

RICHMOND HIGHWAY TRANSIT BOULEVARD STREETSCAPE & FRONTAGE

- 5A Richmond Highway Streetscape Zones
- 5B CBC Building Zone, Planting Zone, and Building Frontages
- 5C Suburban Neighborhood Areas
- 5D Hardscape and Furnishings
- **5E** Transit and Intersection Plazas
- 5F North Kings Highway Streetscape

The Richmond Highway Transit Boulevard serves as the "ribbon" that ties together the Richmond Highway area. It links the distinct Community Business Centers (CBCs) to each other while also fostering a visual and physical cohesiveness of its own. As the area's only Transit Boulevard, the cross-section (see *Graphic 27*) is unique from other streets. Strategies are provided for addressing the Richmond Highway Transit Boulevard design in a cohesive manner while responding to the range of conditions in land use and built form that exist in the Richmond Highway area.

This chapter emphasizes conditions along the Richmond Highway Transit Boulevard within the CBCs, as well as frontage and setback design along the Suburban Neighborhood Area (SNA) portions of Richmond Highway.

The cross-section of Richmond Highway Transit Boulevard



A streetscape along a suburban roadway that incorporates distinct

RIGHT

zones for pedestrian travel and plantings Image Credit: Rhodeside & Harwell

> REFERENCE FOR STREETSCAPE DESIGN Volume I Urban Design Guidelines (Chapter 2 - Street and Streetscape Design)

includes the following elements:

A. Roadway and Median (within the Right-of-Way):

The roadway and median are devoted to moving all motorized vehicles. They include the following zones:

- Median: Dedicated lanes for BRT in the center of the roadway. The median also includes buffer areas for the BRT stations, turn lanes, and trees/landscaping. The median includes a 1-foot shy distance separating it from the abutting drive lane.
- Drive Lanes: Routes for all motorized vehicles except BRT (in limited instances BRT may utilize drive lanes).

B. Public Streetscape (within the Right-of-Way)

As the primary area for pedestrian and bicycle travel, the portion of the public streetscape within the right-of-way includes four distinct zones that are consistent on both sides of the Transit Boulevard:

- Landscape Panel: An area reserved for street trees and understory planting. Along Richmond Highway, it serves as a green buffer separating the Transit Boulevard's drive lanes from its more pedestrian- and bicycle-oriented areas. There is no Amenity Zone in the Landscape Panel.
- Bi-Directional Cycle Track: A dedicated route for two-way bicycle travel.
- Buffer Strip: A hardscaped or vegetated area that delineates pedestrian areas from bicycle areas and provides space for utilities.
- Sidewalk: The primary area of pedestrian travel. A small maintenance buffer adjacent to the sidewalk allows VDOT access to perform work, when necessary.

C. Publicly Accessible Private Realm Streetscape (Outside the Right-of-Way)

Comprising the area between the sidewalk and the building façade, the publicly accessible private realm includes the following components:

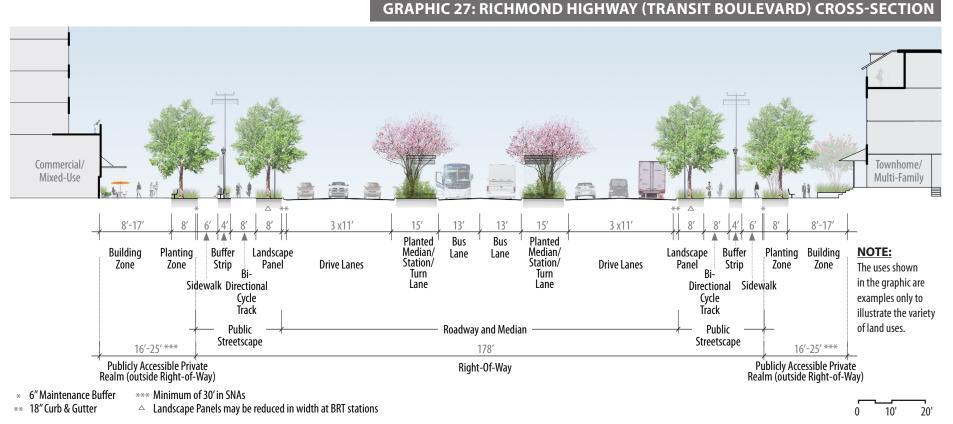
- Planting Zone: A streetscape area reserved for trees and other landscaping, and may also include bioretention facilities and seating. The width of the Planting Zone varies along Richmond Highway and is widest in the SNAs.
- Building Zone: The area between the Planting Zone and building face. This zone accommodates continuous pedestrian circulation and may also include elements such as commercial and residential entrances, outdoor seating areas,

