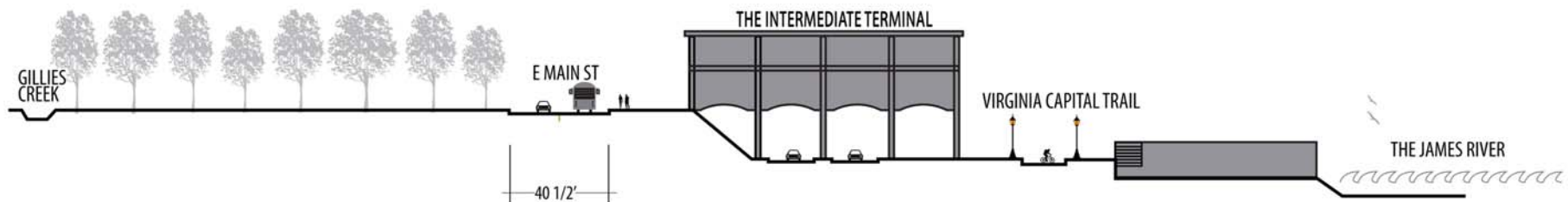


Figure 4.96 Intermediate Terminal: Existing Section

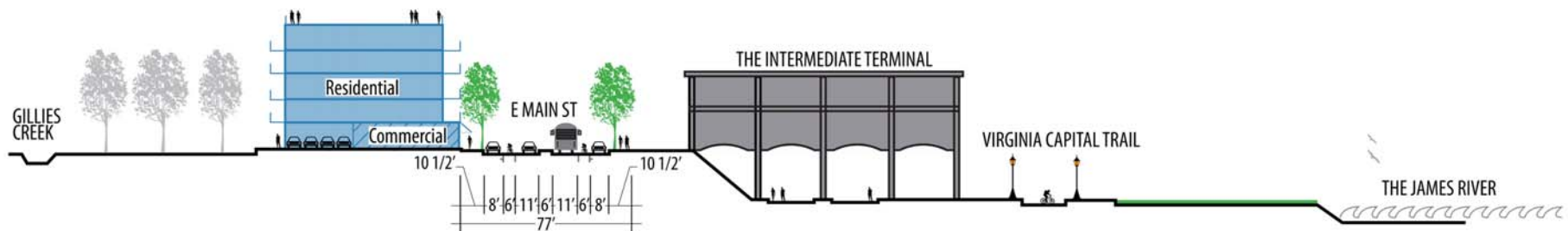
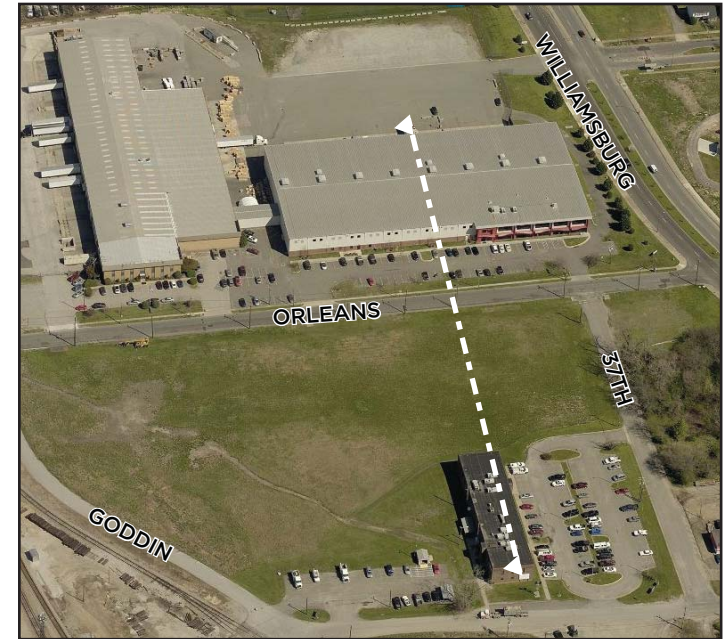


Figure 4.97 Intermediate Terminal: Potential Future Section

## ORLEANS SECTIONS

The sections shown in Figure 4.98 and Figure 4.99 demonstrate the availability of vacant land near the Orleans Street Station which could take the form of medium-scale, mixed-use buildings, oriented around the existing streets, with upper stories above the CSX trestle to get outstanding river views.

Please note that this section drawing is an illustration of how new development may appear at specific heights and forms. Please refer to the Future Land Use map and the Station Area Vision for the land use policy for this area.



Section cut-through line

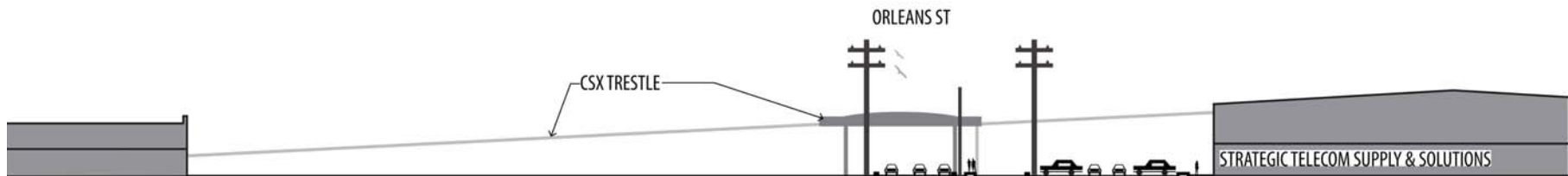


Figure 4.98 Orleans: Existing Section

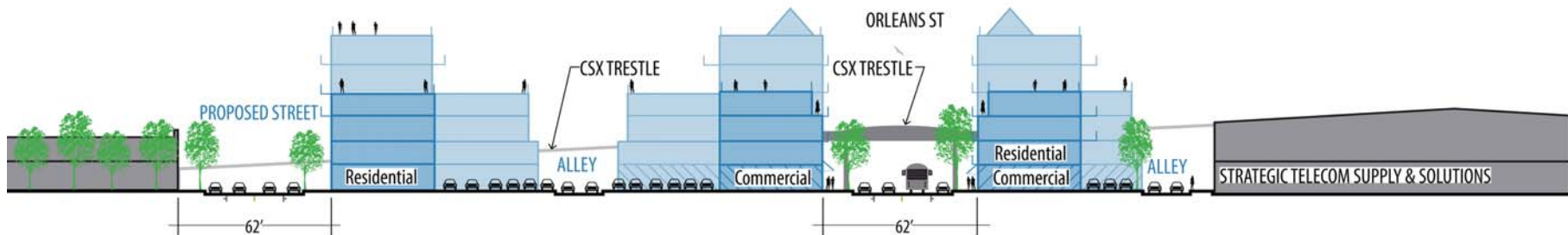
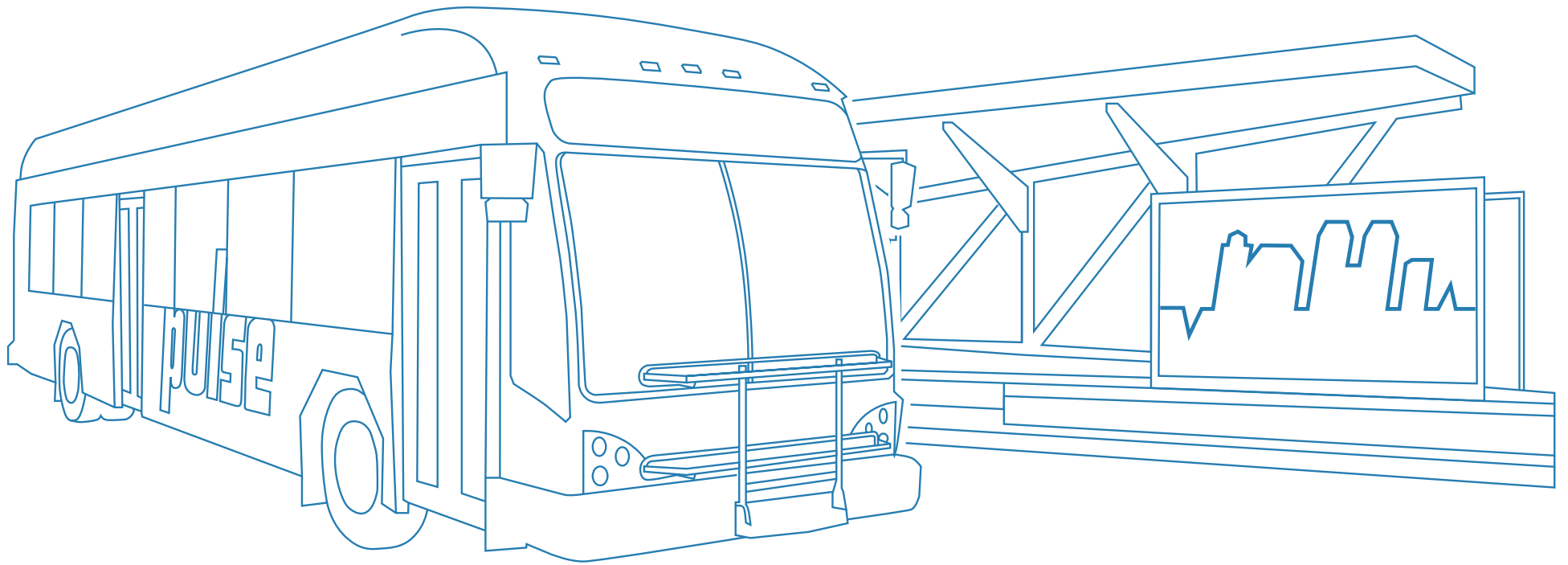


Figure 4.99 Orleans: Potential Future Section



## 5. IMPLEMENTATION



## PLAN EXECUTION

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The Department of Planning and Development Review will oversee the implementation of the Pulse Corridor Plan. Several City Departments were involved in developing this plan and continued cross-departmental collaboration will be essential in implementing the plan's recommendations. The tables that span the next several pages outline a time frame, lead entity, and supporting entities for each recommendation. (Please see Table 5.1 and Table 5.2.)

### PRIORITY STATIONS

The City will focus primarily on implementing the recommendations for the six priority stations identified through SGA's analysis described in Chapter 2. The six priority stations are:

- Cleveland
- Science Museum
- Allison
- Arts District
- Main Street Station
- Orleans

### THIS PLAN IS A GUIDE

Like all planning documents, the recommendations included herein are guides. The Pulse Corridor Plan is a guide to encourage the area around the Pulse to develop according to the transit-oriented development principles outlined in Chapter 3 of this report. As a guidebook, the recommendations in this plan may be modified overtime as new information becomes available and the context changes.

### FUTURE LAND USE & ZONING

An important distinction between the Future Land Use discussed in this Plan and Zoning regulations is that Future Land Use is used to describe the vision for an area, while Zoning designations stipulate what a property owner can legally build on their parcel today and include height limits, setback requirements, and permitted uses, and sometimes form-based requirements, such as fenestration and entrance regulations.

Future Land Use designations are visionary and include language about how the area should look and feel in the future, but do not specify the height, density, setback, and building design of specific parcels. Future Land Use and Vision Statements are important tools in helping communities envision the future of a place without getting into the implementation of how, specifically, the buildings will be designed and built. Future Land Use and Vision Statements are established first, and then zoning is updated over time to meet the established vision.

Zoning is one of many tools that help achieve the vision established by Future Land Use. Other tools that implement the vision are streetscape projects, park and open space projects, transportation improvements, and economic development tools (such as façade improvement grants, tax abatements, etc.). Once a Future Land Use map is adopted, the City begins the process of implementing various tools to achieve its vision. Once such tool is updating the zoning ordinance and remapping zoning districts.

The adoption of the Pulse Corridor Plan will not result in the rezoning of any parcels. Parcels are rezoned through a public process that is separate from the plan adoption process. The Department of Planning and Development Review will work with community stakeholders and property owners to determine specific height, density, setback, and building design regulations as part of the rezoning process.

The Department of Planning and Development Review has identified areas and neighborhoods that are priorities for rezoning, either because the existing zoning is outdated, the neighborhood is changing quickly through Special Use Permits, or a combination of the two. These areas include:

- Scott's Addition
- Monroe Ward
- Shockoe Bottom
- W. Broad Street at Boulevard

**Table 5.1** Corridor-wide [CW] Recommendations

		<b>Time Frame</b>	<b>Lead Entity</b>	<b>Supporting Entities</b>
<b>Compact &amp; Mixed</b>				
CW.1	Create a Plan of Development overlay. A Plan of Development overlay along the Corridor will outline form elements projects must incorporate into their site plan to meet TOD goals.	S	PDR	DPW
CW.2	Rezone the Corridor to match the future land use map. Priority station areas are Cleveland, Science Museum, Allison, Arts District, Main Street Station, and Orleans.	S-M	PDR	
CW.3	Create a new mixed-use zoning district that allows mid-rise buildings, up to 12 stories in building height.	S	PDR	
CW.4	Encourage underground and wrapped parking decks. Incentivize underground parking, require wrapping of structured parking, discourage the development of new surface parking lots along the Corridor, and encourage redevelopment of existing surface lots as new infill sites.	S	PDR	DPW, ECD
CW.5	Encourage contextual small-scale infill development. Remove parking requirements for smaller-scale projects as a way to reduce barriers to entry and diversity of housing choices.	S	PDR	CWB, ECD
CW.6	Update the map of Street-Oriented Commercial and Priority Streets along the Pulse Corridor to incorporate into the Zoning Ordinance.	S	PDR	
CW.7	Improve existing parks and establish new open space. Improve existing parks and identify opportunities for new park space through the use of City-owned land and incentives for privately-created public open space.	S-L	PDR	PRCF
<b>Connected</b>				
CW.8	Improve streetscape amenities. To create a safe, engaging pedestrian experience, provide consistent streetscape amenities where they do not already exist.	S-L	DPW	PDR
CW.9	Provide wider sidewalks and streetscape. Focus on areas where high-density redevelopment is occurring, through road diets, or setbacks of new development.	S-L	DPW	PDR
CW.10	Improve intersections to better accommodate pedestrians and cyclists. Utilize context-sensitive solutions and designing to complete street standards.	S-M	DPW	PDR
CW.11	Install sidewalks. Construct sidewalks where missing in the neighborhoods along the Corridor and repair and improve existing sidewalks. Widen sidewalks based on changes in land use and redevelopment and minimize redevelopment that reduces sidewalk widths. Follow ADA guidelines to provide universal access.	S-L	DPW	PDR
CW.12	Plant trees. Fill empty tree wells along the Corridor and at station areas. Require developers to plant trees in their setbacks and in tree wells adjacent to their developments. Encourage property owners to take advantage of the City's "Adopt a Tree" program. Amend appropriate buffers in the Zoning Ordinance to require trees.	S-L	DPW	CWB, PDR
CW.13	Integrate public art. Focus on key points and gateways along the Corridor, such as I-195/Broad, Broad/Belvidere, and Orleans/CSX Railroad.	M	PAC	PDR
CW.14	Improve lighting. Install pedestrian-scale and -oriented lighting throughout the Corridor.	S-L	DPU	DPW, PDR

