

Streetscape Guidelines, The Framework

2. STREETSCAPE GUIDELINES, The Framework

The pedestrian realm is the public space where people move and interact. It is composed primarily of the streetscape and urban parks (See Chapter 6). These are the most visible areas within the urban environment and are critical elements of a neighborhood. The pedestrian realm can provide environmental benefits through tree cover, remediation of heat island effects and a place for stormwater infiltration.

The streetscape is the space within the pedestrian realm that is between the building facade, or build-to line, and the curb. It provides connections to homes, places of employment, and connects people to retail establishments, restaurants, parks, plazas, trails and other public places.

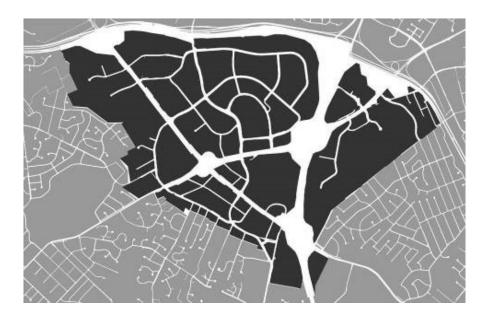
The framework and character of the streetscape will differ depending on the scale of the adjacent street and the associated land uses. Therefore, once land uses, building intensity, the street grid, and functional street classifications are established, the tools in this chapter can be used to establish build-to lines and to begin design for the streetscape.

This chapter addresses the streetscape framework: block sizes and streetscape types. Chapter 3 addresses the streetscape details including hardscape elements, planting, street furnishings, public art and lighting.

Block size is integral in creating a streetscape that is safe and pleasant. Excessively long blocks offer few choices for pedestrians and bicyclists, inhibit transit use, and encourage reliance on automobiles for mobility. The grid of streets concept for Tysons emphasizes shorter blocks and more frequent mid-block connections (including pedestrian passages and breaks in buildings) that result in convenient, short walking distances. Shorter blocks also allow for varied uses and architectural building faces within the span of a short walking distance to create interest and activity along the street edge.

The Urban Design and Transportation sections of the Comprehensive Plan recommend block sizes as follows:

- Blocks should have a maximum perimeter length of 2,000 feet, measured at the curb.
- Any block side longer than 600 feet should have a mid-block pedestrian connection. Examples include a pedestrian walkway, a service street with a sidewalk, or a publicly-accessible walkway through a building.
- The ratio of the longest side of a block to the shortest side is ideally less than 2:1 and should be no greater than 3:1.
- Due to topography and other existing conditions, some blocks may not be rectangular.





The graphic above is conceptual and is intended to demonstrate how a street network will be created for Tysons; it should not be used to determine final road locations or alignments.

Above Left: Tysons—Existing Grid of Streets, Fairfax County Department of Planning & Zoning, June 2010 **Above Right:** Tysons—Proposed Grid of Streets, Fairfax County Department of Planning & Zoning, June 2010

Streetscape Types

In addition to block size recommendations discussed in the Urban Design section of the Plan, the Transportation section of the Plan includes guidance for the functional classification, location and dimensions of streets in Tysons. This information is used to determine the location of the roadway and dimensions of the street from curb to curb.

Once a road width and location have been established, the map on the opposite page, the Tysons Urban Design Streetscape Types Conceptual Map, should be used to determine the Streetscape type for each street.

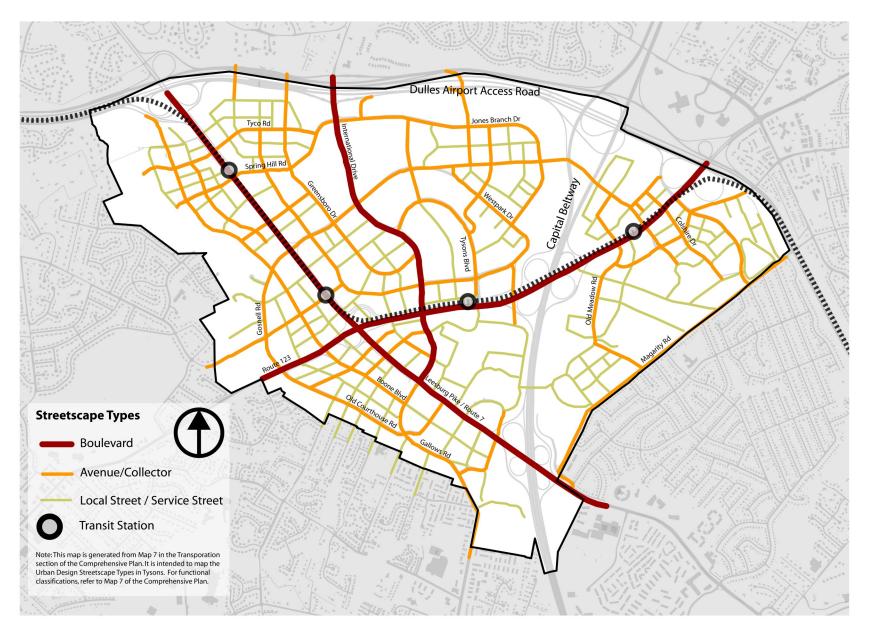
The Tysons Urban Design Streetscape Types Conceptual Map is derived from Map 7 in the Plan which contains five transportation classifications for streets: Boulevards, Avenues, Collectors, Local Streets and Service Streets. Although the lane configurations for Avenues and Collectors differ, the streetscape dimensions are the same and for this reason are referred to as a single type, the Avenue/Collector, in these Design Guidelines.

General descriptions of the character and function of the four Streetscape types - Boulevards, Avenues/Collectors, Local Streets, and Service Streets - can be found on the following pages.

How to Determine the Street and Streetscape Dimensions:

- Determine the location and functional classification of a proposed street (See Map 7 in the Comprehensive Plan). Map 7 will be further revised over time based upon additional information, including Consolidated Transportation Impact Analyses (CTIAs), a more refined public facilities plan, the Tysons Park System Concept Plan, the Tysons Circulator Study, the Tysons Bicycle Master Plan, and the Tysons Metrorail Station Access Management Study, as well as actions on approved rezoning applications.
- 2. Determine the Urban Design streetscape type. See The Tyson Urban Design Streetscape Types Conceptual Map on the opposite page.
- 3. Refer to Section 2.2A for General Streetscape Design Guidelines for design suggestions that apply to all Streetscape types.
- 4. Refer to Sections 2.2B—2.2E for design suggestions and dimensions for each specific Streetscape type.
- 5. Refer to Section 2.4 for recommendations regarding a Pedestrian Hierarchy Plan and how to accommodate the appropriate pedestrian activities within the Streetscape types.