bike racks, signage, and space for browsing or displaying merchandise outdoors, or additional landscaping. The width and design of the Building Zone will vary depending on the location and building use.

D. Transit & Intersection Plazas

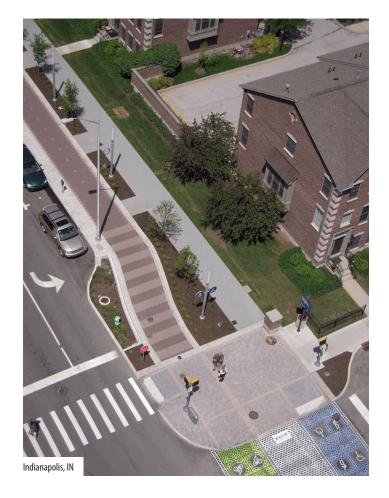
The Richmond Highway Transit Boulevard includes two types of plazas:

 Intersection Plazas: Plazas located at signalized intersections within the right-of-way. These areas accommodate pedestrian and bicycle circulation as well as amenities such as bus stops, bike racks, bike share stations, and wayfinding signage.



 Transit Plazas: Special plazas located at street corners outside the right-of-way and adjacent to BRT stations that provide gathering space and a range of amenities for transit riders and the public. These plazas are formed by the chamfered corners of buildings and are located within private property.

Graphic 33 shows the prototypical location and boundaries of both Transit Plazas and Intersection Plazas.



DESIGN PRINCIPLES

The design of the Richmond Highway Transit Boulevard should serve as the "ribbon" that ties together and unifies distinct CBCs and SNAs. Richmond Highway should incorporate consistent design elements to visually tie the corridor's sub-areas together. Meanwhile, other design elements should be used to distinguish individual CBCs and SNAs from each other.

Building frontages along Richmond Highway should foster active streetscape environments and emphasize Richmond Highway as the "front door" for activity. To support an active streetscape and Building Zone, buildings should incorporate urban design strategies to bring people to the fronts of buildings. While some developments may also include building entrances on other major streets such as Livability Spines, buildings should always have their primary pedestrian entrances on Richmond Highway. The Richmond Highway façade should not be perceived as the rear of the building.

Within SNAs, Richmond Highway should be characterized by a wider and greener feel by incorporating an expanded buffer. To respond to the lower density and intensity of land uses within SNAs, developments are encouraged to have a larger, green buffer in the building frontage area of the Richmond Highway Transit Boulevard. This buffers land uses from the BRT and vehicular traffics, and accommodates a more heavily-planted environment.

At BRT stations, Transit Plazas and Intersection Plazas are distinctive public gathering spaces that highlight the station areas. These plazas act as entrances to the CBCs, highlight station areas, and provide a sense of arrival, while also signaling a transition to a more pedestrian-oriented experience. The experience should consider the complete station area, including the median platform and the entire intersection for transit riders and other pedestrians.

RIGHT

An Intersection Plaza with paving variations that distinguish areas where bicyclists and pedestrians mix Image Credit: Indianapolis Cultural Trail

DESIGN STRATEGIES

1 LANDSCAPE PANEL

- A. The Landscape Panel should include a mix of trees and understory plantings that create a continuous vegetated appearance along the roadway, thereby creating a green corridor that serves multiple ecological functions.
- B. The planting of trees along Richmond Highway should follow the guidance for tree planting and species selection in Section 3A.4. Tree canopies should be pruned at a sufficient height, typically 14-feet, to accommodate buses and other large vehicles passing beneath tree branches.
- C. Given the volume of traffic on Richmond Highway, larger understory plantings, such as ornamental grasses, should be incorporated as a buffer between bicyclists on the cycle track and passing vehicles. Proper care and maintenance is needed to ensure that these plantings do not infringe on or obstruct the cycle track.
- D. Turf grass should be avoided, where possible.