**Time Frame**

S = Short-term, 1-2 years  
M = Mid-term, 3-4 years  
L = Long-term 5+ years

**Entities**

CWB = Office of Community  
Wealth Building  
DPU = Dept. of Public Utilities

DPW = Dept. of Public Works  
ECD = Dept. of Economic &  
Community Development  
GRTC = Greater Richmond

Transit Company  
PAC = Public Art Commission  
PDR = Dept. of Planning &  
Development Review

RRHA = Richmond  
Redevelopment and Housing  
Authority

**Table 5.1 Corridor-wide [CW] Recommendations (continued)**

		<b>Time Frame</b>	<b>Lead Entity</b>	<b>Supporting Entities</b>
CW.15	Underground overhead utilities. Bury utility lines along Broad Street and E. Main Street.	S-L	DPU	DPW
CW.16	Align local GRTC bus routes with the Pulse in order to support existing and future development as indicated in the recommendations outlined in the Richmond Transit Network Plan. Allow easy transfers and improve the pedestrian experience at key transit locations.	S	GRTC	DPW, ECD, PDR
CW.17	Improve bicycle infrastructure throughout the Corridor. Install key projects referenced on the Future Connections Map and work towards more protected bicycle infrastructure in consultation with the Bike Master Plan while balancing the needs of travel lanes, on-street parking, and bicycle infrastructure within a limited right-of-way. Co-locate bike-share stations near the Pulse station areas.	S-M	DPW	PDR
CW.18	Encourage car-sharing programs. These programs can reduce the need to own an automobile for residents and employees along the Corridor and provide flexibility of travel.	L	PDR	
CW.19	Create streetscape design guidelines from Belvidere Street to the City/County line to beautify W. Broad Street through additional screening standards, underground utilities, etc.	M	PDR	
CW.20	Encourage reduced automobile parking in exchange for dedicated car-share spots, sponsoring a bike-share station and/or providing additional bike parking.	S	PDR	
CW.21	Prioritize alley improvements. Create better access to parking and loading via alleys, reducing the need for driveway entrances along the Corridor.	M	DPW	PDR
CW.22	Manage on-street parking as a key resource in redevelopment. Ensure on-street parking regulations are appropriate to surrounding land use context, parking pressures, and ensuring adequate parking and loading. Study possible reforms to the residential permit parking program to manage neighborhood parking and avoid spillover. Study areas to add to regulated on-street parking, or paid on-street parking, to determine the best course of action.	S-M	DPW	PDR
CW.23	Preserve the gridded street network. Given the importance of the street grid to Richmond's urban environment, in terms of both connectivity and neighborhood cohesion, every effort should be made to preserve the grid, including alleys, as the city develops.	S-L	DPW	PDR
<b>Thriving &amp; Equitable</b>				
CW.24	Explore affordable housing as an element of any redevelopment of City-owned land along the Corridor.	S	ECD	CWB, PDR, RRHA
CW.25	Direct investments of City Affordable Housing Trust Fund to property along the Corridor.	S	PDR	ECD
CW.26	Foster a stronger relationship with the State Affordable Housing Trust Fund.	S	PDR	
CW.27	Award bonuses for affordable housing. Award added building height and reduce parking requirements in exchange for the inclusion of affordable housing in projects. Update the City's affordable dwelling unit bonus provisions to include mixed-use districts envisioned in the Future Land Use plan.	S	PDR	
CW.28	Preserve historic structures. In addition to providing a historical context and commemorating significant historic events, historic structures provide housing and commercial space choice, and a diversity of building type and style.	S-L	PDR	

**Time Frame**

S = Short-term, 1-2 years  
M = Mid-term, 3-4 years  
L = Long-term 5+ years

**Entities**

CWB = Office of Community Wealth Building  
DPU = Dept. of Public Utilities

DPW = Dept. of Public Works  
ECD = Dept. of Economic & Community Development  
GRTC = Greater Richmond

Transit Company  
PAC = Public Art Commission  
PDR = Dept. of Planning & Development Review

RRHA = Richmond Redevelopment and Housing Authority



**Table 5.1 Corridor-wide [CW] Recommendations (continued)**

		<b>Time Frame</b>	<b>Lead Entity</b>	<b>Supporting Entities</b>
CW.29	Support new dense, vibrant developments in order to preserve existing historic buildings while increasing vitality at the street and neighborhood levels.	S-L	ECD	
CW.30	Explore creating a transfer of development rights program to capture zoning value of historic structures without demolishing them.	M	PDR	
CW.31	Create new business improvement districts (BIDs) along the Corridor.	M	ECD	
CW.32	Attract new businesses to Station Areas. Direct new or expanding businesses to locations along the Corridor by creating a customized incentive program to support small business, expanding the Façade Improvement Program, and leveraging other existing programs such as C.A.R.E.	S	ECD	PDR
CW.33	Incentivize transit-oriented development. Investigate strategies such as a tax increment finance district, a technology zone, and other incentives to support enhanced job creation opportunities along the Corridor.	S	ECD	CWB, Finance Dept.
CW.34	Investigate the revision of the City's tax abatement program to target properties along the Pulse Corridor to maximize the benefit to the City.	S	ECD	CWB, Finance Dept.
CW.35	Create and adopt an affordable housing strategy for the Pulse Corridor. In developing that strategy, conduct an inventory of housing stock and affordability along the Corridor, and set affordable housing goals.	S-M	ECD	PDR, CWB

**Time Frame**

S = Short-term, 1-2 years  
M = Mid-term, 3-4 years  
L = Long-term 5+ years

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**Table 5.2 Station Area [SA] Recommendations**

		<b>Time Frame</b>	<b>Lead Entity</b>	<b>Supporting Entities</b>
<b>Staples Mill and Malvern</b>	<b>Compact &amp; Mixed</b>			
	SA.1 Rezone areas along W. Broad Street between I-195 and Staples Mill to less auto-oriented districts with specific form requirements that align with the Future Land Use Map. Promote adequate screening and landscaping of all surface parking areas.	M	PDR	
	SA.2 Invite major land owners in this area to discuss their plans for future development and how they will meet Corridor goals and lead to infill development.	S	PDR	ECD
	SA.3 Create a green space on City-owned land at Fitzhugh Avenue, Kent Road, and W. Broad Street.	L	PDR	DPW, PRCF, DPU
	<b>Connected</b>			
	SA.4 Install sidewalks on Chantilly Street and Blacker Street.	M	DPW	
	SA.5 Prioritize the segment of W. Broad Street from I-195 to Staples Mill Road for streetscape improvements as funding becomes available.	M	DPW	PDR
	SA.6 Install public art and attractive, unique infrastructure at the I-195 overpass making it a gateway to the city and improving the pedestrian environment.	M	PAC	PDR
	SA.7 Improve crossing conditions across W. Broad Street between Staples Mills Road and Westmoreland Place.	S	DPW	PDR
	<b>Thriving &amp; Equitable</b>			
	SA.8 Coordinate with Henrico County to meet Corridor goals at the Staples Mill station.	M	PDR	
<b>Cleveland</b>	<b>Compact &amp; Mixed</b>			
	SA.9 Rezone Scott's Addition to districts that align with the Future Land Use Map.	S	PDR	
	SA.10 Develop a small area plan for the Boulevard/W. Broad Street "Nodal Mixed-Use" area.	S	PDR	ECD
	SA.11 Create a green space at Cutshaw Avenue and Broad Street that relates to the nearby Pulse station with shade and seating.	M	PDR	DPW, PRCF, DPU
	SA.12 Develop and prioritize establishment of a park and open space plan for Scott's Addition.	M	PDR	PRCF
	SA.13 Explore methods to incentivize private development to create public open space in Scott's Addition.	S	PDR	PRCF
	<b>Connected</b>			
	SA.14 As development occurs, add sidewalks in Scott's Addition where missing.	S	DPW	
	SA.15 Install streetlights and pedestrian lights throughout Scott's Addition as needed to encourage a safe complete streets environment.	S-M	DPU	
	SA.16 Complete a multi-use path across the northern edge of the neighborhood. Conduct a feasibility review for continuing the path under Boulevard.	L	DPW	DPW, PRCF

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**Table 5.2 Station Area [SA] Recommendations (continued)**

		<b>Time Frame</b>	<b>Lead Entity</b>	<b>Supporting Entities</b>
<b>Cleveland</b>	SA.17 Plant trees throughout Scott's Addition. Require tree planting in public right-of-way by private developers. Require developers to incorporate trees in screening of parking areas.	S-M	DPW	PDR
	SA.18 Prioritize the segment of W. Broad Street from Boulevard to I-195 for streetscape improvements.	S	DPW	PDR
	SA.19 Complete a comprehensive, complete streets transportation and circulation plan for Scott's Addition that addresses two-way street conversions, truck routing, bicycle facilities, lighting, and other needs.	S-M	DPW	PDR, DPU
	<b>Thriving &amp; Equitable</b>			
	SA.20 Maintain a balance of uses as the neighborhood develops by drawing small-scale, neighborhood-compatible industrial and "maker" spaces to the neighborhood.	S-M	ECD	
<b>Science Museum and Allison</b>	<b>Compact &amp; Mixed</b>			
	SA.21 Rezone the areas around the Science Museum of Virginia and Allison Street stations to districts that align with the Future Land Use Map, working closely with neighborhood groups to ensure that future zoning districts are sensitive to the context of the neighborhood. Neighboring civic associations express a strong preference that new development along the south side of W. Broad Street be limited in height, promotes the preservation of historic building stock, and provides adequate buffers to the residential neighborhoods to the south.	S	PDR	
	SA.22 Work with Sauer Properties to develop an urban form master plan. Take advantage of the large concentration of single-owner redevelopment properties north of W. Broad Street and work together towards a high-density, urban form.	S	PDR	CWB
	SA.23 Re-establish the streetwall on W. Broad Street. Encourage new development to build to the street.	M-L	PDR	
	<b>Connected</b>			
	SA.24 Introduce a rectangular street grid north of W. Broad Street using complete streets guidelines. Continue Clay Street from DMV Drive to Lombardy Street, Marshall Street from DMV Drive to Bowe Street, Meadow Street from Clay Street to Leigh Street, and Allison Street to Clay Street as redevelopment occurs.	M-L	Private Sector	DPW, PDR
	SA.25 Improve north-south crossings of Broad Street for pedestrians and cyclists in the general vicinity of Hermitage and Lombardy Streets.	M	DPW	PDR
	SA.26 Explore the creation of an east-west bike route between Belvidere Street and Boulevard.	S	DPW	PDR
	SA.27 Improve intersection at Stuart Circle to accommodate cyclists.	M	DPW	
	SA.28 Prioritize the segment of W. Broad Street from Lombardy Street to Boulevard for streetscape improvements.	S	DPW	PDR
	<b>Thriving &amp; Equitable</b>			
	SA.29 Work with the Commonwealth to retain state employees and improve existing development, including looking at opportunities for repurposing large amounts of surface parking at the DMV Headquarters.	S-M	PDR	ECD
<b>VCU &amp; VUU</b>	<b>Compact &amp; Mixed</b>			
	SA.30 Rezone the area around the VCU & VUU Station to districts that align with the Future Land Use Map.	M	PDR	

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Table 5.2 Station Area [SA] Recommendations (continued)

		Time Frame	Lead Entity	Supporting Entities
VCU & VUU	<b>Connected</b>			
	SA.31 Reconnect the street grid as redevelopment occurs.	M-L	Private Sector	PDR, DPW
	<b>Thriving &amp; Equitable</b>			
	SA.32 Form a TOD committee between VCU, the City, and the broader community. Collaborate with VCU through regular meetings to discuss, plan, and implement a unified vision for the station area.	S	PDR	VCU
Arts District	<b>Compact &amp; Mixed</b>			
	SA.33 Rezone Monroe Ward to districts that align with the Future Land Use Map.	S	PDR	
	SA.34 Encourage and support the redevelopment of surface parking lots into uses that support transit.	S	PDR	DPW, ECD
	SA.35 Develop a public and green space plan for Monroe Ward.	M	PDR	DPW, PRCF
	SA.36 Fully implement the Abner Clay Park plan: Beautify and activate this park in accordance with community needs and desires. Add active uses to attract residents and Pulse BRT riders into this nearby asset. Orient any new development to the park.	S-M	PDR	PRCF
	<b>Connected</b>			
	SA.37 Construct protected bike lanes on 1st and 2nd streets.	S-M	DPW	
	<b>Thriving &amp; Equitable</b>			
	SA.38 Redevelop City-owned land near the Arts District Station to include affordable housing.	S-M	ECD	DPW, PDR
	SA.39 Work with RRHA to ensure that mixed-use, mixed-income developments with a TOD form are developed in Jackson Ward.	S-M	PDR	CWB, ECD, RRHA
Downtown Stations	<b>Compact &amp; Mixed</b>			
	SA.40 Develop a small area plan for the opportunity area around the VCU Medical Center, the Virginia Biotechnology Research Park, Blue's Armory, the Coliseum, and City-owned land. Include VCU Health and the Virginia Biotechnology Research Park in the planning process. Explore public-private-non-profit partnerships to redevelop properties to make the area a dynamic live-work environment.	S	PDR	ECD, VCU Health, Biotech Park
	<b>Connected</b>			
	SA.41 Build protected two-way bicycle infrastructure on Franklin Street.	S	DPW	
	SA.42 Improve the intersections at E. Broad Street and the ramps to I-95.	S-M	DPW	
	SA.43 Pursue two-way conversions of Grace and Marshall Streets in consultation with the City's Strategic Multimodal Transportation Plan, evaluating during implementation the balance of two-way conversion, on-street parking, and bicycle infrastructure.	M-L	DPW	

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Table 5.2 Station Area [SA] Recommendations (continued)