Tysons Urban Design Streetscape Types Conceptual Map



Boulevards are multi-modal thoroughfares within Tysons. They have wide, multi-use streetscapes lined with a double row of trees. Medians may also be present in the Boulevard streetscape to accommodate plantings as well as mass transit lines and stations. In many cases, Boulevards will be adjacent to the tallest buildings in Tysons and will be the locations for the Metro entrances. Even in instances where Boulevards may not have the most significant pedestrian circulation, the full complement of streetscape amenities should be provided. In these cases, the aesthetic, environmental and transportation benefits of Boulevards remain an important element of urban design in Tysons.

Avenues / Collectors are streets that provide a balance between pedestrian and vehicular circulation. Shops, galleries, restaurants, hotels, offices, and residential uses will line these streets and help to energize the streetscape. Residents, workers, and visitors will use Avenues and Collectors to connect to local neighborhood streets and amenities; they will be the venues for street festivals and parades. Onstreet parking, bicycle lanes, and a planted street edge will provide a buffer between cars and the pedestrian realm. Tree shaded benches in the streetscape will provide a place for pedestrians to rest, and bicyclists can use these streets to connect from home to small outdoor cafés and other amenities.

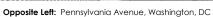




Local Streets support the internal pedestrian and vehicular traffic within Tysons' neighborhoods. They contain shady places to walk the dog or sit and have a coffee. Local Streets will be lined with a mix of uses, including residential and retail. They will provide connectivity within a neighborhood. Local Streets will connect to neighborhood parks, places of worship, and schools. Stoops and porches along Local Streets will be meeting places for Tysons residents. The majority of new streets constructed in Tysons will be Local Streets.

Service Streets provide access to parking, loading docks, waste management, utilities and other "back-of-house" operations. While Service Streets are not designed primarily to serve pedestrians, they should still be accessible and safe.





 $\textbf{Opposite Right:} \ \ \textbf{Streetscape in Reston, VA}$

Above Left: Streetscape in Washiington DC.

Above Right: Cady's Alley streetscape, Washington, DC



Streetscape Zones

All streetscape types in Tysons (with the exception of service streets) are made up of the following three zones: the **building zone**, the **sidewalk**, and the **landscape amenity panel**. This section describes the function and size of each zone and presents conceptual layouts for each. Specific dimensions for each zone within the different streetscape types are provided in Sections 2.2A – 2.2E.

The **building zone** is the area immediately adjacent to a building where building entrances are located and where activities such as outdoor dining and retail browsing occur. Awnings and architectural canopies may project above the building zone at building entrances and windows. In-ground planting and planted containers may also be located in the building zone but should be carefully situated as to not block pedestrian or visual access into doors and retail or commercial windows. Outdoor dining should be located in the building zone (not in the landscape amenity panel) and should be sited early in project development, so that the appropriate building zone width can be provided. Utility vaults should be located outside of the public right-of-way, and preferably within the building. In the Boulevard streetscape, the subgrade in the building zone includes space for street tree root zones and priority should be given to the tree root zone over utility placement. In some cases, utility lines will cross this tree root zone; however, utility locations should be planned early in the design process to ensure that utilities, adequate soil volume for trees, and appropriately sized paved areas for pedestrian circulation are all accommodated appropriately.

The **sidewalk** is exclusively reserved for pedestrian movement and should be clear of any obstructions. To minimize conflicts with street trees and plantings in the building zone and landscape amenity panel, an underground utility zone dedicated for community serving utilities such as telephone lines, electric lines, and fiber optic lines should be located below the sidewalk.

The landscape amenity panel is the area adjacent to the street in which street furniture, street lights, signage, transit stops, and other public realm amenities are located. The landscape amenity panel includes areas for street trees and ornamental plantings. Tree root zones should be given the priority in the landscape amenity panel subgrade. It is understood that in some cases utility lines will cross this tree root zone, however, careful planning early in the design of the project should plan for utility placement to prevent conflicts with street tree placement and survivability.



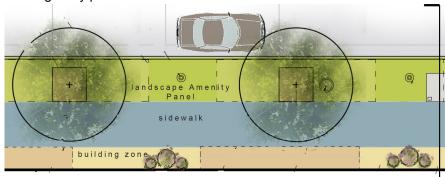
Streetscape zones

<u>Utility Vaults and Parking Structures below grade in the streetscape -</u> Public Streets:

Building zone: The location of stormwatwer and electrical vaults can have major impacts on the pedestrian realm; therefore, they should be located early in the design process and accommodated inside the building and below grade to the extent feasible. If vaults are unable to be provided within the building, the second preferred option is within the building zone, outside of the public right-of-way. All access points should have ADA accessible surfaces that are attractively incorporated into the streetscape by insetting the streetscape paving materials into the access doors to minimize their appearance.

Sidewalk: Except in rare cases, building serving utility infrastructure such as stormwater vaults, electric transformers, mechanical rooms, or parking structures should not be located below the sidewalk. There should be a 5 ft. minimum structure-free zone that extends down from the top of finished pavement to accommodate street tree planting and community serving utility placement.

Landscape amenity panel: Except in rare cases, neither buildingserving utility infrastructure as described above nor parking structures should be placed below the landscape amenity panel. There should be a 5 ft. minimum structure-free zone that extends down from the top of finished pavement to accommodate street tree planting and community serving utility placement.

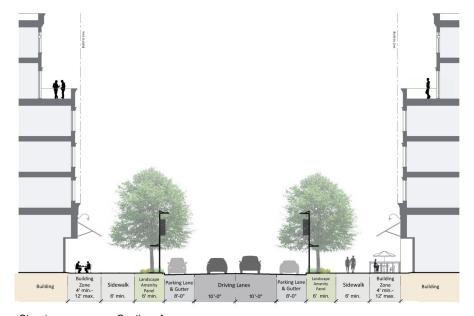


Streetscape zones - Plan

<u>Utility Vaults and Parking Structures below grade in the streetscape</u> - Private Streets:

Below grade parking and utility structures, such as stormwater or electrical vaults, may be located in the **building zone**, **sidewalk**, or **landscape amenity panel** provided:

- All access points are clear of the sidewalk zone, should have ADA accessible surfaces, and be attractively incorporated into the streetscape design as mentioned above; and,
- There is a 5 ft. minimum structure-free zone that extends down from the top of finished streetscape paving to accommodate street tree planting and community serving utility placement.