2 BUFFER STRIP

A. The ground surface within the buffer strip may include either paving or planted ground cover. If vegetated, it should have frequent paved crossings for bikes to access adjacent building entrances. Paved areas should utilize precast concrete pavers. See *Table 1* in Chapter 3 for material specifications.

- B. Furnishings and planters should be integrated into the buffer strip to delineate bicycle and pedestrian areas.
- C. Paved intermittent breaks should be incorporated into the buffer strip to enable bicycles to cross easily into the sidewalk and Building Zone areas.

5A RICHMOND HIGHWAY STREETSCAPE ZONES

8'-17' 2 8 Planting Zone¹⁷ Sidewalk ¹ Buffer¹ Bi-Directional **Building Zone** Landscape Drive Lanes Strip Cycle Track Panel 16'-25' *** Publicly Accessible Private Realm Public Streetscape Zone (outside Right-of-Way) 6" Maintenance Buffer *** 30' (minimum) in SNAs △ Landscape Panels may be reduced in width at BRT stations ** 18" Curb & Gutter 10'

GRAPHIC 28: RICHMOND HIGHWAY STREETSCAPE ZONES

5B CBC BUILDING ZONE, PLANTING ZONE, AND BUILDING FRONTAGES

DESIGN STRATEGIES

1 PLANTING ZONE - GENERAL CRITERIA

- A. Trees and landscaping should be the primary functions of the Planting Zone. As illustrated in *Graphics 29 and 30*, landscape features - including plantings and ornamental trees - should be integrated in creative ways that enable these facilities to serve as streetscape amenities and contribute to Richmond Highway's visual appeal. Wherever possible, bioretention plantings and seating should be incorporated into Planting Zones.
- B. Breaks in Planting Zone plantings should be incorporated at intervals along each block to provide connections from the Building Zone to the sidewalk and cycle track.
 - i. At least one, but not more than four, breaks in the Planting Zone should occur along the length of each block.
 - ii. These breaks may be either at-grade paved connections through the Planting Zone or bridged connections over bioretention areas.
- C. Plantings should be located so that they do not encroach on the sidewalk or impede pedestrian travel within the Building Zone.
- D. Planting areas should be linked below ground.
 - i. Create continuous ribbons of soil and rooting areas along all frontages.
 - ii. Suspended pavements and structural cells below sidewalks and other hardscape surfaces are encouraged to preserve uncompacted rooting space, create greater rooting areas, and enhance the viability of the plantings.

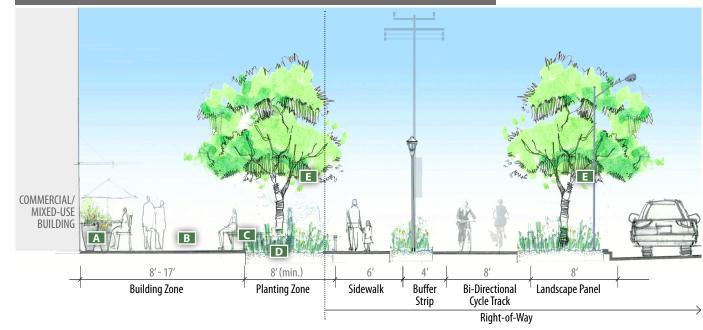
2 CBC BUILDING & PLANTING ZONES - COMMERCIAL

- A. The Building Zone should include a 6-foot-minimum, continuous, and unimpeded walkway.
- B. At least 60% of each ground floor building frontage should be transparent to provide views into interior spaces.
- C. Non-transparent walls along ground-floor building frontages should incorporate architectural elements, murals or other artistic elements. These may include contextual content pertaining to the surrounding area, its community, and its history.
- D. The Building Zone should incorporate elements to generate street activity and pedestrian traffic. Potential elements include outdoor seating oriented toward the streetscape, displays, kiosks, and related elements.
- E. Planters may be incorporated to demarcate and enhance outdoor dining spaces and storefronts. Larger strips of plantings may be incorporated along the fronts of free-standing commercial buildings (see *Graphic 29*).
- F. In limited instances where there may be a small amount of offstreet surface parking or portions of drive lanes, these autooriented areas should be shielded from view. Both plantings and structural elements should be used to visually screen these areas from the pedestrian environment, as follows:
 - i. A row of trees and understory landscaping should be provided between the sidewalk and parked vehicles.
 - ii. Structural elements should include screens, berms, raised bed/planters, high-quality fences, or low walls no greater than 4-feet in height.