		Time Frame	Lead Entity	Supporting Entities
Downtown Stations	SA.44 Reconnect the street grid as opportunities present themselves in order to establish a more fine-grained street pattern while preserving the existing gridded street network by not closing any additional streets in the Downtown core.	S-L	DPW	PDR
	<b>Thriving &amp; Equitable</b>			
	SA.45 Using City-owned lots, especially in the opportunity area around the Coliseum and the lot across from the Convention Center, develop affordable housing with a mix of uses.	M	ECD	CWB, PDR
	SA.46 Continue to develop the Virginia Biotechnology Research Park area by attracting biotech companies to the Biotech Research Park.	S-M	ECD	
Main Street Station	<b>Compact &amp; Mixed</b>			
	SA.47 Rezone the Main Street Station Area to districts that align with the Future Land Use Map.	M	PDR	
	<b>Connected</b>			
	SA.48 Improve crossing conditions along E. Broad Street between 14th Street and 17th Street.	S	DPW	
	SA.49 Extend the Virginia Capital Trail to reach the Capitol. Require developments along the Virginia Capital Trail to provide amenities and infrastructure supportive of cyclists and pedestrians.	S	DPW	ECD
	SA.50 Work with private, state, and institutionally-owned entities to develop a shared parking strategy for the area around Main Street Station.	M	PDR	DPW, ECD
	SA.51 Pursue two-way conversions of the few one-way streets in Shockoe Bottom in consultation with the City's Strategic Multimodal Transportation Plan, evaluating during implementation the balance of two-way conversion, on-street parking, and bicycle infrastructure.	S	DPW	PDR
	<b>Thriving &amp; Equitable</b>			
	SA.52 Promote Main Street Station as the regional mass transit hub with the convergence of rail, BRT, regional bus, and GRTC local bus routes.	S-M	ECD	
	SA.53 Continue efforts to commemorate, memorialize, and interpret sites of historical and cultural significance in Shockoe Bottom and their on-going meaning to the city.	S-M	ECD	PDR
Shockoe Bottom	<b>Compact &amp; Mixed</b>			
	SA.54 Rezone Shockoe Bottom to districts that align with the Future Land Use Map.	M	PDR	
	SA.55 Encourage and support infill development on underutilized parcels in the Shockoe Bottom Station Area by working with the Army Corps of Engineers to mitigate the floodplain.	S-L	PDR	DPW
	<b>Connected</b>			
	SA.56 Improve crossing conditions along Dock Street for pedestrians and cyclists going to and coming from the Capital Trail, and the Low Line.	S	DPW	

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Table 5.2 Station Area [SA] Recommendations (continued)

		Time Frame	Lead Entity	Supporting Entities
Shockoe Bottom	<b>Connected (cont'd)</b>			
	SA.57 Conduct a study to provide recommendations for increasing connectivity between Libby Hill Park and the Riverfront, particularly for cyclists and pedestrians.	S	DPW	
	SA.58 Work with private, state, and institutionally-owned entities to develop a shared parking strategy for the Capital Trail.	S-M	PDR	DPW
East Riverfront and Orleans	<b>Compact &amp; Mixed</b>			
	SA.59 Coordinate with Henrico County to create a cohesive approach for development around Orleans Station.	S	PDR	
	SA.60 Create a small area plan for the East Riverfront Station area.	M	PDR	
	SA.61 Improve the former Lehigh Cement property as the next phase of the Riverfront Plan implementation.	S	PDR	PRCF, DPW, DPU
	SA.62 Encourage and support infill development on underutilized parcels in the East Riverfront and Orleans Station Areas.	S-L	PDR	
	SA.63 Develop the Historic Fulton Memorial Park at the foot of Powhatan Hill.	M-L	PRCF	PDR
	<b>Connected</b>			
	SA.64 Construct the Gillies Creek Greenway.	M	DPW	PRCF, PDR
	SA.65 Recreate a street grid in the industrial area. Add new roads as development occurs in the block bound by the CSX railroad, Williamsburg Avenue, Nicholson Street, and Orleans Street.	L	Private Sector	PDR, DPW
	SA.66 Add traffic signals at Williamsburg Avenue/Orleans Street and Orleans Street/Route-5.	S-M	DPW	
	SA.67 Investigate installing a pedestrian bridge over the Norfolk-Southern at-grade rail line and Gillies Creek that connects Fulton Street to the bottom of Chimborazo Park.	M	DPW	PDR, PRCF
	SA.68 Improve pedestrian connections throughout the neighborhood with paths connecting Fulton Hill to Historic Fulton and pedestrian access to the waterfront at the end of Orleans Street and Nicholson Street.	M	DPW	PDR, PRCF
	SA.69 Improve public art in this section of the Corridor, such as at the Dock & E. Main Streets roundabout, the CSX overpass at Orleans Street, or other locations as they become available.	S	PAC	PDR
	SA.70 Require developers to improve the streetscape of Orleans Street, per the streetscape design guidelines, as parcels redevelop.	M-L	PDR	
	<b>Thriving &amp; Equitable</b>			
	SA.71 Redevelop the Fulton Gas Works site and preserve the historic gasometer and the Fulton Works building. Continue the brownfield clean-up on this Utilities-owned site to prepare it for higher and better uses once regulatory items have been addressed, such as environmental remediation and Section 106 review for historic resources.	S-M	DPU	PDR, ECD

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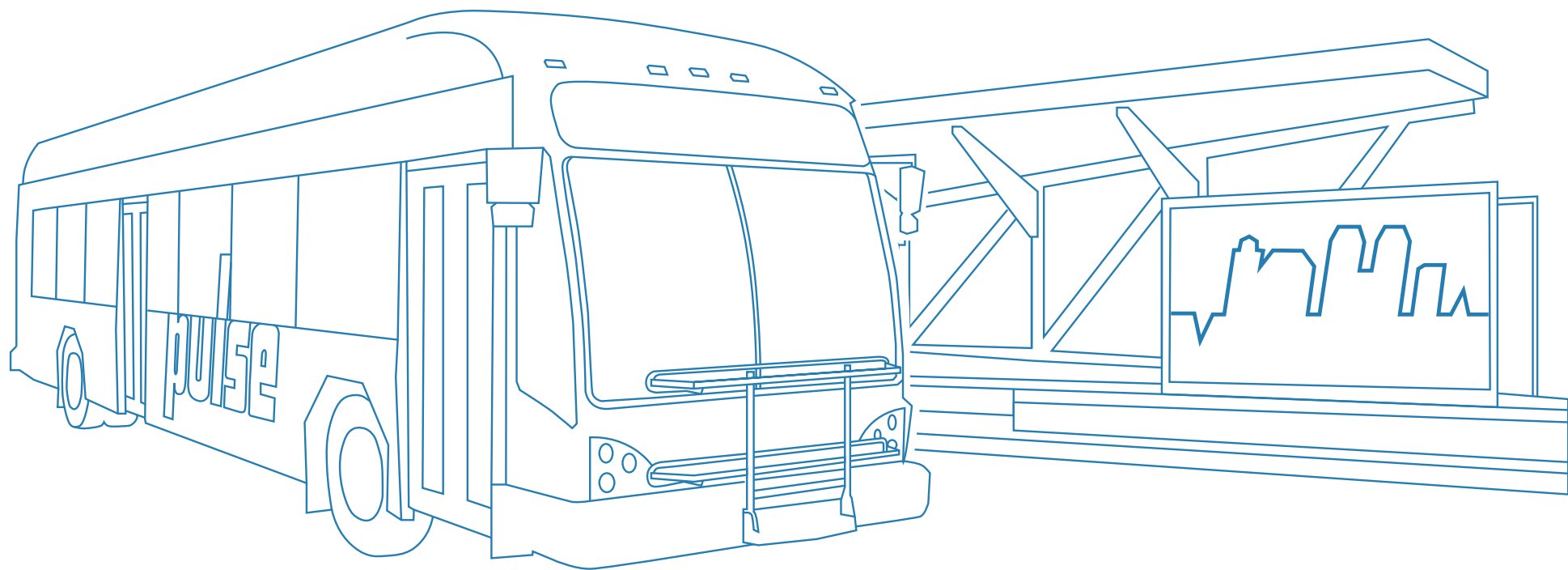
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## 6. APPENDIX

## PARKING ANALYSIS

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### AERIAL PHOTOGRAPHY

In order to better understand the utilization of parking along the Corridor at various times of day and days of the week, the Department of Planning and Development Review commissioned several aerial photography flights along Broad and E. Main Streets, as well as their surrounding neighborhoods.

The following pages showcase some of these images, with particular focus given to highlight parking decks and lots that have significant differences in parking utilization at different times of day and days of the week.

The aerial photography image on the left side of each page was taken on Thursday, February 18th 2016 at 10:00 a.m., while the aerial photography image on the right side of the page was taken on Saturday, June 25th 2016 at 5:00 p.m. Comparing these two sets of images show the relatively high utilization of parking along the Corridor on weekdays during business hours, compared to the relatively low utilization of these same lots and decks on weekends.

For the purposes of these observations, parking decks with very few or no cars on their top, exposed level are assumed to be underutilized since these are often the last spots chosen by parkers, since most parkers would rather choose available spaces at lower levels which are more quickly accessed.

### PARKING MITIGATION PLAN

To supplement the information displayed in the aerial photography, data was taken from the GRTC Pulse *Parking Mitigation Plan (Version 2.0 - May 2016)*. This plan seeks to inventory and analyze changes in parking necessitated by the construction of the Pulse Bus Rapid Transit project. It also provides recommendations for increasing the efficiency of existing parking.

Public, off-street parking lots and decks were inventoried along Broad Street between I-195 and I-95 and between Clay and Franklin Streets. Where available, the following pages show tables of off-street parking inventory and utilization. Utilization counts were performed during weekdays during the following timeframes: 9 a.m. to 10 a.m., 12 p.m. to 1 p.m., 3 p.m. to 4 p.m., and 6 p.m. to 7 p.m., as well as on Saturday between 1 p.m. and 2 p.m. By using these parking utilization figures, a better understanding of the fluctuation of parking use along the Corridor is provided.

This plan can be found in its entirety at the following link:

[http://www.ridegrtc.com/media/main/GRTC\\_BRT\\_Parking\\_Mitigation\\_Plan\\_Version\\_2.pdf](http://www.ridegrtc.com/media/main/GRTC_BRT_Parking_Mitigation_Plan_Version_2.pdf)

## STAPLES MILL/ANTHEM OFFICES

These aerial images demonstrate the discrepancy in parking utilization at two different times of day. The first shows high utilization of surface parking during the workday, while the second shows virtually empty parking lots on the weekend. This is not uncommon for single-use developments, particular offices that are most activate 9-5, Monday through Friday. However, it should be noted that even during the weekday aerial photography, the parking is not completely occupied, with considerable vacancy in parking lots furthest from the building.

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Furthermore, the Staples Mill Pulse Station (westbound) is situated directly adjacent to the Anthem campus, and the eastbound station is across W. Broad Street and about 400 feet to the southeast. The City of Richmond, Henrico County, and GRTC could work together to increase the efficiency and utilization of these parking lots either through shared parking arrangements, or some type of Park 'N Ride activity that would help support the operation of the Pulse Bus Rapid Transit.

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## WEST AND EAST OF I-195

These images focus on two separate areas of development with significant surface parking, one west of I-195 that is composed of Estes Express Lines to the north and the Foreign Mission Board of the Southern Baptist Convention to the south, and one area to the east that is composed of the Preserve at Scott's Addition and 3600 W. Broad Street. The area to the west of I-195 is mostly office uses, while the area to the east in Scott's Addition is mixed-use with a substantial number of multi-family housing units.

The cluster of office-related uses to the west of I-195 and south of W. Broad Street shows a significant discrepancy in parking

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utilization between the weekday and weekend, while the mostly-residential uses to the east of I-195 and north of W. Broad Street show a more balanced use across time, with slightly more vacancy on the weekday when residents are presumably commuting to jobs.

This situation, particularly the vacancy in parking on the weekends associated with office uses, shows the opportunity for shared parking agreements where office parkers are the primary users during the workday, and residential parkers are the primary users in the evening and on weekends.

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## COMMONWEALTH OF VIRGINIA

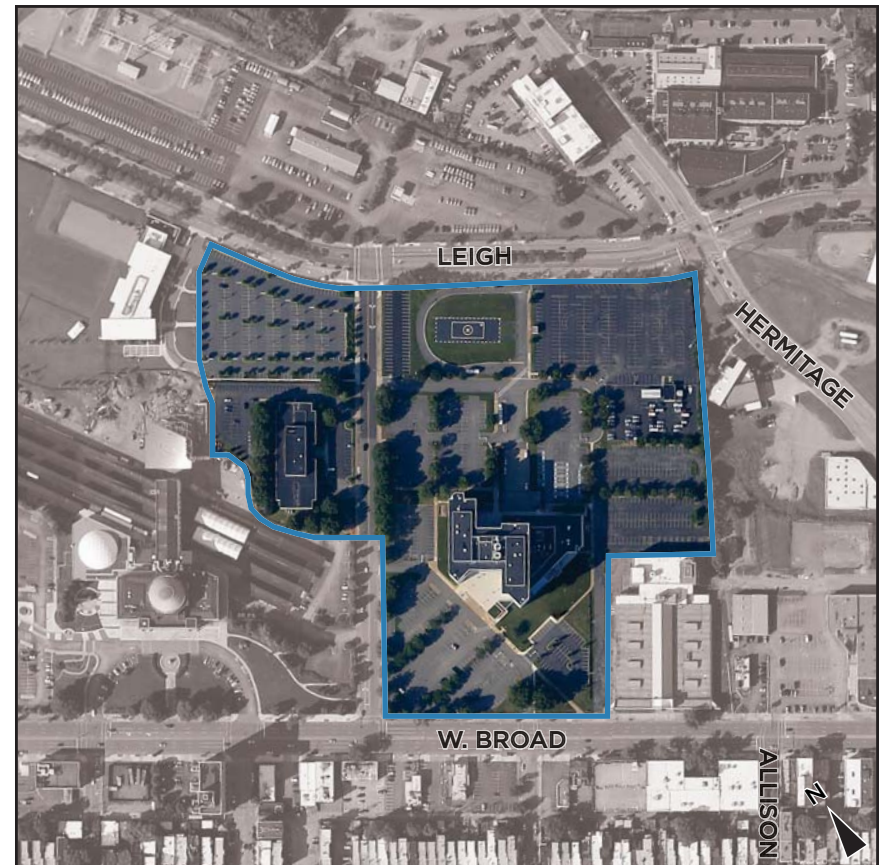
This area is mainly owned and occupied by the Commonwealth of Virginia, specifically the Department of Motor Vehicles and the Workers' Compensation Commission. As is typical with single-use office, the surface parking is almost completely vacant on a Saturday evening as compared to relatively high utilization during the workday.

Opportunities to increase the efficiency of this surface parking could be found with increased development in the general area, specifically the Sauer's landholdings that could seek to either share the existing parking for uses that are in highest parking demand at different hours of the day, or days of the week, or even look to partner with the state on a parking garage or some other arrangement that is beneficial to both parties.