Streetscape zones - Section A

2.2A General Streetscape Design Guidelines

The following suggestions for incorporating streetscape design elements into the public realm supplement the guidance of the Comprehensive Plan. Coordination with the Virginia Department of Transportation (VDOT) is critical for any improvement within the VDOT right-of-way. Projects that propose construction within a VDOT right of way must obtain all necessary permits from VDOT, including those for streetscape elements that may impact roadway clearance standards. Additionally, all streetscape designs must adhere to VDOT clear zone and sight distance standards as set forth in the <u>Transportation Design Standards for Tysons Corner Urban Center</u> that is available from the Fairfax County Department of Transportation (FCDOT).

Design suggestions have been included that are applicable to all streetscape types. In addition, Sections 2.2B – 2.2E include illustrative diagrams that demonstrate how these suggestions may be applied to the specific streetscape types. Chapter 3, which follows, provides details regarding materials and furnishings.

The dimensions provided are suggested minimums and may need to be larger in order to accommodate street tree planting requirements and outdoor dining, and to meet other required standards.

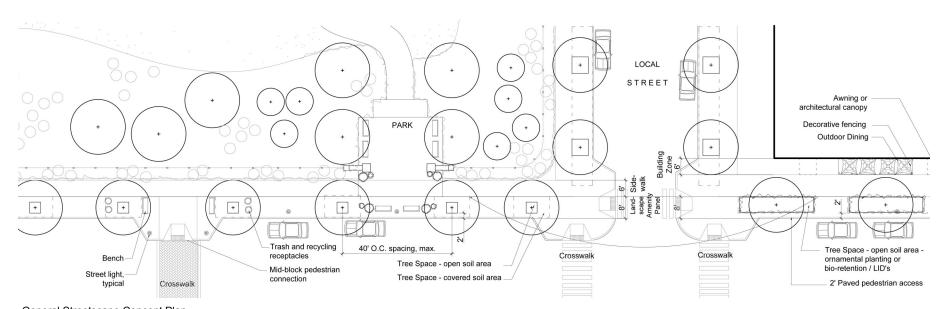
Design Suggestions for all Streetscape Types:

- As detailed in Chapter 4, Provide consistent build-to lines along the street, but architectural features and building articulation may also be incorporated. The design of the streetscape should respond to and complement variations in the build-to line.
- Consider incorporating awnings, canopies and architectural elements over doorways and windows that project into the building zone. These elements provide protection from the weather and assist in way-finding for pedestrians. Size awnings appropriately to avoid conflicts with adjacent street tree's projected 15 year canopy size.
- Porches and balconies may also project into the building zone.
 Locate these elements to avoid conflicts with a street tree's projected
 year canopy size. These should not extend into the sidewalk zone.
- Accommodate adequate soil volume in all tree planting spaces to foster healthy root growth for street trees. Innovative use of subgrade structural elements and suspended paving is encouraged to provide sufficient soil volume while accommodating pedestrian traffic. See Section 3.6A for tree space design guidelines.
- The planting spaces around trees can either be entirely planted or partially paved. This planting strategy should remain consistent, at a minimum, within a block. See Section 3.6A for tree space design guidelines.
- Accommodate both adequate paved areas for passenger loading, including accessible routes and landings, as well as adequate soil volume for trees at transit stops.

2.2A General Streetscape Design Guidelines

- Provide an ornamental boundary or edge, such as moveable posts and rails, to delineate outdoor dining spaces in the building zone.
- Provide transitions between public spaces such as plazas and other urban parks and the streetscape. This could include extending paving patterns from a park into the streetscape, or placing benches, signage, or other seating elements in that streetscape that is near the entrance to a park.
- Incorporate creative stormwater remediation and other Low Impact
 Development (L.I.D.) techniques into the streetscape. See
 Section 3.6F, Stormwater Planting Design.
- Provide regularly spaced, publicly accessible seating in the building zone and/or landscape amenity panels, where possible. See Section 3.4, Streetscape Furnishings, for suggested seating.

- Consider including Public art installations in the building zone or landscape amenity panel.
- In the event that the streetscape is adjacent to a large urban park or other designed landscape that occupies at least one block, the building zone may be eliminated. Sidewalk and landscape amenity panels should align with those located on adjacent blocks.
- Consider both sides of the road, including alignment and spacing of street trees in all streetcape designs.
- Consider Crime Prevention Through Environmental Design (CPTED) strategies that help increase visibility and safety.



General Streetscape Concept Plan

(Note: Streetscape dimensions vary by streetscape type, example shown is a Local Street)

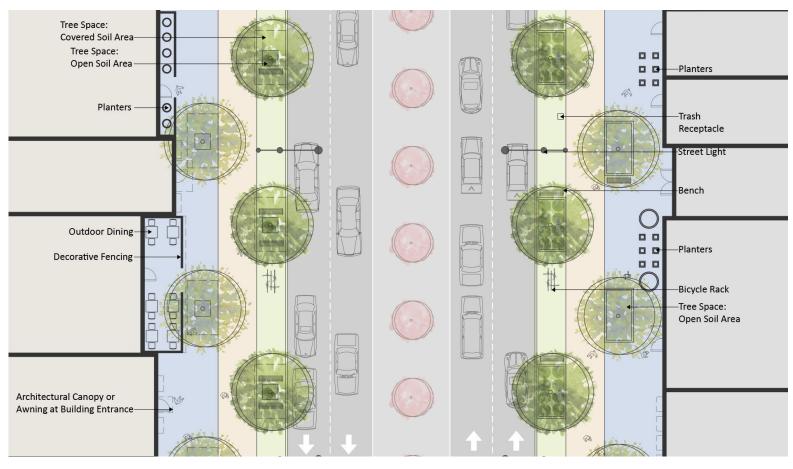
All Measurements shown are from back of curb.

2.2B Boulevard Streetscape Design

The Boulevard streetscape applies to Route 7, Route 123 and International Drive.

Boulevards are the Metro and vehicular gateways to Tysons. They will have wide, tree-lined street edges and will often be where a visitor's first perception of Tysons occurs. Boulevards will be activated with pedestrians moving to and from the Metro and work, browsing at window displays, and shopping in retail establishments. Major art installations and other monumental architectural elements may also be found within the Boulevard streetscape.