SURFACE PARKING REFERENCE

Volume I Urban Design Guidelines (Section 5A.3)

GRAPHIC 29: CBC BUILDING ZONE ALONG COMMERCIAL USES



KEY

- A Planters, displays and outdoor dining along building frontage
- B Building Zone walkway
- C Seating integrated with Planting Zone
- Planting Zone: Trees with understory landscaping with pedestrian connections between sidewalk and Building Zone. This Zone can be used as bioretention to capture and treat on-site stormwater, if feasible
- Trees with maintained canopy to provide visibility to retail/commercial storefronts from sidewalk and roadway

NOTE:

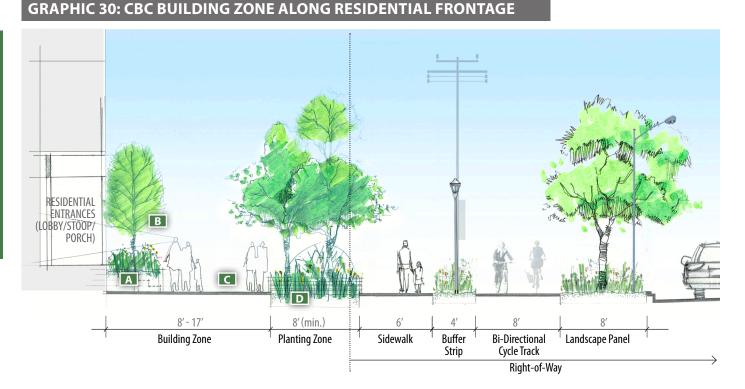
Landscape Panels may be reduced in width at BRT stations



LEFT

Outdoor seating, walkway and Planting Zone along streetscape Image Credit: Rhodeside & Harwell

RIGHT Planting, walkways, and connections to mixed-use building entrances Image Credit: Ontario Growth Secretariat, Ministry of Municipal Affairs



3 CBC BUILDING & PLANTING ZONES - RESIDENTIAL

- A. A landscaped area should be included between the building face and the walkway within the Building Zone. Plantings may include low-height planters or at-grade plantings demarcated by high-quality architectural treatments. Ornamental trees and shrubs may be utilized to provide privacy for ground-floor residences (see *Graphic 30*).
 - i. The Building Zone may include a walkway, a planted buffer, or both. Planted buffers can be designed as front yards for residential unit with frequent pedestrian connections between the sidewalk and building entrances.
 - ii. If the minimal amount of Building Zone is provided (8-feet), then the entire area should be planted and pedestrian connections to residential units should be provided from the right-of-way sidewalk.

KEY

- Low height walls (4-feet or less), architectural screens, shrubs and ornamental trees provide privacy to ground level residential uses while maintaining visibility of porches/stoops/etc. from pedestrians
- Ornamental trees feature shade and privacy for residential ground floor uses
- C Building Zone walkway (or planted buffer).
- Planting Zone: Trees with understory landscaping with frequent pedestrian connections between the sidewalk and the Building Zone. This Zone can be used as bioretention to capture and treat on-site stormwater, if feasible

NOTE:

Landscape Panels may be reduced in width at BRT stations

DESIGN STRATEGIES (CONTINUED)

4 FRONT ENTRANCES

- A. Buildings along Richmond Highway should have their primary entrances oriented toward Richmond Highway.
- B. Where rear parking areas are provided, pedestrians should be directed to front entrances via paved pedestrian pathways connecting rear parking areas to primary building entrances on Richmond Highway.
 - i. Pathways should be landscaped on both sides to make these routes welcoming and comfortable for pedestrians.
 - ii. Adequate pedestrian-scale lighting should be incorporated to ensure safety and security at night.
 - iii. Public art, including murals, is encouraged along the sides of buildings facing pedestrian pathways, in order to enliven these spaces and make them welcoming to pedestrians.
- C. Service access should be provided to the rear and/or side of buildings via alleys, neighborhood streetscapes, off-street parking areas, and/or parking garages.