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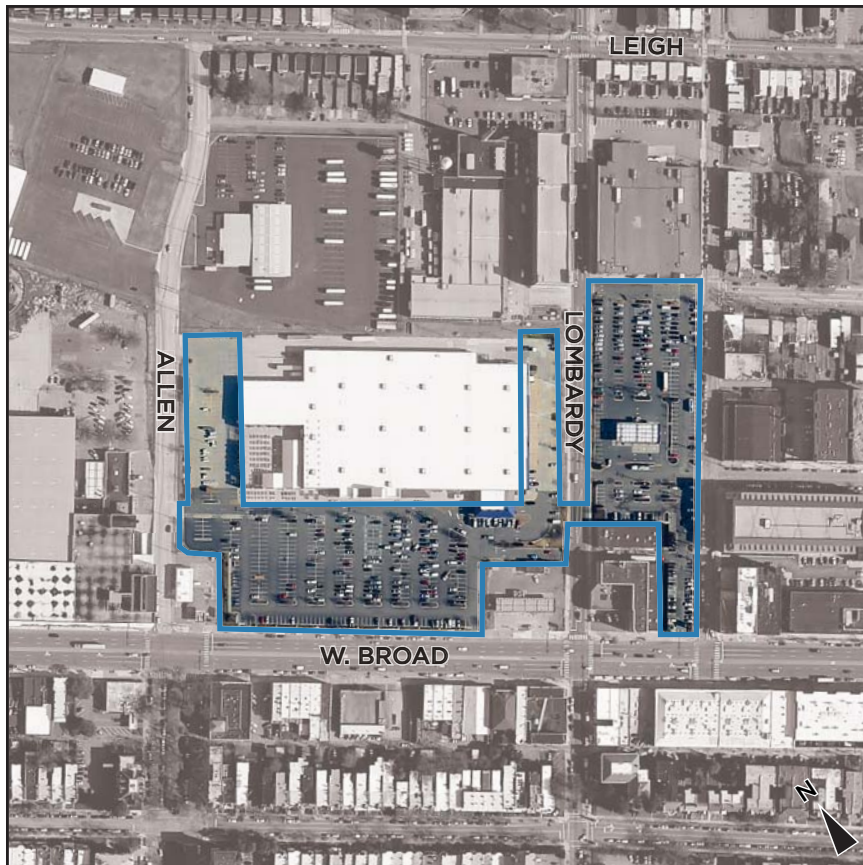
## LOWE'S AND KROGER PARKING LOTS

These images show the parking lots associated with two commercial uses, Lowe's Home Improvement and Kroger grocery store. Being a commercial use, and therefore open on both weekdays and weekends, there is less discrepancy in parking utilization between the weekday and weekend aerial images. The Kroger parking lot, and associated gas filling station, seems to be consistently near capacity, especially in the evening and on weekends.

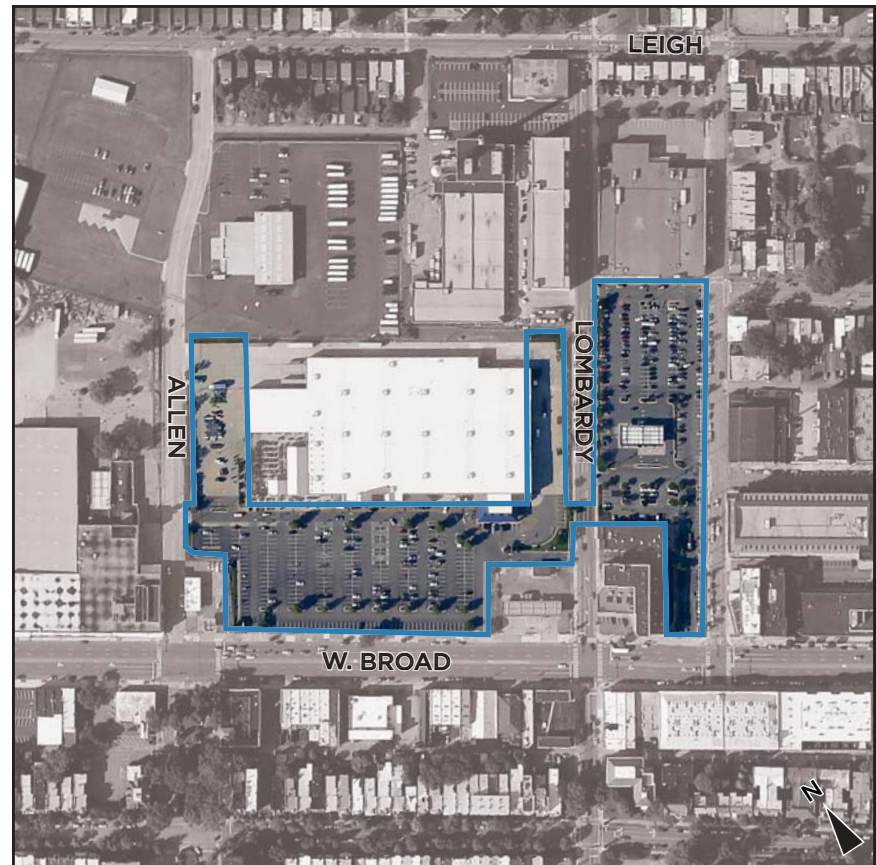
The Lowe's parking lot however may have an abundance of available parking, suggesting there may be opportunities to share its parking

with other uses, or perhaps convert some of the spaces into more productive activity. For instance, this plan recommends restoring the streetwall where missing, and the existing parking lot up to W. Broad Street detracts from the streetscape and urban experience. A new building built along the frontage of Broad Street would help reconstruct the streetwall here and the removed parking could be recouped in the form of a parking deck, or other parking structure, that could be shared between Lowe's, a new building, and other uses as well.

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# WEST OF BELVIDERE STREET

These aerial images identify scattered surface and structured parking owned by the Commonwealth of Virginia and operated by VCU. Judging by the aerials, the lots and decks have moderate usage during the weekday, and much lower utilization during the weekend. This observation is supported by the *GRTC Pulse Parking Mitigation Plan*, whose surveys showed usage mostly in the 75%-89% range during the weekday but less than 25% utilization on the weekend (please see Table 6.1). This demonstrates that there may be the opportunity to share this excess capacity with other uses in the general vicinity.

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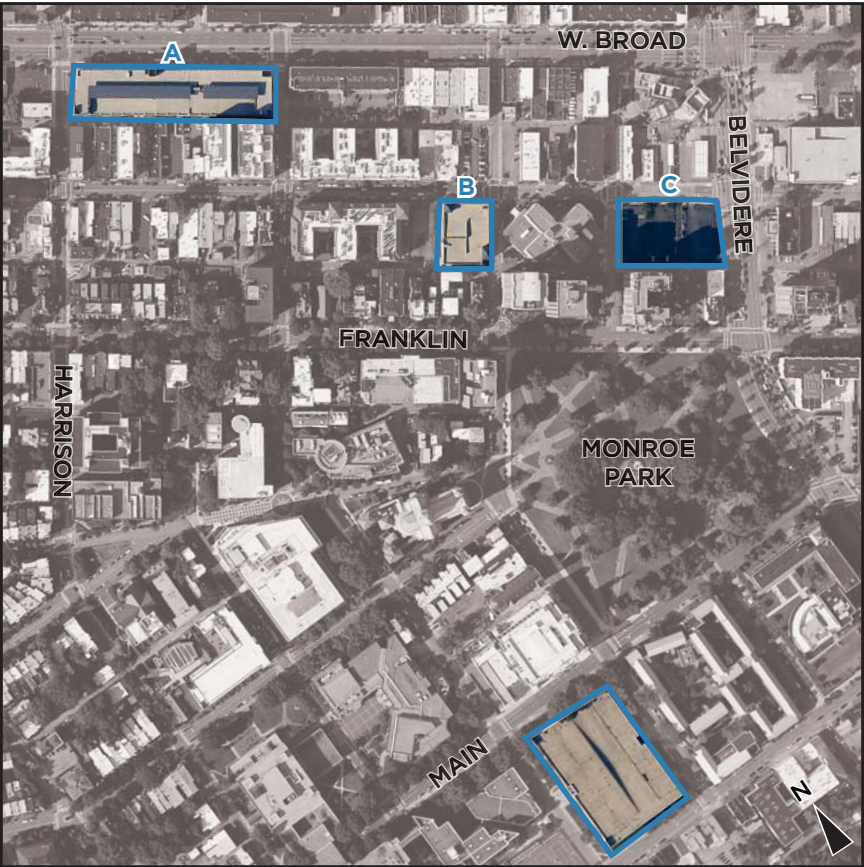


Table 6.1 Off-Street Parking Capacity and Utilization Rates

Lot	Capacity	Weekday 9-10 a.m.	Weekday 12-1 p.m.	Weekday 3-4 p.m.	Weekday 6-7 p.m.	Saturday 1-2 p.m.
A	984	75%-89%	75%-89%	75%-89%	<25%	<25%
B	237	50%-74%	50%-74%	50%-74%	<25%	<25%
C	100	75%-89%	75%-89%	75%-89%	<25%	<25%

Source: GRTC Pulse Parking Mitigation Plan, Version 2.0 - May 2016

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EAST OF BELVIDERE STREET

These aerial images identify scattered surface and structured parking owned by the Commonwealth of Virginia, the City of Richmond, and other entities and mostly used for public and commuter parking. Examining the aerial images show high utilization of the surface lots on the weekdays and weekends, with available parking space on the top level of the parking decks on both weekdays and weekends. These observations are supported by available data from the *GRTC Pulse Parking Mitigation Plan*, which shows moderate usage during the week and less usage during the weekend, with the exception of the parking lots labeled “E” and “G” (please see Table 6.2).

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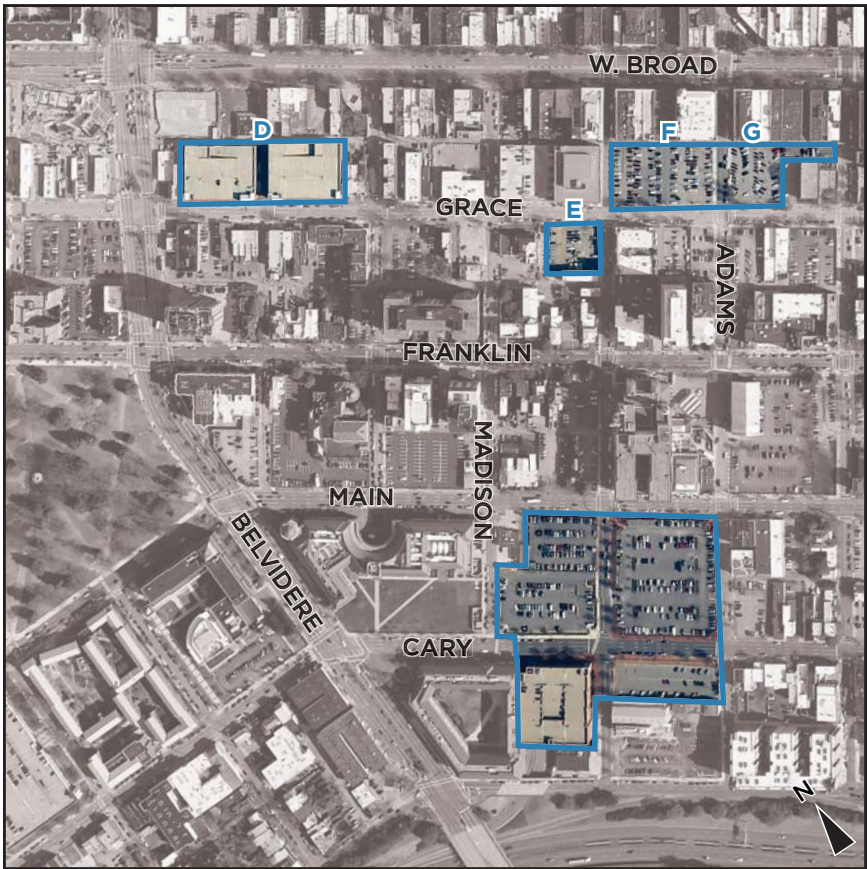
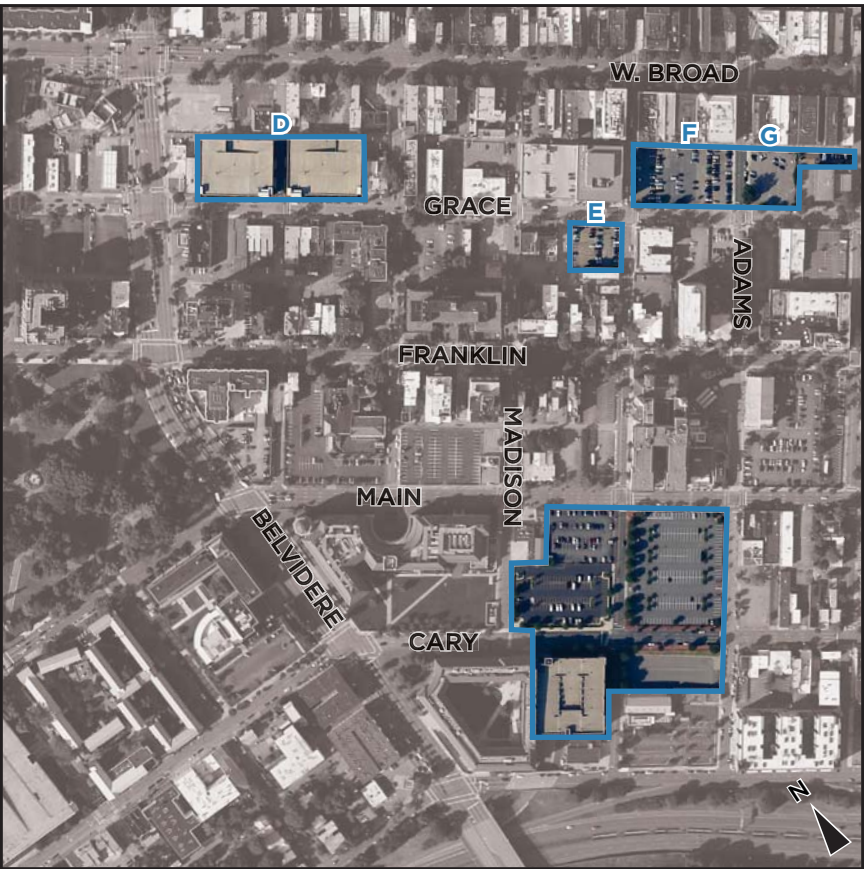


Table 6.2 Off-Street Parking Capacity and Utilization Rates

Lot	Capacity	Weekday 9-10 a.m.	Weekday 12-1 p.m.	Weekday 3-4 p.m.	Weekday 6-7 p.m.	Saturday 1-2 p.m.
D	754	75%-89%	75%-89%	75%-89%	25%-49%	<25%
E	34	>90%	>90%	>90%	>90%	>90%
F	100	50%-74%	25%-49%	25%-49%	<25%	<25%
G	68	>90%	>90%	>90%	>90%	>90%