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Boulevard Streetscape Example - Plan

Design Suggestions:

- The building zone dimension is preferred to be 15 feet wide. If the boulevard must be used for fire access, accommodations can be made by reducing the width of the building zone for certain segments.
- The sidewalk is preferred to be 10 feet wide.
- ◆ All **landscape amenity** panels are preferred to be 10 feet wide.
- Use design elements that are consistent in type and style along the entire length of each Boulevard. This includes street tree varieties, paving patterns and materials, and street furnishings. Chapter 3 provides suggestions for specific plant varieties, hardscape materials, and furnishings.

- Include a staggered double row of trees that is spaced at 40 50 feet on center. Additionally, clustering groups of trees in groves or bosques would be a successful alternative design along the Boulevard streetscape.
- Include streetscape lighting fixtures that illuminate both the roadway as well as the streetscape and pedestrian realm. These fixtures may or may not be physically attached to each other, but they should be consistent throughout the length of the Boulevard.
- The utilities for Metrorail are largely located within the right-of-way along Route 7 and Route 123 and can present challenges in the implementation of the Boulevard streetscape. Flexibility in the streetscape standards may be necessary to accommodate utilities that can not be moved.



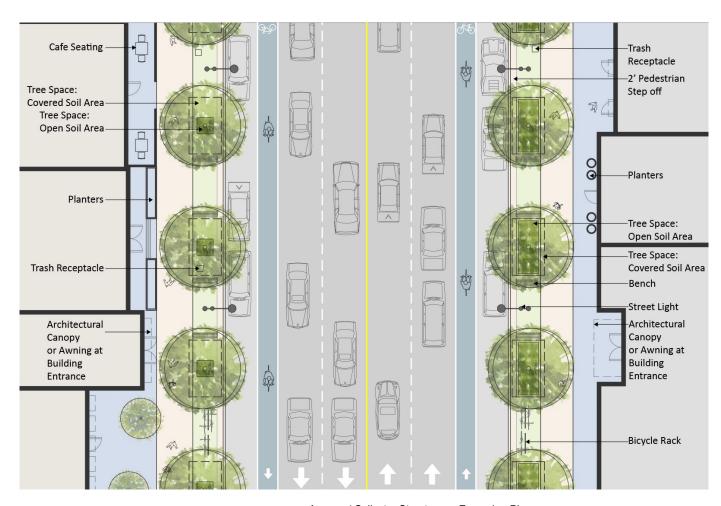
Boulevard Streetscape Example- Section

Note: All measurements shown are from front of curb.

2.2C Avenue / Collector Streetscape Design

Avenues and Collectors will provide connections between the diverse neighborhoods planned within Tysons. Avenues and Collectors may be the location of restaurants, local grocery stores, doctor's offices, movie theaters, shops, small performing arts venues, art galleries, live-work and residential units, as well as fire and police stations. Offices, hotels and residential buildings may also be located along Avenues and Collectors.

Avenues and Collectors will be the routes for parades and will set the stage for street fairs and farmer's markets. Larger scale urban parks may have their entrances and edges along Avenues and Collectors. Bus and circulator service will make frequent stops along Avenues and Collectors to bring Tysons residents and workers to their daily destinations.

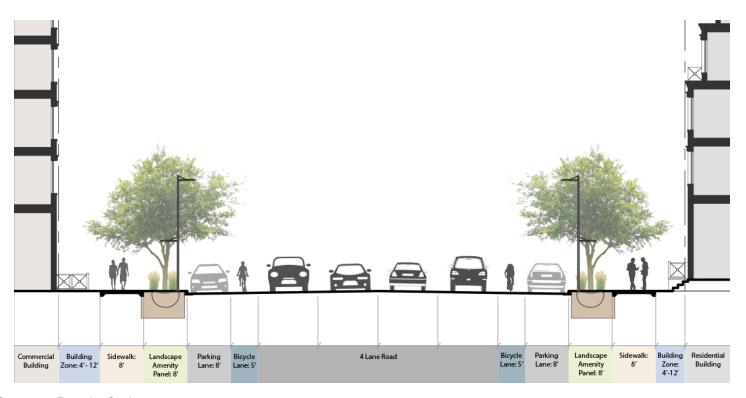


Avenue / Collector Streetscape Example - Plan

Design Suggestions:

- ◆ The **building zone** dimension can range from 4 feet to 12 feet in width.
- ◆ The **sidewalk** is preferred to be a minimum of 8 feet wide.
- The landscape amenity panel is preferred to be a minimum of 8 feet wide.
- Provide a 2 foot wide paved walkway adjacent to planting areas and parallel to the curb to accommodate passengers entering and exiting cars parked along the street.

- Space Street trees at 30 40 feet on center.
- Use Planting in the building zone especially when the adjacent land use includes residential development.
- Provide safely designed mid-block pedestrian connections at highactivity areas or where intersection spacing exceeds 600 feet to reduce walking distance.
- Include **streetscape lighting** fixtures that illuminate both the roadway as well as the streetscape and public realm.



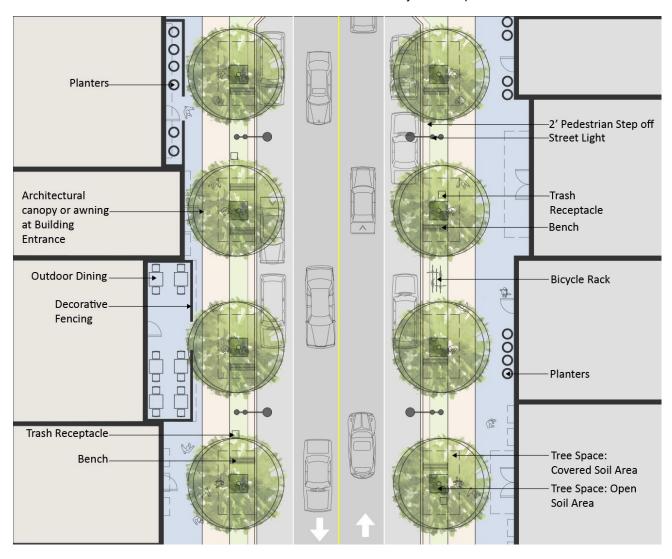
Avenue / Collector Streetscape Example - Section

Note: All measurements shown are from front of curb.