5 BUSINESS SIGNAGE

- A. Signage should be incorporated into building architecture, rather than be free-standing.
- B. If free-standing, signage should be ground-mounted; pylon or post signs should not be used.
- C. Signage should cater to both pedestrian and vehicular traffic, while striking a balance in scale between the two.
 - i. The height of signage should be limited to 16-feet to the top of the sign structure.
 - ii. Pedestrian blade signs should be incorporated so that they are visible from sidewalk areas in the Building Zone.
 - iii. Given the distance between building frontages and vehicular travel lanes, signs should incorporate lettering that is big enough to be visible from passing vehicles yet not visually dominating or out of proportion with the pedestrian environment.
- D. Business signage placement should be coordinated with placement of trees when determining the location of signs.
- E. Signage should be consistent with Fairfax County ordinances.

BUILDING SIGNAGE REFERENCE
<u>Volume I Urban Design Guidelines (Section 4E)</u>

5C

AREAS

SUBURBAN

NEIGHBORHOOD

DESIGN STRATEGIES

1 ALONG COMMERCIAL FRONTAGES IN SNAs

- A. A Planting Zone of at least 8-feet should be included. Wider planted buffers should be provided wherever feasible.
- B. The Planting Zone within the setback area may include a variety of treatments, ranging from low-height walls and mounds to the planting of shrubs and trees on mounds, flat terrain, or sloping terrain.
- C. A portion of the Building Zone should be paved to provide access to building entrances and encourage browsing along the fronts of buildings.

See Graphic 31.I.

2 ALONG COMMERCIAL FRONTAGES WITH OFF-STREET TEASER PARKING IN SNAs

- A. The design of off-street teaser parking should follow the guidance for off-street parking in *Volume I* (Section 5A.3, "Off-Street Parking")
- B. Off-street teaser parking in front of buildings should be screened by landscaping along the sidewalk and along the private walkway adjacent to buildings.
- C. Within the Planting Zone, architectural walls (4-feet maximum height) may be provided. Such walls should be located along the edge of the Planting Zone and sidewalk, and incorporate stormwater flow-through design. Creative design treatments, such as undulating wall alignments lined with planted shrubs, are encouraged. Architectural walls should be outside the Planting Zone if Category IV trees are provided.
- D. A pedestrian walkway should be provided from the sidewalk that is located within the Richmond Highway right-of-way to commercial building entrances.

See Graphic 31.II.



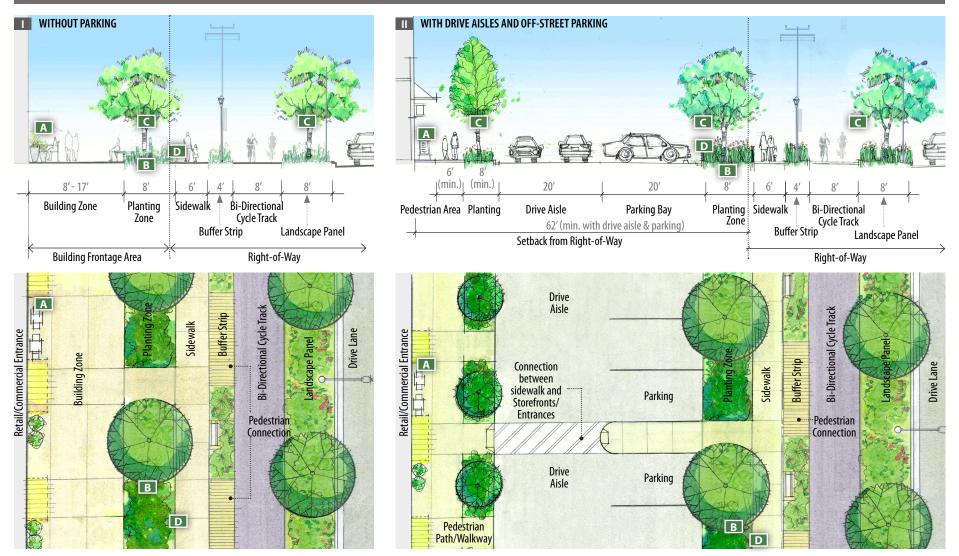
OFF-STREET PARKING AND TREES/LANDSCAPING REFERENCES Volume I Urban Design Guidelines (Sections 5A.3 and 2F.1)