Source: GRTC Pulse Parking Mitigation Plan, Version 2.0 - May 2016

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# DOWNTOWN

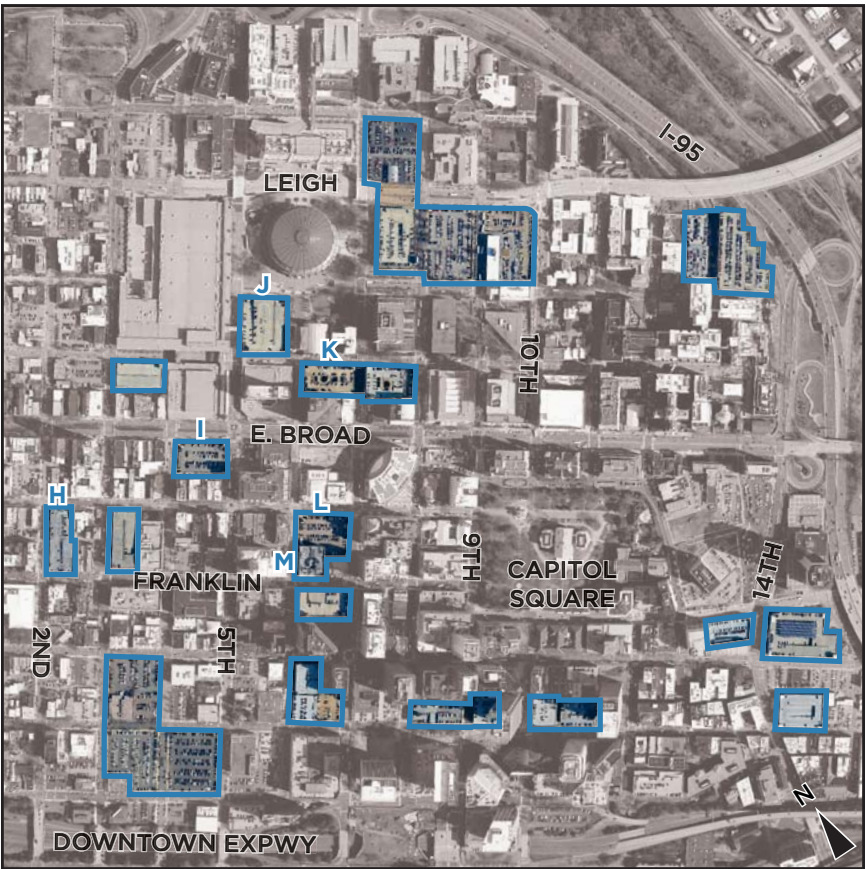
These images identified various scattered surface and structured parking throughout Downtown, many of which are owned and operated by the Commonwealth of Virginia. As is typical with parking associated with office uses, is observed in the aerials, and is supported by available data from the *GRTC Pulse Parking Mitigation Plan*, parking utilization is high during the workday hours, but drops off considerably on nights and weekends (please see Table 6.3). This suggests much opportunity for shared parking, especially as more residents, businesses, and restaurants are locating in the downtown core.

**Table 6.3** Off-Street Parking Capacity and Utilization Rates

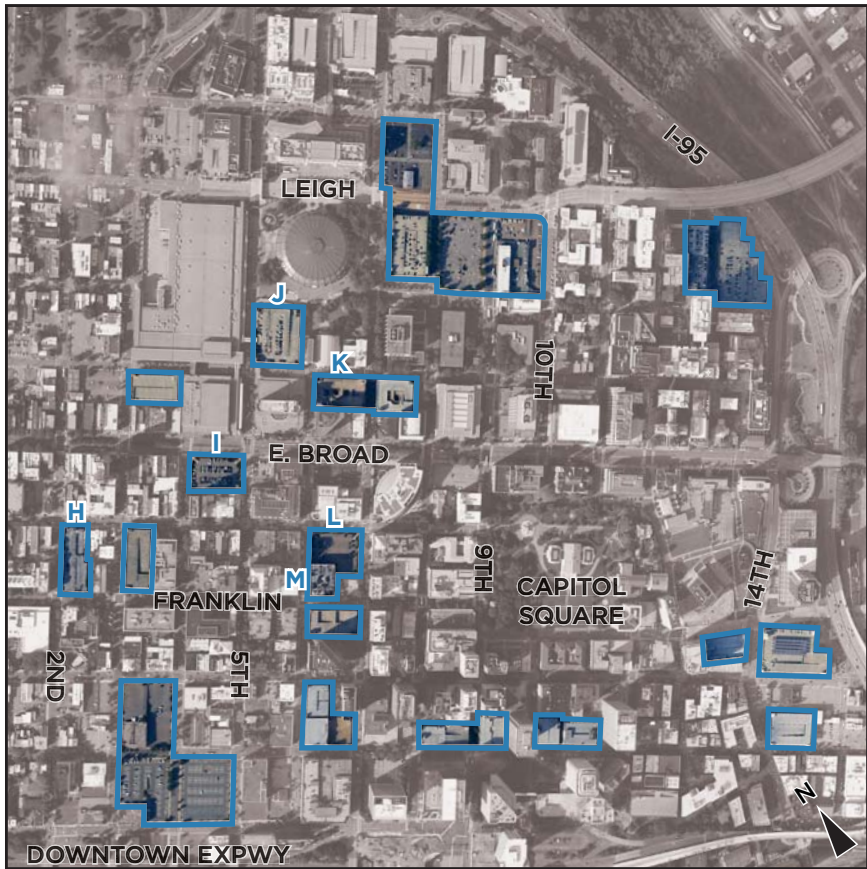
Lot	Capacity	Weekday 9-10 a.m.	Weekday 12-1 p.m.	Weekday 3-4 p.m.	Weekday 6-7 p.m.	Saturday 1-2 p.m.
H	350	50%-74%	50%-74%	25%-49%	25%-49%	<25%
I	117	50%-74%	50%-74%	50%-74%	25%-49%	<25%
J	1,000	25%-49%	25%-49%	25%-49%	<25%	<25%
K	640	75%-89%	75%-89%	50%-74%	<25%	<25%
L	124	50%-74%	50%-74%	50%-74%	<25%	<25%
M	90	25%-49%	<25%	<25%	<25%	<25%

Source: GRTC Pulse Parking Mitigation Plan, Version 2.0 - May 2016

**THURSDAY, 10 AM (FEBRUARY 18, 2016)**



**SATURDAY, 5 PM (JUNE 25, 2016)**





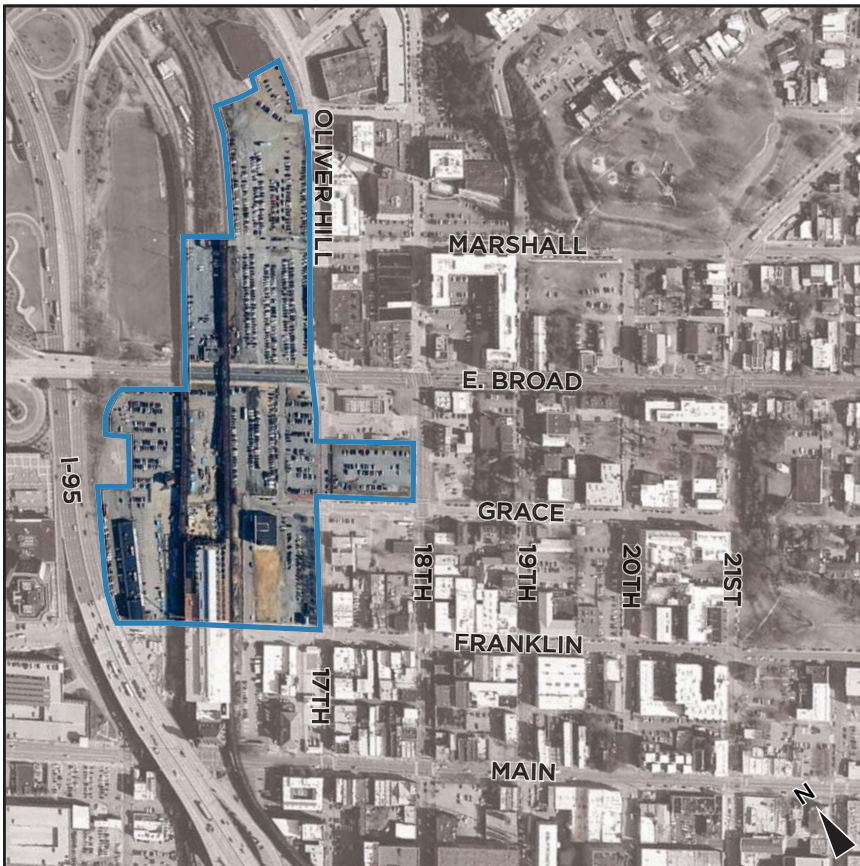
## SHOCKOE BOTTOM

These aerial images focus on the surface parking located in Shockoe Bottom on the north and south sides of E. Broad Street. The majority of these surface parking lots are used as commuter parking for VCU Health or for City of Richmond operations out of Main Street Station. As can be seen in the aerial images, these lots are moderately to very full during the weekday, but almost completely empty on the weekend. This suggests that there is a demand for commuter parking, either provided at this location

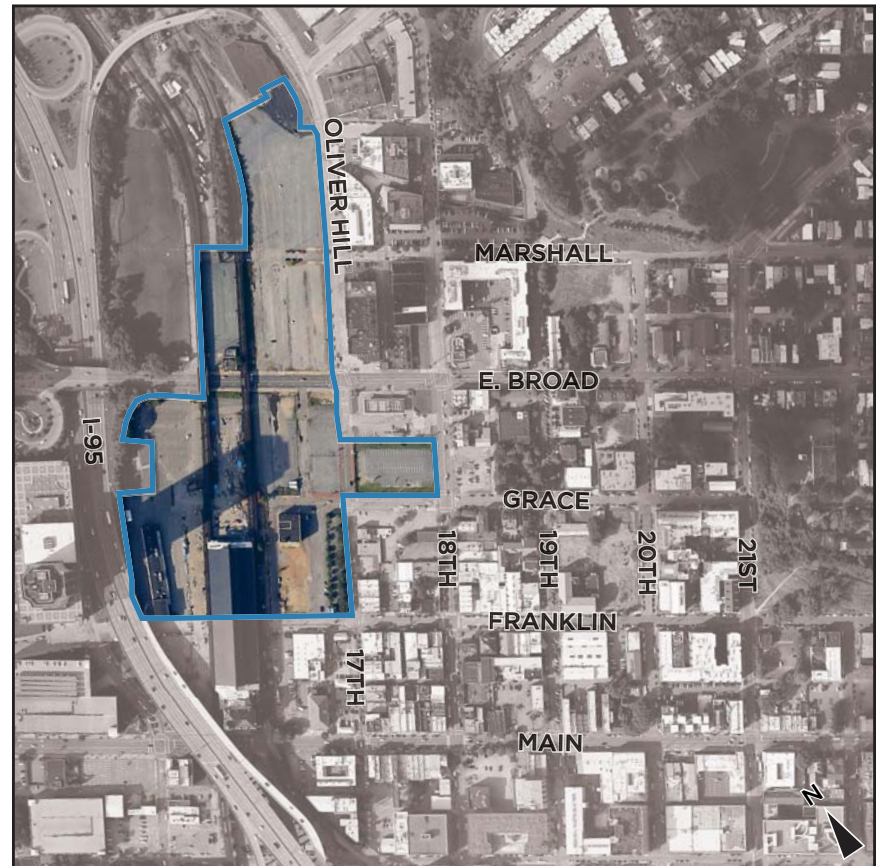
or elsewhere, and that there may be opportunities to share this parking with existing and future uses.

Should this area be redeveloped in the future, structured parking could be used for those new uses as well as commuter parking, public parking, or other parking needs as well.

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## PUBLIC ENGAGEMENT MATERIALS

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### ONLINE SURVEY

Throughout the months spent developing this plan, the City hosted an online survey that asked a number of big picture questions in order to gauge the public's perceptions of the Pulse Corridor and its collective vision for its future. Most questions were open-ended, allowing respondents wide-ranging freedom in answering. Respondents could also opt to be put on a contact list to be e-mailed with future meetings and updates about the plan.

Respondents in general tended to be younger than attendees at public meetings or civic association meetings, and generally had a vision for more growth, including taller buildings, along the Corridor.

What follows is a copy of the questions that were asked.

#### Kick-Off Survey

This survey is being made available to garner input from everyone who lives, works, studies, or is interested in the Broad & E. Main Street Corridor Plan area who was not able to attend the November 19, 2015 kick-off public meeting for the Plan.

1) What is your age range?

- Under 18
- 18-21
- 22-29
- 30-39
- 40-49
- 50-59
- 60-69
- 70+

2) Do you live and/or work/study on Broad St, E Main St, or the neighborhoods near it? (The areas around the BRT route are being studied for connectivity improvements, land use, and economic development)

- Live
- Work
- Live and Work
- Neither
- Not Sure

3) Please pick the 5 most important topics for the study to examine.

- Connectivity
- Neighborhoods
- Streetscape
- Public Space & Parks
- Character of Development
- Affordable Housing & Economic Opportunity

- Gateways
- Housing & Residential Development
- Historic Preservation
- Business & Commercial Development
- Other: \_\_\_\_\_

4) Complete the vision statement: In the next 20 years, this part of the city will be:

5) What's one of your favorite places on the Corridor and the neighborhoods around it? Why?

6) Do you think Broad & E Main St are the most important corridors in the city? What would make it more important to you?

7) Are there intersections that you think particularly need attention from your perspective (As a pedestrian? As a cyclist? As a driver?)

8) How would you describe your experience walking in the Corridor? (Also, biking? Riding transit? Walking?)

9) Where do you currently use parks & open space in the Corridor? How do you use it?

10) What could be better about parks & open space in the Corridor? How would you use it?

11) Where would you like to see more trees in the Corridor? Should they be street trees or more ornamental?

12) Where could public art help add a sense of place in the Corridor and its neighborhood?

13) Where do you take visitors from out-of-town in the Corridor and the neighborhoods around it to show off Richmond? What would make that better?

14) What do you think is important to have near BRT stations? What type of development and what type of services would you like to see when you get off the Pulse BRT?

15) Where should new housing be developed in the Corridor? What should it be like?

16) Where should more office and other commercial uses be developed in the Corridor? Why?

17) Where should more retail be developed in the Corridor? What about restaurants? Bars and music? Why?

18) Where should more manufacturing space, including creative and maker space, be developed in the Corridor? Why?

19) If you were to establish a minimum building height for Broad or E. Main St, what would it be?

20) Would you like to be added to a mailing list for updates about the Broad & E Main St Corridor Plan? If so, please enter your preferred email address here.



## NOVEMBER 19, 2015, VISION STATEMENT

At the public kick-off meeting held at the DMV Offices on November 19, 2015, participants were asked to complete a vision statement for the Corridor. These were then placed on a large board and grouped by category so that everyone could get a sense of the overall vision for the future of the Corridor. What follows is an inventory of these visioning statements grouped by category.