2.2D Local Street Streetscape Design

Local Streets will be home to many of the new residents in Tysons. They will connect residents to their places of employment, their sources of recreation and to Metro. Local streets will include entrances to local playgrounds and parks, small restaurants and coffee houses, and places of worship.

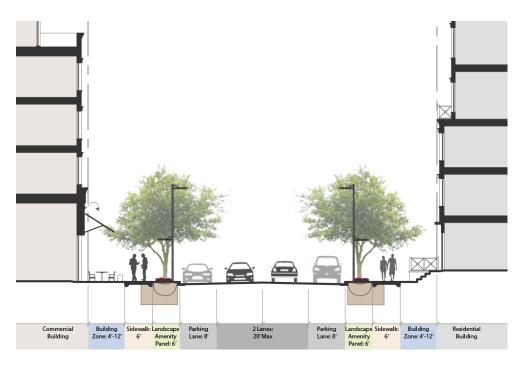
The street edge along Local Streets will be intimate, while providing comfortable pedestrian access along residential and commercial streets. Plantings and trees in the landscape amenity panel will provide visual interest and shade, and will create a clear edge between the roadway and the pedestrian realm.



Local Street Streetscape Example - Plan

Design Suggestions:

- ◆ The **building zone** dimension can range from 4 feet to 12 feet in width.
- ♦ All **sidewalks** along are preferred to be 6 feet wide.
- ◆ All landscape amenity panels are preferred to be a minimum of 6 feet wide. (Note: All tree planting spaces must be 8 feet wide. On Local Streets when the Landscape Amenity Panel is 6 feet wide, tree planting spaces should extend beneath the sidewalk zone in order to meet the standards set forth in the Fairfax County Public Facilities Manual. (See Local Street Streetscape Example Sections A and B on the opposite page and planting details in Section 3.6.)
- Use planting in the building zone when the adjacent land use includes residential development.
- Provide a 2 foot wide paved walkway adjacent to planting areas, parallel to the curb, to accommodate passengers entering and exiting cars parked along the street.
- ♦ Space street trees at 30 40 feet on center.



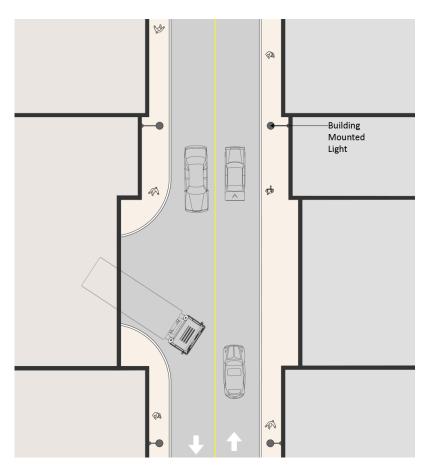
Local Street Streetscape Example - Section

Note: All measurements shown are from front of curb.

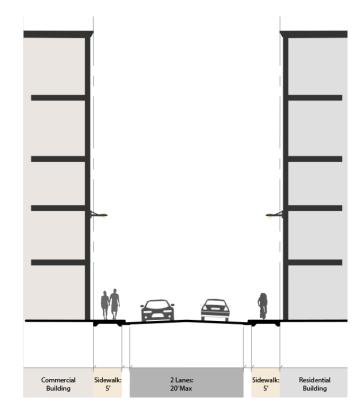
2.2E Service Street Streetscape Design

Service Streets will provide access to parking, loading docks, waste management, utilities and other back-of-house operations. While service streets are not designed primarily to serve pedestrians, they should still be safe and accessible. Service Streets may be purely functional but should also provide opportunities for unique, intimate, and hidden places within the urban fabric. Cady's Alley in Washington, DC is an example of this type of space. Alleys should also be considered a place to implement LID strategies such as pervious pavement to reduce stormwater runoff.

The design of service streets can vary. Some may provide more a more enhanced pedestrian experience, depending on the pedestrian hierarchy and the use of the streetscape to meet other Plan goals such as tree canopy and stormwater management. Some service streets may perform more like local streets rather than alleys and include amenities such as street trees and enhanced lighting.



Service Street Streetscape, no landscaping, Example - Plan



Service Street Streetscape, no landscaping, Example - Section

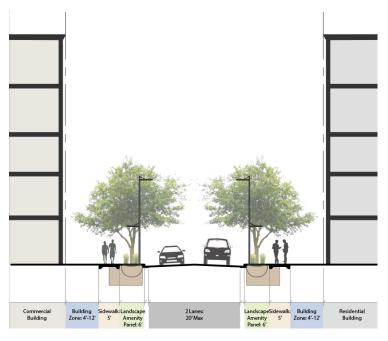
Design Suggestions:

- Build utility and service operations such as waste storage, waste collection and loading docks into the mass of the building.
- Provide a 5 foot minimum width unobstructed walkway for pedestrians.
- Consider eliminating curbs provided that pedestrian ways are clearly distinguished using material color or texture changes and positive drainage is accommodated.
- -Street Light Tree Space: Open Soil Area Tree Space: Covered Soil Area

Service Street Streetscape with Landscape Amenity Example - Plan

- Consider including high quality and well-designed, building-mounted street lighting to illuminate the public realm and decrease conflicts between sidewalk amenities and pedestrians.
- ◆ Designation of **ADA-accessible parking** or locating the primary accessible path to a building is not allowed on service streets.
- Consider **pervious paving** systems for sidewalk and street paving.

Note: All measurements shown are from front of curb.



Service Street with Landscape Amenity Streetscape Example - Section

2.3 Street Crossing Design



Creating a new urban environment brings with it the need to balance and accommodate the needs of a wide range of street users including pedestrians, bicyclists and motorists. In the efforts to design this new environment, prioritizing safety for all people, but particularly the more vulnerable groups (children, the elderly and those with disabilities) and vulnerable modes (walking and bicycling) becomes crucial. Care must be given to the design of safe and frequent pedestrian crossings and bike paths through intersections.

A crosswalk is defined as the portion of roadway designated for pedestrians to use in crossing the street. Crosswalks indicate preferred locations for pedestrians to cross and help designate right-of-way for motorists to yield to pedestrians. The design and treatment of crosswalks and bike crossings should help create a safe pedestrian and bicycle network throughout Tysons and should be coordinated with FCDOT and VDOT. The following are crossing design suggestions and diagrams of typical intersections that can be applied to street crossing design in Tysons.