LEFT Streetscape with planted buffer, walkway and amenities along commercial frontage Image Credit: Rhodeside & Harwell

RIGHT Teaser parking and wide planted area, along streetscape Image Credit: Rhodeside & Harwell



GRAPHIC 31: COMMERCIAL FRONTAGE IN SNAs ALONG RICHMOND HIGHWAY



KEY

A Planters/outdoor dining along building frontage

B Landscape and buffering (bioretention can be incorporated within the Planting Zone)

C Trees with maintained canopy to provide visibility to retail/commercial storefronts from sidewalk and roadway

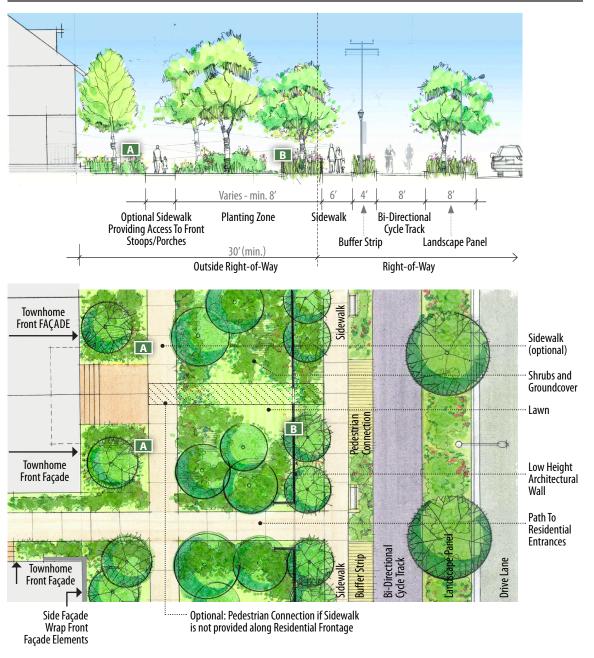
D Low height architectural screen/wall

GRAPHIC 32: RESIDENTIAL FRONTAGE IN SNAS ALONG RICHMOND HIGHWAY

3 ALONG RESIDENTIAL FRONTAGES IN SNAs

- A. Setback from edge of right-of-way to residential buildings should be a minimum of 30 feet, and developers should maximize the size of the Building Zone to the extent that site constraints allow.
 - i. The Planting Zone within the setback should include trees and landscaping, with the residential grade located above the sidewalk.
 - ii. Along townhouse frontages, guidelines for the treatment of the fronts, corners, and sides should be followed, as described in Chapter 4 ("Building Design").
 - iii. An optional six-foot-wide sidewalk can be incorporated outside the ROW to provide access to front doors. If the sidewalk is not provided, a connection should be provided from the sidewalk within the right-of-way.

Recommended conditions along residential frontages in SNAs are illustrated in *Graphic 32*.



KEY

- Low height walls, architectural screens, shrubs and ornamental trees provide privacy to ground level residential uses while maintaining visibility of porches/stoops/etc. from pedestrians
- Low height architectural walls, screens or public art elements along with trees and low height plantings provide a buffer between sidewalks and Planting Zones

DESIGN STRATEGIES

1 PAVING

- A. Paving of streetscapes along the Richmond Highway Transit Boulevard should follow the guidance in Sections 3A.1 and 3A.2.
- B. At intersections with Gateway Streetscapes, the same precast concrete paving elements from the Transit Plaza should be incorporated into the Amenity Zone of the Gateway Streetscape in order to provide a visual connection to the Transit Plaza (See Table I in Chapter 3 for material specifications).
- C. Cycle tracks should be paved with asphalt.

2 FURNISHINGS

A. All furnishings along the Richmond Highway Transit Boulevard should follow the furnishings palette described in Section 3A.3.