The prompt that was asked to participants stated,  
*"In the future, this part of the city will be:"*

### Neighborhoods

- Mixed-use
- Car optional
- Full of character, URBAN, transit oriented
- Connected by walking and public transportation
- Dense, walkable, connected and with commerce and services and public open space
- Walkable, small business thriving, connected to each other, appreciate each one's history
- Safe, equitable
- Most walkable part of the city
- More dense with more mixed-use to support residents
- Full of character
- Urban
- Transit oriented

### Streetscape

- Walkable
- Walkable and attractive
- Human-scaled
- Nicely landscaped with shade providing trees
- Furnishings, outdoor dining, transparency beyond building faces, urban forest
- Vibrant
- Provide multimodal corridors serving pedestrians (young and old), bikers, (with transit priority systems where feasible), automobiles, truckers

- Provide federal & state routes (as well as other arterial roadways & collector streets) with very effective lighting systems illuminating both sidewalk areas as well as traffic lanes
- Richmond having the lowest motor vehicle crash rate of any cities in America having populations between 200,000 and 350,000 residents
- Accessible sidewalks
- Beautiful, shade canopy trees
- At the Intermediate Terminal Building on Dock Street have three travel lanes, not just two. The middle lanes would operate as a reversible lane by time of day; 2 WB & 1 EB lane in AM peak; 2 EB & 1 WB in the 4-7PM
- Improved
- 1. Walking 2. Bike 3. Transit 4. Auto (In order of priority)
- Furnishings
- Outdoor dining
- Transparency beyond building faces
- Urban forest
- Nicely landscaped with shade-providing trees
- Walkable
- Human-scaled
- Walkable & attractive

### Connectivity

- A flowing center to which all have ease of access due to revamped Public Transit system connecting seamlessly to BRT
- Extended to Short Pump
- Paralleled by other similar routes
- Made obsolete by light rail
- Have reliable & affordable public transit & bikeability
- Will allow for multiple modes of transportation
- Very bike and pedestrian friendly
- Public Transit that service all people for employment needs
- Accessible to everyone regardless of socio-economic status
- Free from automobiles

- Enhanced by paths for walking, biking & busing
- Will have high-speed transit
- Buses & bikes will feed riders from other areas of the city to the BRT
- Best connected part of metro-city
- Pulse is the central transfer
- In need of more parks & public spaces, especially if walking & taking public transit
- Very bike & pedestrian friendly

#### Public Space and Parks

- Pocket parks - frequently
- Small neighborhood parks for increased number of residents
- Active, accessible
- Something for all (kids, adults, seniors)

#### Affordable Housing & Economic Opportunity

- Mixed-use housing - more holistic.
- Form-based code implemented
- Walkable transit-oriented development
- Mixed income - lots of diversity
- Deliberate linkages between affordable housing and economic opportunity
- Essential housing variety
- Provide a variety of housing types and a range of affordable options
- Mixed-use/mixed-income housing
- Inclusive zoning for affordable housing in new multistory housing that borders the public right-of-way

#### Character of Development

- Dense
- Unique to RVA, embracing who we are
- Dense, bigger city
- Create urban spaces
- Eclectic in age, height, density, architecture - as it is now!
- Fast-paced and more people and pedestrians, less cars, more transit
- Lots of people and businesses
- Modern building

- 'All of the above'
- Transit-oriented pedestrian.
- Sidewalks
- Crime free
- Will be magnified by the designs by Richmond architects, who seek to capture the essence of our city's communities
- Fabulous, vibrant, dense, mixed-use/balanced
- Thriving
- An up and coming city with a forward thinking community

#### Business and Commercial Development

- BRT connects hotels & makes the City-wide accommodation district
- Safety and transportation
- Full of commercial development
- The most robust area in the city
- People, restaurants & specialty shops
- Have lots of well-paying jobs that are transit accessible
- Focus on small scale businesses
- Thriving, attracting & retaining creative workers
- Vibrant- the densest business area in the region
- More jobs
- Aging corridors revitalized
- Thriving (easy access for employees and customers)
- Shopping & dining (as well as small minimarts like Trader Joe's or Aldi) to help citizens purchase various food products
- Form-based zoning code
- No required parking for development

#### Housing & Residential Development

- In danger of being unaffordable
- High density, but human scale
- More mixed-use multi-family
- More mixed-income
- Condos
- Live, work, play

#### Parking

- Will need parking hubs for commuters
- Surface parking lots shrink.

- Parking decks not on a street front
- Parking reductions for BRT line zone
- No surface lots
- Decreased
- Minimal
- Less parking than what's available now
- Not as necessary as today
- Less of a concern/anxiety because we have quality regional transit system
- A place where the parking space utilizes car-sharing services
- Shared
- Have metered parking on-street spaces in those areas where traffic volumes are low enough. On those public thoroughfares have 'variable time of day' parking rates whose prices climb when the occupancy rates are very high

#### Historic Preservation

- Save our character, but don't copy
- What we've got is great
- Valued and connected to public education opportunities. Make it relevant to people
- Protect the buildings that contribute meaningfully to the unique historic characters and promote smart, engaging infill/redevelopment in between

#### Gateways

- Highly visible to tourists
- Train and airport connections are critical, prefer Main Street Station
- Upgrade all interchanges on I-95, I-64, I-195 and VA-195 with effective lighting systems and low-lying plants and shrubs to showcase to newcomers major entryways into the city
- Recognizable, welcoming
- Recognizing dense 'new' neighborhoods along the Corridor

## **NOVEMBER 19, 2015, TABLE DISCUSSIONS**

The bulk of time spent at the kick-off meeting held at the DMV Offices on November 19, 2015, was in table discussions, organized by segment of the Corridor. What follows is a summary of some of the comments and ideas expressed by participants. The conversation was relatively open ended, but facilitators used prompts to help steer conversation, such as what attendees like most about the Corridor, liked least, or what future changes they wanted to see.

#### West End (Table 1)

- Zoning has to change in Scott's Addition.
- If we let the market decide future development we will have tall buildings everywhere. Zoning should not allow one tall building next to another (like Arlington VA).
- In terms of height, Arlington VA is a bad example because there are tall buildings everywhere.
- In terms of building character (for Scott's Addition) we would like to continue with the 1970s.
- Approach in terms of how to address corners.
- The majority of the group believes that the character for Scott's Addition should be decided in this plan.
- Most transparency on the front façade of the buildings at Scott's Addition.
- All people at this table agreed that all streets at Scott's Addition should be two ways. However; one-way should persist where the industrial business are located.
- More Bike infrastructure in Scott's Addition.
- Be able to bike on Leigh St. to get into Scott's Addition.
- Clear standards for future building form (on Broad St) such as height, setbacks, openings, etc.
- Give developers the option of creating setbacks to allow outdoor cafes or other active activities at ground level.
- No parking in front of the buildings. Buildings need to be close to the street and have small setbacks to place tables.
- Even storage buildings should have an active use at the ground level.
- Underground utilities on W. Broad St same as E. Broad St.
- Park 'n Ride on Hamilton St near the BRT stop.
- Parking deck on the parking lot of CVS on Willow Lawn.



- A parking deck near the West End station for people who come to work from Short Pump area.
- In general a parking deck near to each BRT station.
- Make the intersection of Hamilton St. and Broad St. more attractive. It needs more code enforcement. This is a gateway.
- New development should include LEED buildings with solar panels on the roof.
- Make sure to have a maintenance plan for proposed public improvements on Broad St.
- Tall trees on Broad St. to provide shade.
- Urban form (vs suburban) for new development on Broad St.
- Opportunity for a small park or green space in the big median on the intersection of Broad and Sheppard Streets.
- Streetscape: Lighting is a priority. Lighting brings businesses.
- Streetscape: trees, improve sidewalks and provide benches.
- Priorities: 1) Lighting 2) Sidewalk 3) Trees.
- Conservation easement to preserve the green space along the railways begin the Science Museum.
- More coordination between City departments during the process of planning.
- Increase pedestrian traffic on W Broad St.
- Broad St. should be a place where people feel comfortable by walking.
- Reduced Parking.
- No height limit in Scott's (taller).
- All the same in Scott's Addition (zoning).
- Light industrial – Mix of uses.
- Allow for new types of industrial uses.
- Two-way streets (especially Leigh/Moore).
- Still facilitate trucks/deliveries.
- Other outlets.
- Form of development: height – let market decide.
- Setbacks – 0 except if public plaza.
- Location of parking/entrances – no parking in front of building.
- Wider sidewalks.
- Active use on ground floor.
- Simplified encroachment process.
- Uniform design for streetscape.
- Lighting.

- CDA treatment along Broad Street.
- Sidewalks.
- Trees.
- Green Space (conservation easements?).
- Different within neighborhoods (more pedestrian scale).
- Parking Deck/Park 'n Ride.
- Façade improvement along Broad Street and the Boulevard.
- More coordination between City departments.
- Highly visible to tourists.
- Train.

#### West End (Table 2)

- Lighting and sidewalks.
- Increased greenery.
- Use code enforcement to beautify.
- Make I-195 bridge a gateway.
- I -195 bridge is currently a barrier.
- Western side of I-195 is unattractive.
- Continuity needed in sidewalks, lighting, streetscape, but should be distinct from Scott's area.
- Art on I-195 bridge.
- Two people wanted no more than two stories. Six people wanted a minimum of three stories.
- Articulated buildings.
- Active uses on first floor.
- Awnings on existing buildings.
- Preserve older buildings.
- Balconies on upper stories (eyes on the street).
- Quick food shops (cafes, not convenience stores).
- Signage to important places (VMFA).
- Ground-level retail.
- Conserve as much industrial in Scott's addition as possible.
- Mixed-use throughout.
- Use the triangular blocks as significant buildings/sites.
- Add a BRT stop at Malvern Ave.
- Allow/encourage underground parking for new developments.
- Shared parking garages.
- Have bridge parks span I-195 to connect both sides.
- Vacant land and deep setbacks are uncomfortable to walk past.

- Good architecture is helpful, but when coupled with bad architecture it doesn't help that much.
- In regard to suburban malls, one person said they would be good for the area west of I-195, all others said it would be bad.
- Architecture can be different, but should be contextual. Can be achieved through building massing and materials.
- Trees alleviate the discomfort of parking lots.
- Articulated buildings are interesting and attractive.
- Historic buildings are interesting.
- Rehabs are interesting.
- Articulation with a single building is not as interesting as articulation with multiple buildings.
- Glass-fronted architecture would make a good riverfront community.
- Deeper set backs are great when they for plaza-like spaces and have tree cover.
- Ground-floor commercial is ideal.
- The William Byrd building is a good height and is broken up by its own architecture.
- The McDonald's near Boulevard is good because it fronts the street.
- The old JC Penney is unpleasant to walk past.
- The new VCU buildings on Broad are non-contextual.

#### VCU/Fan/Museum District (Table 1)

- 40,000 cars per day already in area, there is a concern about adding 20,000 more cars headed west.
- Concern: too much asphalt in the Corridor.
- 100,000 new residents in the Corridor in the next 20 years.
- Concern: already have a bus to and from downtown.
- Once BRT is constructed what effect will result with other existing bus lines.
- Concern: the destruction of Broad St.
- BRT does not stop at the transfer station or grocery stores.
- More people on Broad St, there should be no parking lots on Broad St, infill the parking lots.
- Do not want traffic to leave Broad St and invade the other residential streets and neighborhoods.
- Want baseball diamond on the Boulevard.
- Need bus down the Boulevard (there is no bus which stops at the Greyhound station).
- Stymie businesses on Broad St while construction is underway.
- Need more apartment units for adults (not just geared towards VCU students) as infill development.
- Goal is to share a car with others and use public transportation for balance of travel.
- Gateways: Broad and Belvidere, Broad and Boulevard, Broad and Meadow.
- Concern: left turn from Broad to Lombardy leading to use of Grace, Leigh and Monument.
- Walkability: currently not available, not fun but Harrison to Belvidere is improving.
- Concern: making Broad an expressway, needs greenery, maintenance, need trees for shade.
- Do not want 10-story condos.
- Sears building at Broad and Allen is the worst example – dark and boarded windows.
- Need better human-scale development.
- Don't want contemporary architecture – needs to blend in.
- Neighborhood signage is essential – could have flags up and down the Corridor marking different neighborhoods.
- No behemoths occupying entire blocks.
- Respect the scale of the existing grid.
- Storefronts help walkability.
- Is there funding for improvement of larger buildings like the Sears building?
- Need accommodations for shoppers who want to use BRT to convey purchases (3 block walk to Shafer stop from Kroger).
- Should the neighborhood inquire of Whole Foods what their plan is going to be?
- Cover all of the parking lots along Broad St, 30% of the land in the area is surface parking, need to have infill instead.
- Streetscape softening important.
- Alley development to become passageways or pocket parks, European influence.
- Alleyway utilization – European word is Mews.
- Question: what is being done with post office building? Office for new owner.
- Concern: Big civic project destroying changing neighborhoods.

- Phasing of construction/communication of phasing on news/newspaper/TV.
- Zip car option along Broad St. short-term leasing.
- Can we enhance Broad St. for events/parades/marathons, accommodation of spectators, widening of sidewalks, trees in the tree wells, cleaning and maintenance along Broad St (trash management), more frequent pickups.
- Café seating would enhance the Corridor – zoning issue.
- Create funding mechanism for funding landscape improvements.
- Set landscaping back off the curb.
- Green zelkova trees, fast growing and leafy.
- Who is doing the landscaping – we want to see the landscaping plan early in the process.
- More retail would be good for the Corridor.
- Mixed-use housing is better – wide range of sizes of apartments.
- Bars and music.
- Building height should be minimum 3 stores, ideally between 4 and 5 stories, with some buildings up to 10 stories in certain areas.
- 10 stories in parking lots like DMV.
- Need to develop form-based zoning.
- Current pattern of development with beautiful variety.
- Where would pocket parks do well?
- Find small-scale places for green space, not huge spaces, little corner parks.
- Visitors in the Corridor? Sometimes the Children’s Museum or Science Museum, but generally don’t take visitors in the Corridor.
- Need walkable spaces with trees.
- Public art in the Corridor? Okay but “no weird stuff.”
- No parking lots along the Corridor.
- Get rid of M-1! Get rid of B-3!
- Zoning should permit artisanal manufacturers like furniture makers, glass makers, pottery shops, breweries, metal shops.
- Look at Lombardy for softening of larger uses (meaning Lombardy, just north of Broad has the same problems with large parking lots, etc).
- Connectivity North to South – near East Coast trucking –

could restore the grid? Road through the property?

- Protect the integrity of the neighborhoods and their structure.
- Lighting – sizes layer in Corridor, and smaller into the neighborhoods.