Design Suggestions:

- Install stop bars ten feet from all crosswalks to provide a buffer between vehicles at intersections and pedestrians crossing the streets.
- Install Leading Pedestrian Intervals (LPIs), in which intersection signals allow pedestrians to cross before traffic, at crossings where there is a high volume of turning vehicles, particularly where the pedestrian crossing distance is long.
- Install pedestrian countdown signals at all signalized crossings and provide adequate time so that pedestrians of all mobility levels can safely cross the intersection. Locator tones for the visually impaired may also be included.
- Install high visibility crosswalks on all streets with more than one moving lane in each direction to make the crosswalk more visible to both pedestrians and motorists as seen in the diagrams in sections 2.3A, 2.3B, and 2.3C on the following pages.
- Provide curb extensions or bulb-outs into the parking lane wherever feasible. As seen in the diagrams in sections 2.3A, 2.3B, 2.3C, and 2.3D on the following pages.
- Utilize mid-block crossings, where warranted, to reduce walking distances at primary pedestrian crossings and on street types where warranted and safely accommodated. All mid-block crossings are subject to review by FCDOT and VDOT.
- Incorporate mid-block curb extensions into the parking lane at all signalized mid-block crossings and signalize midblock crossings on streets with more than one moving lane in each direction. Unsignalized mid-block crossings may be considered on local streets but are subject to review by FCDOT and VDOT.

Benefits of Curb Extensions / Bulb-outs:

- ♦ Calms traffic by physically and visually narrowing the roadway
- At a corner, slows turning vehicles and emphasizes the right of way of crossing pedestrians
- Shortens crossing distance, reducing pedestrian exposure and minimum required signal time for crossing
- Improves the ability of crossing pedestrians and drivers to see each other
- Makes the crosswalk more apparent to drivers, encouraging them to stop in advance of the crosswalk and reducing illegal parking within crosswalk
- Reinforces lane discipline through the intersection; prevents vehicle passing in parking lanes
- Provides additional pedestrian space and reduces crowding, particularly for queing at crossings and bus stops
- Creates space that may be used to locate street furniture, bike parking, bus stop, public seating, and street vendors, potentially reducing clutter in the sidewalk zone
- ♦ Keeps fire hydrant zone clear when located in front of a hydrant

- ♦ Defines the ends of parking
- ◆ Can include vegetation to help mitigate air pollution and capture carbon dioxide from the air, improving environmental health and public health

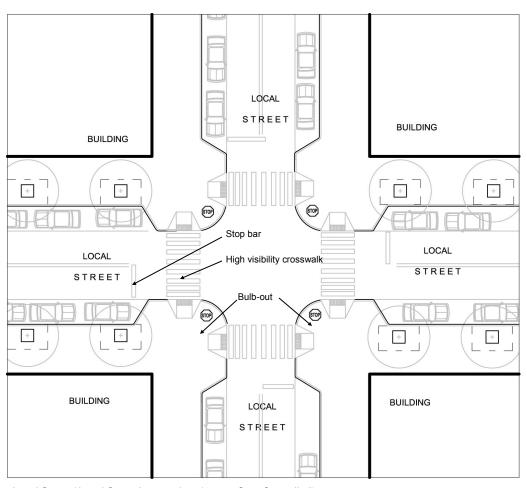
Sections 2.3A to 2.3D illustrate conceptual and typical intersection designs including the use of bulb outs and curb extensions, high visibility crosswalks, pedestrian refuge areas, and other intersection design concepts.



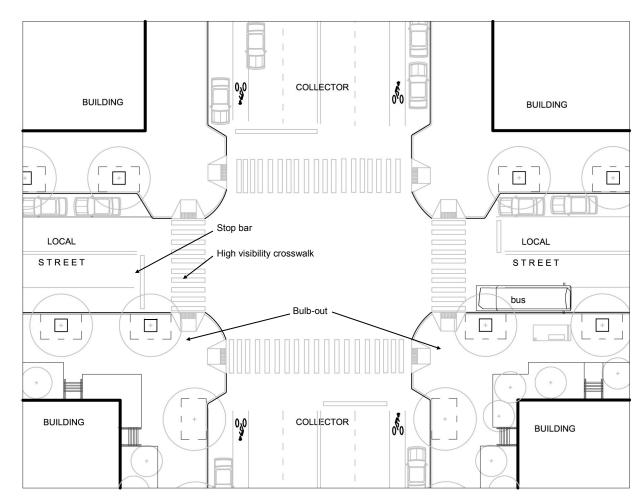
Opposite Left: Pedestrian crossing street, NYC, Image: Newcity.com

Right: Intersection at 9th Ave. bike lane, NYC, Image: NYCDOT

2.3A Local Street / Local Street Intersection Crossing Design

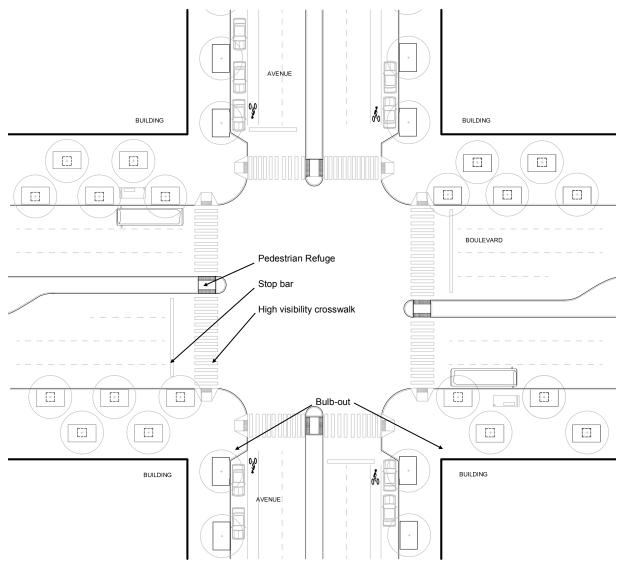


Local Street / Local Street Intersection (4-way, Stop Controlled)



Local Street / Collector Intersection (Signalized with Bus Service)

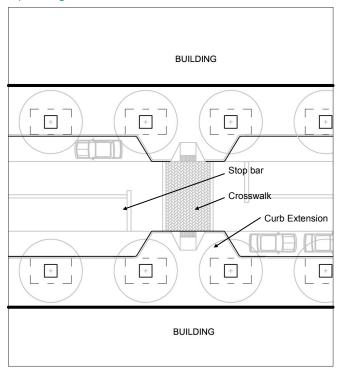
2.3C Boulevard / Avenue Intersection Crossing Design



Avenue / Boulevard Intersection (Signalized with Bus Service)

2.3D Mid-Block and Loading Entrance Design

Careful consideration should be given to the spaces where there is potential for pedestrians and vehicles to conflict. Street designs that minimize the distance a pedestrian has to cross a street are encouraged. In addition, loading and parking entrances that are located along high pedestrian volume areas should include elements such as textured pavers, bollards, special lighting, flush curbs, and other elements that alert pedestrians and vehicular drivers to pay special attention without disrupting the pedestrian flow on the sidewalk. In particular instances, raised tables may need to be considered. There are multiple design solutions for addressing the potential conflicts between pedestrians and vehicles, and the solution may vary depending on the site conditions.