3 LIGHTING DESIGN

- A. Lighting along Richmond Highway should follow the guidance and specifications included in Section 3A.3. In addition to these guidelines, the following placement criteria also apply:
 - i. Vehicular-scale street lighting within the Landscape Panel should be placed at least two feet from the edge of the curb.
 - ii. Pedestrian-scale street lighting should be placed along the center of the buffer strip.





LEFT & RIGHT A streetscape with concrete sidewalks, asphalt cycle tracks and pedestrian scaled lighting Image Credit: Toole Design

5D

AND

HARDSCAPE

FURNISHINGS

5E

PLAZAS

TRANSITAND

INTERSECTION

DESIGN STRATEGIES

1 TRANSIT PLAZAS (OUTSIDE THE RIGHT-OF-WAY)

- A. The design of Transit Plazas should be coordinated with each BRT station's identity and branding, including paving treatments and signage.
- B. Transit Plazas should be flexible spaces that incorporate a mix of landscaped and hardscape areas. Trees and other plantings should be located to provide for a mix of shade and open areas, while maintaining the flexibility to accommodate a range of activities.
- C. As detailed in Chapter 4 ("Building Design"), the shape and size of Transit Plazas should be defined by their adjacent chamfered building corners (at approximately 30-degree angles) and by an approximately 120-foot length facing Richmond Highway.
- D. Transit Plazas should provide a range of amenities that increase visitor comfort and encourage their use for relaxation, small gatherings, waiting for transit, outdoor dining, and other activities. Potential amenities include, but are not limited to: shade (provided by trees as well as shade structures), seating, gathering spaces, digital displays, bike storage facilities, wayfinding and interpretive signage, bathrooms and changing stations, small performance areas, outdoor dining spaces for adjacent businesses, and public art.
- E. To increase the level of activity and functionality of each Transit Plaza, active ground floor land uses - such as cafés, restaurants, or retail - and primary building entrances should



RIGHT A transit plaza with special paving, landscaping and outdoor seating Image Credit: The Source be incorporated into the portions of buildings fronting the plaza.

F. Transit Plazas may be delineated with elements such as planting, seating, kiosks, etc. This area should also enable frequent pedestrian connections between the two plazas.

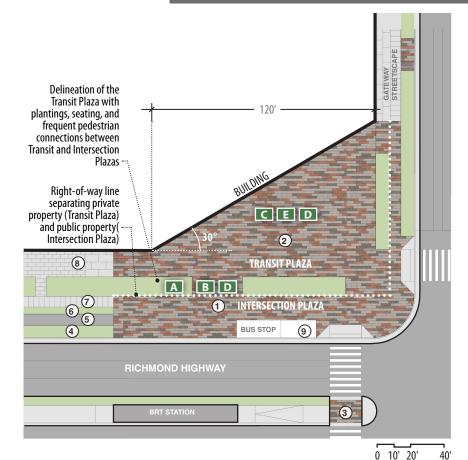
2 INTERSECTION PLAZAS (INSIDE THE RIGHT-OF-WAY)

- A. Space for bus stops, bike share, and other micro-mobility options may be included in the Intersection Plazas.
- B. Special concrete pavers that match the paving of Transit Plazas should be used in Intersection Plazas that are adjacent to BRT stations.
- C. Signage at the edge of Intersection Plazas should alert bicyclists on the cycle track and pedestrians on the sidewalk of the transition to a combined bicycle and pedestrian facility within the Intersection Plaza.
- D. Informational signage should be included that provides transit riders with BRT and local bus route maps. Real-time information on bus arrivals should be provided, if feasible.
- E. Intersection Plazas may also include wayfinding signage for pedestrians, bicyclists, and vehicular traffic, communicating information such as the location and distance of nearby destinations and directions to nearby bicycle routes (See Section 3A.5 for additional guidance regarding wayfinding and interpretive signage).
- F. Kiosks with maps, area information, tourism information, area events and other announcements are strongly encouraged.
- G. Signage location and quantities should be minimized to ensure pedestrian safety and reduction of visual clutter.

See *Graphic 33* illustrating a prototypical example of a Transit and Intersection Plaza.