#### VCU/Fan/Museum District (Table 2)

- Cyclists mostly bike around the VCU neighborhood, but not much outside of it, except for Scott’s Addition or the Museum District.
- Cyclists will take Marshall Street for biking west, and Grace Street for biking east.
- Bike lane disappears on Lombardy Street at the Dollar Store.
- Broad and Belvidere feels unsafe for walking and biking. It’s confusing and there is a lot of light running..
- N. Belvidere is very congested at times with all the cars heading to the I-95/I-64 interchange.
- Sidewalks are not in great condition in the western portion of the Corridor.
- When bike lanes end it is “terrifying.”
- Alleys are a bit of a mess.
- People speed down alleys and across the sidewalk into streets.
- Bridge on Boulevard over CSX is scary on bike and on foot.
- Enjoy the Science Museum, Bowtie Cinemas.
- Lack of mix of uses at current storefronts along Broad St.
- Lowe’s is nice to have so nearby, but because of the sea of parking, maybe it could be located elsewhere.
- Enjoy the restaurant and bars.
- Gateways – Hermitage, Boulevard, Lombardy.
- Broad/Boulevard has ugly buildings and too much parking.
- Myers/Boulevard intersection is very awkward.
- Mystery park behind Training Camp?
- Make the Training Camp more accessible to everyone.
- There are currently no good connections from the Museum District to Scott’s Addition. Broad Street acts as a barrier.
- Lack of crosswalks in some areas is problematic.
- Parking lot in front of the DMV is ugly and a waste of prime space.
- Thinking about more restaurants, bars, office, and retail uses right on Broad Street, with residential just off of Broad,



because of noise concerns.

- Street-level shops.
- Residential should be further away, just off of Broad.
- Break up the superblocks and reconnect the grid! (Area bounded by Broad, Hermitage, Leigh, Lombardy).
- More bars/restaurants in the more western portion of the Corridor. Nicer restaurants, not just chain fast food and convenience stores.
- West of Belvidere has a nice streetscape, should carry that through to this portion of the Corridor.
- In Scott's Addition, convert one-ways to two-ways and add more green (i.e., medians).
- Pavers to dress up intersections. Raising them makes it feel safer.
- Roundabout is a plus, great for driving, but less so for bicycling.
- Allow for more bikes on the buses than now.
- Medium height buildings, 4-8 stories. Taller on Broad Street. Some buildings which are taller might be OK if they are interspersed with buildings of medium height.
- More shops and storefronts to tie things together.
- Bike lanes on Hermitage would be great.
- No less than two stories on Broad Street.
- Not Downtown-height here.
- Jackson Ward and Scott's Addition are both interesting places where they take out-of-towners, Libby Hill as well.
- Monroe Park could be better overall. How will the new plans address that?
- Scott's Addition is confusing to get through, some street one-way dead-end into each other.
- Pocket parks could be a great way to provide green space where space is limited.
- Have green space in front of buildings.
- VCU to be contained? "I love VCU and I go there, but I don't want them taking over the whole neighborhood."
- Take advantage of the ICA and have a way of enjoying it. Perhaps the former Hess station could have some outdoor space (plaza/courtyard), or outdoor café where the building can be enjoyed.
- Improved bike connection into Scott's Addition where Leigh

St crosses Boulevard and becomes Moore St,

- Vacant parcel west of the William Byrd Senior Apartments could be greenspace.

#### Downtown

- Favorite places along the Corridor: Grace St (architecture, restaurants), Brook Rd & Adams triangle, Capitol Square, Main Street Station, general Arts District street fabric, Church on E. Duval St, Federal Courthouse & Library of Virginia, Shockoe Slip.
- Least favorite places along the Corridor: Coliseum, dead zone around the Convention Center, bunker Library of Virginia and dead hours, neglect of 1st to 3rd St on Broad St, Parking lots on E. Cary & Canal.
- Unanimously the most important part of the city.
- Like walking in Jackson Ward, on Grace St, Broad St.
- Marshall St is not as much fun to walk on.
- Bad intersections: Broad & Belvidere, 16th & Broad, Gilmer, Canal & 9th.
- Gateways: Broad & Belvidere, Broad out of Bottom, 3rd to 5th, Brook & Adams, 95, Leigh St viaduct.
- City Center uses: hospital, entertainment, proper groceries, effective anchor retail, dwelling units.
- What is the connection from BRT to General Assembly when buildings are under construction (opportunity).
- N. Adams through the Jefferson Hotel.
- Residential over parking areas.
- Corner commercial uses (versus all of ground-floor requirements).
- Identifiable boundaries.
- Integration is desirable (compared to containment).
- Need to go after student rentals in Jackson Ward with bad landlords.
- Public/Open/Green Space includes: Capitol, Abner Clay Park, West side of N. 16th, Kanawha Plaza.
- Tall buildings with a relationship to the street (no closed off corporate HQ).
- Connectivity to green spaces.
- Better code enforcement.
- Architecture Review Board for Monroe Ward (also a vote for

“no.”).

- Building height diversity, relationship to street essential and more important.
- Viewsheds in Monroe Ward, transection.
- Public Safety building as redevelopment site.
- Activate the Armory.
- Richmond Coliseum: Multi-use, too small for entertainment, bus transfer station?
- Coliseum redevelopment does not necessarily need to be as an entertainment center.
- More residential, particularly encouraged in Monroe Ward and near the hospital.
- No closing of existing streets.
- No more garbage on Grace St.
- A skate park would be a neat downtown public space – that’s who is recreating Downtown on weekends.
- Want to reconnect Clay Street, have two way Clay and Marshall Streets.
- Too many institutional buildings and their parking lots like fortresses on 14th St. Need to redevelop. Infuse diversity and mixed uses into the State office areas.
- Move the BRT to Ambler St. to avoid 14th traffic jams.
- Improve landscaping along I-95 through the city.
- Redevelopment of Gilpin is necessary for the residents and for downtown.

#### East End

- Favorite things in this section of the Corridor: Yoga in the park /family-oriented park (Chimborazo Park), Stone Brewing Plant and Beer Garden, Chimborazo Park, Gillie’s Creek Park, Libby Terrace Park, Libby Hill Park – Great UCI Showcase, Adaptive reuse project between 23rd and 24th Streets on Main St, Park space at 24th and Franklin, Main Street Station, Fulton Hill Properties projects (Lava Lofts, new residential development end of E Broad St).
- Development needs to happen just SE of the Pear and Dock intersection.
- There should be a grocery store near Admiral Gravelly Blvd. and Williamsburg Rd.
- There is a need to redevelop the parking lots along

Williamsburg Road between Nicholson and Orleans Streets.

- There is a need for historical markers along Route 5.
- Fulton Gas Works site needs mixed-use development.
- Redevelop (Adaptive Reuse) 3200 Williamsburg Ave (Armitage Building).
- Create/maintain park at land near 31st and Franklin Streets.
- Develop 4-story buildings on plots north and south of Main, either side of 26th street.
- Extremely dangerous pedestrian crossing at 21st and Main Streets.
- Need to infill vacant lots around MSS, develop a master plan with a mix of uses including hotel, residential, historic museums, retail.
- Traffic Congestion on 14th Street (especially during rush hour).
- Need density near end of Orleans St. station.
- There is a need for more sidewalks along Government Road.
- Include Greater Fulton in this plan.
- Daylight/re-naturalize Gillie’s Creek to create a greenway.
- The BRT should expand to Fulton. There should be more transit connections and more bike/ped connections to Fulton (possibly via Nicholson St. and/or Orleans St).
- Restore historic roads between Fulton and Chimborazo, enhance the pedestrian connection between these areas.
- There should be protected bike lanes along Williamsburg Rd.
- Fulton Gas Works site needs mixed-use development, perhaps Medium Density but also needs to preserve views.
- Some would like to preserve some Fulton Works structures, others disagreed.
- Williamsburg Rd could benefit from a road diet especially between Admiral Gravelly Blvd and 31st Street (potentially add protected bike lanes and better pedestrian access).
- There is opportunity to engage with the County near Orleans St.
- Opportunity for a bike/ped ferry from Sugar Pad site to Ancarrow’s?
- Enhance Great Shiplock Park.
- Create another park on the former silos site.
- Retain part of land between Shiplock and former silo site as a future park.

- Invasive Species overgrowth around Chimborazo Park.
- 29th Street Bike Boulevard should have increased connectivity closer to the river and Libby Hill Park and other parts of Church Hill.
- There needs to be general access from North Church Hill to points south towards the river.
- The span of Route 60 between Poe's Pub and where Williamsburg Rd and Main St fork should be considered a Gateway.
- Address at-grade railroad crossing on Williamsburg Rd.
- Restore Navy Yard of the Confederate States pocket park.
- Is there opportunity to develop parking lots between 22nd and Pear between Cary and Dock? Is this preserved or developable? What kind of form would we want?
- What is the status of the development at Pear and Dock? Is there precedence for 5 stories?
- Repair stairs heading north on 27th Street from Main Street.
- 25th and Main Streets should be considered a Gateway.
- Restore area around Richmond Hill along Franklin and 21st Streets, it is currently not cared for.
- Improve connection from Richmond Hill (Grace St. overlook to 21st street).
- Pedestrian oriented design near Jefferson Ave. and M St.
- Consider a Parking Overlay / Exemption along Main St.; Shockoe Slip; and Broad street near MCV.
- Rezone more cohesively, UB-2 in the Bottom.
- Keep the street grid in the Bottom, especially area around 18th and Grace Streets.
- Poor pedestrian environment around Broad Street and Interstate interchanges (don't like proposed pedestrian bridge concept).
- M-1 & B-5 zoning similarities, should be looking at.

## NOVEMBER 16, 2016, TABLE DISCUSSIONS

One year after the initial kick-off meeting, the public was invited to a meeting held at the DMV Offices (as well as one held a day prior at the Powhatan Community Center) to review the draft recommendations and land use and connection maps and provide feedback. What follows is a summary of the discussions held at each table which was arranged by segment of the Corridor.

### West End

- Please give more details about the TOD overlay? There is a need for a Form Base Code/a Design Overlay?
- We need to focus on small nodes first such as Broad and Boulevard. These nodes need to be mixed-use and walkable.
- Create incentives for development at specific nodes.
- How are you going to prioritize streetscape improvements in this area?
- Underground utilities needs to happen in the West End.
- There is a need for a structured parking close to the Cleveland Station.
- We need another BRT Station between the Cleveland and Staples Mills stations.
- Add a recommendation to connect the Amtrak station with the Staples Mills station.
- Reduce parking requirements along the Corridor.
- Please keep the green triangle area on W Broad St. (in front of Scott's Addition) as a public plaza,
- This area needs green public open space.
- We need to retain land for open spaces before the land value increases.
- Have more conversations/discussions with Henrico County to coordinate the future of this part of the Corridor.
- There are currently all kind of materials and colors on the streetscape (sidewalks, driveways). We need to have standards.
- Biking is very important. We need bike plans for this area.
- Make it easy for people to navigate in bike. We need north and south connections.
- Incentivize structured parking or underground parking.
- Connection to Amtrak Station & Staples Mill



#### VCU/Fan/Museum District

- Whole Foods status?
- Zoning concerns on too much height (2800 block to 1600 block of Broad/Grace).
- What would happen with alleys?
- What would happen with surface parking? Would it become housing/new construction?
- Could you widen the alleys?
- No looming buildings.
- Add setbacks/stepbacks.
- Would existing setbacks be increased?
- No walls!
- Would City do streetscaping or waiting for development?
- Would that include Boulevard too?
- Good bones on the Boulevard.
- Incentivize redevelopment - what about other incentives?
- Lombardy, Broad to Interstate, Bike Lanes.
- Buffered Bike Lanes.
- Park Ave. would be a great bike boulevard.
- What would be route from Lombardy/Northside.
- Connect to Grace by Dollar Tree, there is no bike lane.
- Economic development incentives for small businesses.
- Bike support infrastructure (i.e. fill stations).
- 16 second crosswalk time is not sufficient.
- Underground parking.
- Hancock/Harrison - two-way street changes, what would this do to bike lanes?
- Parking vs. travel lanes.
- Grace should be two way, it would lighten traffic on the residential areas.
- Reconfigure some of the parking, i.e., Floyd.
- Further west - How do you connect to the next area? Like close to Libbie, which lane along Broad?
- Leigh Street is a highway currently.
- Street trees.
- Weeds in alleys/sidewalks.
- Multi-use paths for walking by railroad tracks, pathway connection, bike lane Lombardy linkage.
- Missing links filled in.
- One-way conversions.

- Two-way conversion impact on biking?
- Turn lanes have traffic impact on bikes

#### Downtown

- Supportive of greenway idea in Bottom, 8th & 9th cycletrack.
- Getting from downtown to Capital Trail.
- 11th St as pedestrian street - that's where they cross.
- Mural on Convention Center - Broad St Wall.
- Jackson St. E/W for walking.
- Opportunity area - 6th St. Market, sense of place, Blue's Armory, open up 6th St.
- Pedestrian improvements and public art at Broad St. across highway.
- Recommendations on parking access by alleys.
- Demarking difference between neighborhoods along Broad St, not 5 miles of the same.
- Push design excellence in new infill, more design overlay and hope and expect architectural excellence.
- Should all of Broad St. be under review?

## NOVEMBER 16, 2016, COMMENT CARDS

At the end of the follow-up meeting held at the DMV offices on November 16, 2016, participants were asked to leave comment cards asking them how they felt about the plan and its draft recommendations. A space was also provided for participants to leave any comments they had. What follows is a list of those comments.

### I feel...

- Great!
- Excited.
- Encouraged – Like the idea of bike lanes paralleling the rail tracks.
- Very Positive – Recommend possibly different land uses (from institutional) behind Science Museum and put in high standards for new driveways (city-wide!) to protect pedestrians.
- Positive (but hesitant that a lot relies on private development, that's putting a lot of eggs in one basket) – Improve Broad and Boulevard Intersection, need to develop the four corners and need Park Ave. to be a bike boulevard & Need more green space between Boulevard and Harrison.
- Good – Would like: ADU ordinance with strong incentives for developers and perhaps a tax overlay district that certain percentages of revenue goes to schools.
- Excited (a lot of great ideas) – Franklin Street bike path/ lane connecting downtown to East End. Currently it is very difficult to bike to Church Hill/Shockoe Bottom
- Good – Need clear, protected connection for bikes between Franklin St cycle track and Floyd and preserve plan for bike lane on Hermitage between Broad and Brookland Park Blvd. Documents for Boulevard development (Diamond) do not foresee bike lane here. Make it a protected lane and where non-protected bike lane present, calm traffic.
- Good – Please consider expanding the eastern loop to Orleans -> Williamsburg Ave – Station at Admiral Gravelly -> Left on Nicholson -> Main. It would really help connect the neighborhood of Greater Fulton to the BRT. Connecting buses are a start, but not a solution.
- Good – Well thought-out plan. Need more specificity regarding affordable housing. The mixed-use housing opportunities could easily become quite pricey. Look forward to expanded complementary bike plan. Although not related to land use, Pulse needs to move to electric buses as soon as possible and away from CNG.
- Excited.