Mid Block Crossing (Signalized)





Design Solutions for Loading and Garage Entrances. Images: LandDesign



The streetscape designations described previously in this chapter provide a structure for the basic form of the streetscape primarily related to the adjacent street network. However, the street designation does not necessarily relate to how pedestrians will use the streetscape. For example, pedestrians might avoid walking along a noisy, high-traffic boulevard, while a smaller, local street, may be the location of numerous outdoor cafes and other significant pedestrian activity.

Developments should consider how the streetscapes will function, how they might be used, and how people will move through the space. Streetscapes should be designed for flexibility in uses. A hierarchy of pedestrian experiences should be developed within each neighborhood and throughout Tysons to reinforce an integrated connective network that provides a safe, functional and enjoyable pedestrian environment. As a result, a hierarchy plan will use the street grid as a basis, but may not necessary relate to the underlying streetscape designations in terms of functionality for pedestrian-oriented activities and level of use.

As the pedestrian hierarchy is looked at as a holistic network, every site may not have a primary corridor. The pedestrian paths should be considered in context with the site's proximity to metro and any adjacent planned developments.

Goals of a Pedestrian System and Hierarchy:

A pedestrian hierarchy plan shows how pedestrians will use the street network. It recognizes that some routes will be more used that others, and that some streets may be used for different functions by pedestrians. Some corridors can be used primarily for movement or access, while others may be used for social interaction, shopping and dining. A clearly defined pedestrian hierarchy can help focus pedestrian-oriented activities in certain areas and coordinate future development along corridors to support a public realm that provides an appropriate level of comfort, utility and amenities. Further, the pedestrian hierarchy will:

- Connect Tysons through the provision of an organized system of pedestrian routes through, between and among neighborhoods
- Reinforce transit-oriented development patterns
- Facilitate connections to transit facilities and bus stops
- Support active and attractive pedestrian areas within neighborhoods
- Help determine locations for retail, outdoor dining, and other uses which support business viability
- Connect parks, libraries, schools, community centers, and other civic uses

<u>Using a Pedestrian Hierarchy</u>

Creating a hierarchical pedestrian system furthers the development of a pedestrian-friendly Tysons. As such, it is a tool that can assist developers, property owners, businesses and the County in making appropriate decisions to support this goal.

A pedestrian hierarchy will help organize and orient land uses that are supportive of the most important pedestrian corridors. Understanding the hierarchy can help determine potential locations for retail and urban parks so that these uses can build upon positive adjacencies with other projects within the district, and will assist in identifying the most appropriate locations for parking and access, mechanical spaces, and other non-active uses. Above all, a pedestrian hierarchy helps provide a context for proposed development so that it may be understood within the larger networks of transportation, urban parks and land use.

Understanding the pedestrian hierarchy helps inform site and building orientation, and provides guidance regarding building facades and their treatment. Each of these elements can contribute to a functional and pleasurable pedestrian realm. It is important that the design of buildings and sites consider their impacts on the pedestrian experience early in the design process. The pedestrian hierarchy proposed can also provide guidance for the phasing of pedestrian and public realm improvements.

The pedestrian hierarchy plan should be one of the first decisions undertaken when starting site layout and design work, as the hierarchy has implications for building footprints and impacts on pedestrian spaces. For example, siting potential locations for outdoor dining is important to do at the outset, as outdoor dining typically needs a larger building zone than the minimum.





Opposite Left: Residential streetscape

Above Right: Residential streetscape

Bottom Right: Pentagon City streetscape, Arlington, VA

The pedestrian hierarchy plan utilizes four corridor categories: Primary, Secondary, Tertiary, and Service Streets/Alleys. These categories are distinct and separate from the streetscape designations. The following descriptions provide an overview of these categories. The chart on the opposite page provides a synopsis of each, including some recommendations regarding their applicability.

Primary Pedestrian Corridors

Primary Pedestrian Corridors are intended to have the highest levels of pedestrian activity and interaction. They typically occur near transit stations and are the location of significant retail, major building entrances, and social and civic gathering spaces. Primary Pedestrian Corridors support pedestrian circulation, but should also include spaces for outdoor gathering, sidewalk cafes and browsing areas. As a result, these areas typically have the widest streetscape and most animated building facades. These corridors may be identified as a neighborhood destination in and of themselves.

Secondary Pedestrian Corridors

Secondary Pedestrian Corridors typically have significant pedestrian volumes, and generally are utilized for pedestrian movement as opposed to pedestrian interaction. Some retail activity that is generally more neighborhood or district-serving occurs within these corridors. Residential and civic uses should have their entrances facing Secondary Pedestrian Corridors. These corridors typically have wider streetscapes to facilitate pedestrian movement, and a significant level of building façade animation to create an interesting and comfortable walking environment.

Tertiary Pedestrian Corridors

Tertiary Pedestrian Corridors support pedestrian connectivity through and between neighborhoods. These corridors typically include residential entrances, access to parking, and limited access to loading and service facilities. Any retail which occurs will typically be found at intersections with other more significant streets. Residential yards and stoops typically can be found along this corridor type. Building facades provide some variation and level of detail to create an interesting and comfortable walking environment.

Service Streets & Alleys

These include any remaining corridors (not previously categorized) which may support other pedestrian movement or connectivity. These typically include the most basic streetscape amenities, including sidewalks and lighting. Landscape buffers may be provided when adjacent to exposed parking garages or in order to meet other plan goals, such as tree canopy or stormwater management retention. Mechanical and service spaces, along with loading, can be found in these areas.