5-14 RICHMOND HIGHWAY DISTRICT DESIGN GUIDELINES

GRAPHIC 33: TRANSIT AND INTERSECTION PLAZAS - COMPONENTS AND POTENTIAL PROGRAMMING



KEY

- (1)Intersection Plaza
- (2) Transit Plaza
- (3) **BRT Station Crosswalk**
- (4) Landscape Panel
- **Bi-Directional Cycle Track** (5)

- (6) **Buffer Strip**
- (7)Sidewalk
- (8) **Building Zone**
- (9 Informational Signage for Transit Riders

LANDSCAPING



A Planted buffer with connections between plaza and sidewalk spaces

OUTDOOR SEATING & DINING



C Hardscape plaza/lawn with movable

B Outdoor seating along edges of lawn and hardscape plaza spaces with connections between spaces

AMENITIES



D Kiosks (food, information, etc.)



seating



Bike share stations. Planned locations are on the opposite side of the intersection of **Richmond Highway and** Gateway Street

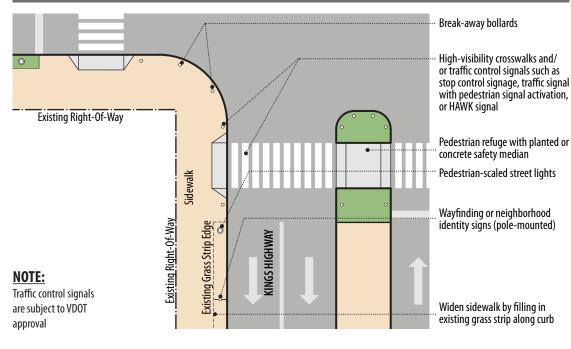
adult play areas

5F NORTH KINGS HIGHWAY STREETSCAPE

NORTH KINGS HIGHWAY, BETWEEN THE HUNTINGTON METRORAIL STATION AND JAMAICA DRIVE

High quality, safe and comfortable multimodal connections along North Kings Highway to destinations such as the Huntington Metrorail Station and Mount Eagle Elementary School are important. The BRT system is anticipated to run in the travel lanes of North Kings Highway from the Huntington Metrorail station to Richmond Highway. The roadway has narrow sidewalks, building setbacks are minimal, and there is limited available right-of-way outside of the curb. There is also high pedestrian activity due to the proximity of the Huntington Metrorail station and Mount Eagle Elementary. Despite the limited right-of-way on North Kings Highway, some multimodal improvements are possible that could enhance pedestrian safety and comfort, manage the speed of vehicles, and encourage drivers and pedestrians to be more alert.

GRAPHIC 34: KINGS HIGHWAY IMPROVEMENTS



DESIGN STRATEGIES

1 PEDESTRIAN AND MULTIMODAL IMPROVEMENTS

- A. A prototypical example of multimodal enhancements to North Kings Highway that could improve the pedestrian experience and level of comfort without requiring additional right-of-way is shown on *Graphic 34*. Following is a list of potential improvements for North Kings Highway:
 - i. High-visibility crosswalks and/or HAWK/RRFB traffic signals to provide safe pedestrian crossings.
 - ii. Break-away bollards at intersections to slow traffic.
 - iii. Wayfinding and/or neighborhood identity signs along the sidewalk.
 - iv. Pedestrian refuges within medians to promote safe and comfortable crossings.
 - v. Existing grass strip between the sidewalk and curb may be replaced with paving to increase sidewalk width.
 - vi. Planted or concrete medians, where appropriate, to reduce crossing distance and promote traffic-calming.
- B. Multimodal improvements to provide a complete street design approach should also be considered. These improvements may include innovative strategies that are intended to test enhancements as a pilot project.

REFERENCES FOR HAWK & RRFB TRAFFIC SIGNALS HAWK Traffic Signal: Fairfax County User's Guide RRFB Traffic Signal: Federal Highway Administration Guide





TOP LEFT A street intersection with breakaway bollards for pedestrian safety Image Credit: Google

TOP RIGHT A pedestrian refuge area within planted median





Image Credit: City of Fort Lauderdale

BOTTOM LEFT

Directional signage for Metrorail via creative integration within existing streetscape elements, including wrapping utility boxes Image Credit: Rios Clementi Hale Studios

BOTTOM RIGHT Pedestrian-scaled lighting along streetscape Image Credit: Rhodeside & Harwell