## CIVIC ASSOCIATION & NEIGHBORHOOD OUTREACH

In addition to hosting city-wide meetings, the Department of Planning and Development Review reached out to civic associations, neighborhood groups, stakeholders, and others to speak about the plan and receive feedback at their regularly scheduled meetings. What follows is a list of meetings that PDR attended and solicited feedback about the plan and the Corridor in general:

- Church Hill Central Civic Association – January 4, 2016
- Monument Avenue Preservation Society – January 12, 2016
- Robinson Street Association – January 26, 2016
- GRACRE Commercial Coffee – January 27, 2016
- Art 180 & Groundwork Green Team – January 29, 2016
- Fan District Association – February 1, 2016
- Scott's Addition Boulevard Association – February 3, 2016
- Bike Walk RVA Northside – February 6, 2016
- Historic Jackson Ward Association – February 16, 2016
- MCV Student Association – February 17, 2016
- Carver Area Civic Improvement League – February 23, 2016
- Museum District Association – March 9, 2016
- VCU Office of Planning & Design – March 29, 2016
- Greater Fulton Neighborhood Association – April 12, 2016
- Downtown Neighborhood Association – April 19, 2016
- Venture Richmond Marketing & Advocacy Committee – June 8, 2016
- ULI & GRACRE Joint Meeting – September 20, 2016
- Scott's Addition Boulevard Association – November 30, 2016
- West Grace Street Association – December 12, 2016
- Museum District Association – December 15, 2016 & March 8, 2017
- West Grace Street Association – January 3, 2017
- Fan District Association – January 4, 2017
- Greater Fulton Civic Association – January 10, 2017
- West Grace Street Association – January 16, 2017
- Historic Jackson Ward Association – January 17, 2017
- Carver Area Civic Improvement League – January 31, 2017
- Church Hill Association – February 21, 2017

## FULTON NEIGHBORHOOD CHARRETTE

As discussed previously in this plan, a four-day planning charrette was conducted in order to develop a TOD land use plan for the area around the Orleans Street Station Area. What follows is a recap of the charrette, provided by Smart Growth America, as well as maps which summarize the final report which were prepared by Van Meter Williams Pollack LLP in conjunction with Smart Growth America. Please refer to the entire report titled, “Richmond, Virginia Transit-Oriented Development Technical Assistance.”



### Richmond-Fulton Urban Design Charrette (May 31 – June 3, 2016)

#### Recap

**Goals for the charrette.** As indicated in the approved scope of work, a major task of the technical assistance assignment is to help the City develop a TOD land use plan for the sector around the coming Orleans Street BRT station. The subject area includes the Rockett's Landing area near the riverfront, the immediately adjacent industrial area, and the Greater Fulton community, which abuts the prospective TOD zone. Elements of the prospective plan may include: Changes to the built environment, involving both the public realm and private development; identification of key urban design elements; proposed location and massing for new development, based on a market assessment to determine the scale of the TOD (which may include recommendations for near-term, mid-term and long-term build-out; and provisions for preservation of housing affordable to low- and moderate-income residents. Other desired elements include a multimodal connectivity assessment to determine the ability to make safe connections to



the BRT station; and determination of a primary area for a potential TOD opportunity within proximity of the Station.

The purpose of the charrette was to engage the public, most particularly the residents of the Fulton community, in the process of devising a plan. Strong public engagement is essential, if a plan is to be successfully implemented. As noted in the scope of work, “Roots of support must be planted deep in the community, not just for the ensuing approval process, but to maintain commitment to a plan over the long time during which transit-related development unfolds. . . . The process must not only foster consensus, but engender excitement, and result in a feeling of ownership in the product by members of the community. It follows that station-area planning must begin with, and fully integrate, community engagement.” For these reasons, the urban design charrette (or “workshop”) was conducted the week of May 31 – June 3.

The input gathered from the engagement will inform the work of the project team over the next couple of months. The final work products will include direct input to the Corridor-wide TOD plan being developed for the City at the Richmond Regional Planning District Commission, as well as a summary report to the City with specific recommendations for actions.

**Structure.** Organizationally, the week-long charrette involved three major components: A consultant team, a core group, and a public group.

The Consultant Team for the urban design charrette included Tim Van Meter and Karen Murray (Van Meter Williams Pollack); Mariia Zimmerman (MZ Strategies); and Chris Zimmerman (SGA). Patrick Jordan (Enterprise Community Partners), who is part of the larger Technical Assistance Team, also joined for one day.

[Note: The urban design charrette is one component of the larger task to assist in the development of a plan for the Orleans station sector. In addition, the scope of work includes a task to provide a market assessment analysis across the BRT corridor. The consultant team for the charrette is a subset of the larger technical assistance team. The latter includes Michael Rodriguez and Alex Hutchinson (SGA) and Chris Leinberger (LOCUS/GWU).]

The Core Group included: Planning Director Mark A. Olinger and planning staff members Maritza Pechin and Kathleen Onufer; Amy Inman from the Office of Economic and Community Development; from Public Works, City Transportation Engineer Mike Sawyer and M Khara; Jane Ferrara of Economic Development; Garland Williams of the transit agency (GRTC); from the Richmond Regional Planning District Commission, Director Barbara Jacocks and staff members Josh Mallow and Will Sanford; Daniel Hutchinson of RRHA; Ben Stehl and Rosemary Deemer, representing Henrico County; Juliellen Sarver, a community resident and representative of Stone Brewing; Cheryl Groce-Wright, director of the Fulton Neighborhood Resource Center; and the members of the consultant team.

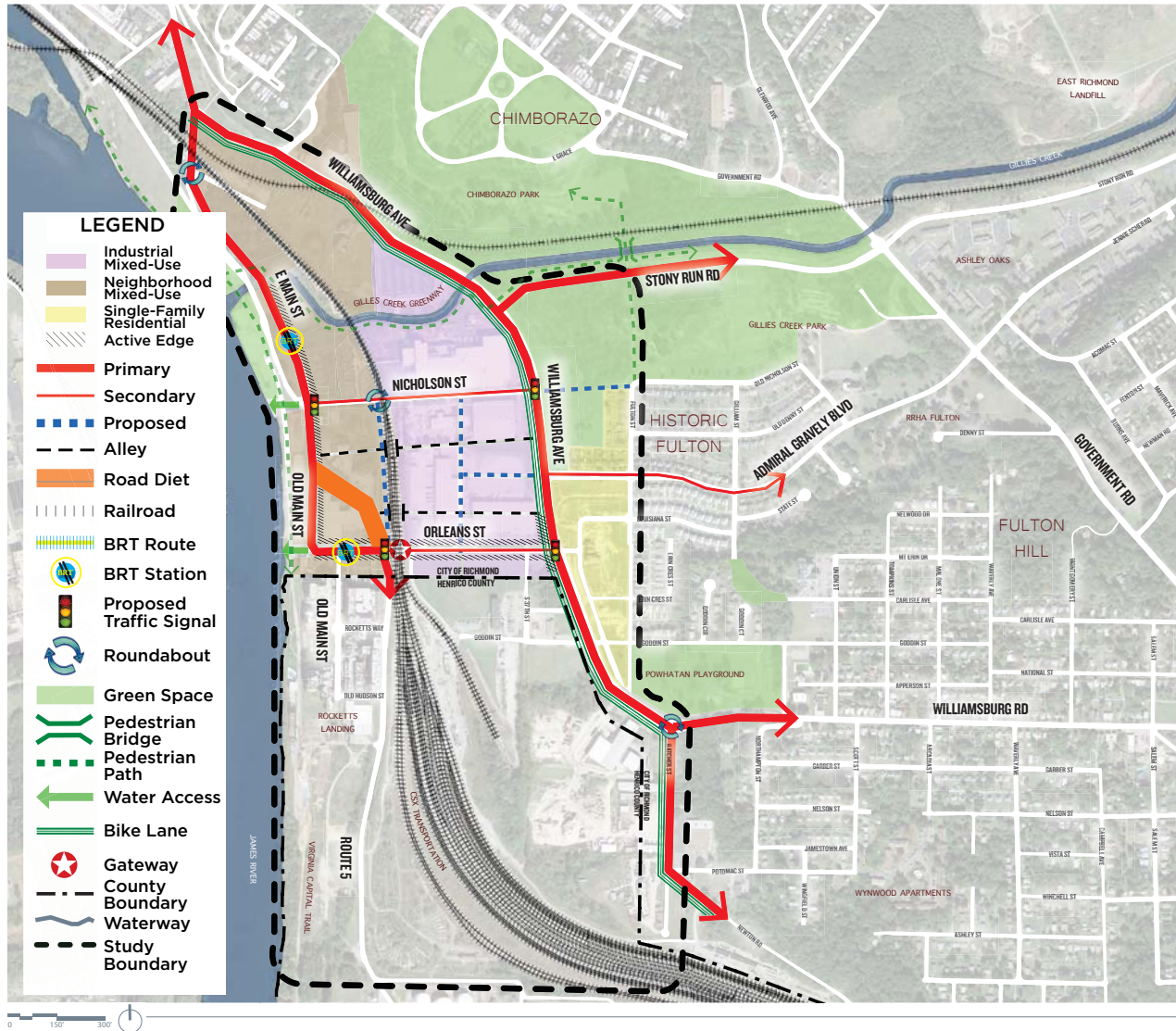
Each of the four days (Tuesday through Friday) began with a meeting of the Core Group (with 13 to 17 members participating each day); Tuesday through Thursday ended with a meeting with the public. In between the project team made site tours, conferred with staff, and conducted work in studio. Daytime meetings and work were conducted in space at Fulton Studios; evening meetings with the public were held at the Powhatan Community Center in Fulton (known to residents as “the Hut”).

**Public sessions.** About 30 – 40 people participated each of the three evenings in the public portion of the charrette. Some came for one or two sessions, but quite a few returned each night, so there was considerable continuity throughout the process. This included residents of the three Fulton neighborhoods and the Richmond City Council Member for the area, Dr. Cynthia Newbille. Overall, about 60 unique individuals participated over the course of the week.

The first evening was devoted to listening, with community members participating in general discussion followed by small table breakouts. At individual tables members engaged in a facilitated discussion, referring to maps of the area (sample attached), and considered the challenges and opportunities presented by the coming of BRT. Finally, the whole group reconvened, and a community spokesperson for each table (chosen by the table) reported on the discussion and consensus items.

Together with the input gathered earlier in the day at the initial Core Group meeting and from the site visits, and following the “core guiding principles” culled from the discussions, the consultant team developed some initial design concepts for TOD in the Orleans Station area and connectivity improvements for Fulton. These were presented at the Day 2 session Wednesday evening. Again in small table discussions participants had the opportunity to examine and critique the draft concepts. These were reviewed with the Core Group Thursday morning. For the balance of Day 3, the consultant team refined the concepts to create a preliminary draft plan, which was presented at the final evening session.

After a slide presentation, community members asked questions and provided comments. Toward the end of the evening, the group was asked if the plan seemed to be generally headed in the right direction; those assembled responded with an indication of assent.



## ORLEANS BRT STATION AREA PLAN | COMBINED MAP

RICHMOND, VIRGINIA | 12/19/2016 | #1530



Complete Streets



GTRC Bus Route



Road Diet



Roundabout



Pedestrian Path



Gateway



Local Streets



Passage/Lane/Alley



Traffic Signal



Active Edges



Active Park



Green Fingers



**VAN METER  
WILLIAMS  
POLLACK**





#### All streets:

- Shall be public ROWs
- Follow NACTOs complete streets guidelines to ensure all modes and constraints are considered in ROW design.
- Construct sidewalks that are a minimum of 5'-0" wide

#### Tertiary streets:

- Connect Old Nicholson St. across Williamsburg Ave. to Nicholson St.
- Connect Admiral Gravelly Blvd. across Williamsburg Ave. into the redevelopment area, terminating into a T intersection with a new mid-block north/south street that connects to Orleans St. and Nicholson St.
- Connect Hwy. 5 to Nicholson St. road diet for the E. Main St. diagonal
- Connect across Orleans St. to the north/south new street north of Orleans St. Extend Goddin Street to the new north/south street. Extend 37th Street to the south from Orleans St. Extend Potomac St. to 37th St. Bend the north/south new street to connect to 37th St. and Potomac St.
- Connect Old Main St. south of Rocketts Landing another 2 blocks and connect to Hwy 5 at each block
- Connect Northampton St. through site to Carlisle Ave.

#### Alleys:

- Connect the existing CSX elevated tracks/tunnels through the site to the east to the new mid-block north/south street, and on through to Williamsburg Ave. These lanes can be service lanes, parking access lanes, pedestrian lanes or fire lanes of no more than 30' ROW.
- Create mid-block lanes as required for service, fire and parking access.

#### Road Diet:

- Reduce flow line down to 36' [2-12' lanes and 2-8' on street parking] in concert with the new Hwy 5/ Nicholson St. connection. Add sidewalks on both sides.

#### Traffic Signal:

- Add Traffic signals at Williamsburg and Admiral Gravelly, Williamsburg and Orleans St and the intersection of the new north south road just west of the rail lines and Orleans St.

#### Roundabout:

- Add traffic circle at Williamsburg Ave. and Hatcher St. intersection, E. Main St. and Ash St., and Nicholson St. and new proposed street.

## ORLEANS BRT STATION AREA PLAN | ROAD NETWORK

RICHMOND, VIRGINIA | 10/17/2016 | #1530





## ORLEANS BRT STATION AREA PLAN | PATHS AND BIKE ROUTES

RICHMOND, VIRGINIA | 10/17/2016 | #1530



### Pedestrian Paths:

- Connect top of hill at Union St./Mt. Erin Dr. to Admiral Gravelly Blvd.
- Connect top of hill at Tompkins St./Nelwood Dr. to Admiral Gravelly Blvd.
- Connect bottom of hill at Fulton St./Old Nicholson St. across Gillies Creek Park, with a safe pedestrian mid-block crossing at Stony Run Road, with a bridge across Gillies Creek, with a crossing of the single track railroad, up to Chimborazo Park

### Water Access:

- Place a publicly accessible green space leading to the Virginia Capitol Trails at the T intersections with Old Main St.

### Bike Lane:

- Bike lane along Williamsburg Ave.







## ORLEANS BRT STATION AREA PLAN | FUTURE LAND USE

RICHMOND, VIRGINIA | 10/17/2016 | #1530



Adopt a future land use plan that fosters a mixed-use walkable urban development that connects residents and workers to the BRT and the riverfront. Allow building heights that provide river views over the elevated railroad tracks. Develop the area between the James River and the elevated railroad as Nodal Mixed Use, allowing for mixed-used, dense urban development with pedestrian-oriented street frontages. Remediate and reposition Fulton Gas Works and Sugar Bottom into a Nodal Mixed Use area. Designate the area between the elevated railroad and Williamsburg as Industrial Mixed Use to allow for maker spaces and small scale industrial uses mixed with residential and office uses. Require commercial first floor uses along Main Street and Orleans Street. Designate the entire area as an Opportunity Site, signaling that this portion of the Pulse Corridor is particularly under-utilized and poised for redevelopment. Maintain Gillies Creek Park and Chimborazo Park as public open space. Redevelop the Sugar Pad and the Lehigh Silos site as public open space. Maintain single family residential uses on the east side of Williamsburg Avenue. (See the full land use descriptions in the Land Use Categories section of the Pulse Corridor Plan.)