Pedestrian Hierarchy Plan Designations

	Primary Pedestrian Corridors	Secondary Pedestrian Corridors	Tertiary Pedestrian Corridors	Service Streets & Alleys
Primary Activities	Major pedestrian movement and interaction	Major pedestrian movement	Pedestrian connectivity	Parking garage access and frontage
	Primary building entries and lobbies	Building and unit entries	Unit entries	Building service functions
	Direct access to parks and open spaces	Access to parks and open spaces	Parking garage access	
	Retail opportunities	Some retail		
	Outdoor dining	Limited parking garage access		
	Access to major public facilities, civic and cultural institutions			
Building Zone	Widest Building Zone to allow for outdoor dining and other activities	Widest Building Zone sufficient to allow for outdoor dining and other activities	Building Zone may include residential yards and stoops	Varies
	~80% Active uses along street frontage	~60% Active uses along street frontage	~30% Active uses along street frontage	Facade articulation and changes to vertical plane every 180' for visual interest.
Active Uses	Pedestrian Entrances every 15'- 40'	Pedestrian Entrances every 15' - 60'		May include landscape buffers for garages
(Ground Floor)	~70% Façade transparency	~50% Façade transparency	~30% Façade transparency	Parking structures screened with architectural treatment
	Parking decks screened with active uses	Parking decks screened with active uses	Parking structures screened with architectural treatment	
Active Uses	~80% Active uses along street frontage	~60% Active uses along street frontage	~30% Active uses along street frontage	Facade articulation and changes to vertical plane every 180' +/- for visual interest.
(Above the Ground Floor)	Parking decks screened with active uses	Parking decks screened with active uses and architectural treatment	Parking decks screened with architectural treatment	

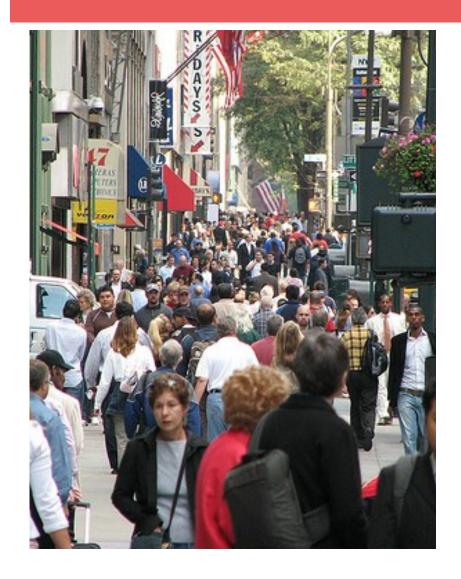
<u>Creating a Pedestrian Hierarchy Plan</u>

The pedestrian hierarchy system is an organizing feature for the whole of Tysons. The pedestrian system provides links within developments as well as between and among developments. As such, the pedestrian hierarchy plan for an individual development must be considered in the larger context of Tysons as a whole.

All applications will be expected to include a pedestrian hierarchy plan, using the designations described in this section, as applicable. Existing and future street alignments, along with potential sidewalk and trail corridors, should be shown with their pedestrian hierarchy category. In developing this plan, the Tysons-wide system should be considered and the proposal should demonstrate how the site will be integrated into that system. In addition, it is anticipated that site features such as building orientation, building zones, service areas, enhanced placemaking opportunities, etc. will be located in a manner that is responsive to the category.

In most cases, the Metrorail stations and their landings act as an organizing feature. In addition, the pedestrian hierarchy system should take into consideration:

- Access to other transit facilities, in addition to rail
- Existing and proposed bicycle routes
- Proposed transit and circulator routes
- The character of the existing and proposed road network, including street widths, vehicular traffic flow, and connectivity within and between districts
- Existing and planned uses both on-site and in the area
- Existing and planned density and intensity of development both on site and in the area
- The existing and proposed network of urban parks and other resource-based amenities
- Other potential amenities or other place-making features
- Connections to existing neighborhoods within and surrounding Tysons



Design Suggestions:

- Pedestrian circulation should occur at ground level to the greatest extent possible. Above-grade skybridges or below-grade pedestrian tunnels are strongly discouraged as they detract from the vibrancy of the streetscape. Further, skybridges and tunnels can pose challenges for security and public access.
- Active uses, such as retail, should occur at street level along the appropriate pedestrian corridors. Such uses should have their primary entrances from the sidewalk. Above-grade retail or retail accessible only from interior courtyards or lobbies is strongly discouraged.
- In locations where retail is not expected to be viable, consider other active uses like live-work units, offices, or walk-up residential units to provide activity along the street.
- Pedestrian corridors which must pass through the interior of buildings are strongly discouraged. Pedestrian circulation should be focused on publicly-accessible sidewalks and open spaces which are located outdoors.

Above: New York City sidewalk, New York City, NY, Image: Flickr

Enhanced Placemaking Opportunities

In addition to pedestrian corridors, locations for enhanced placemaking should be indicated on the pedestrian hierarchy plan. These are intended to highlight certain areas as places of importance, or opportunities to emphasize the character or identity of a district, corridor, neighborhood, or development. These can be locations of retail, civic facilities, urban open spaces, public art, special architecture and/or other elements which create an identifiable destination.

Enhanced placemaking opportunities can include:

- Iconic architecture, or unique architectural elements (A).
- Civic or cultural uses, either stand-alone buildings or within mixeduse developments (B).
- Public open spaces, such as common greens, plazas, or pocket parks (C).
- Special landscape and hardscape elements, such as water features and seating areas (D).
- ◆ Special retail destinations (E).
- Public art, either in permanent installations, or places designed to accommodate changing art (F).
- Signature sites, as discussed in Section 4.7.



Α



В





Ε



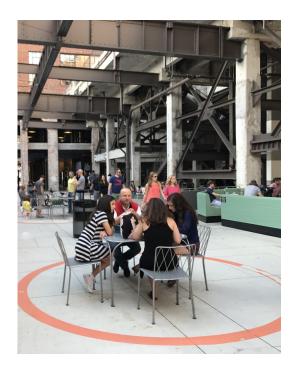


Designing and Accommodating Outdoor Dining

The location of outdoor dining is highly related to pedestrian movement and typically occurs in areas with high pedestrian volumes. Outdoor dining also impacts building design and building zone widths and should be located early in order to avoid negative impacts on the pedestrian realm.

Outdoor dining is highly encouraged to be located in the building zone and should be clearly defined by the use of low fencing, walls, or planters to create a clear separation from the private dining and public walking spaces. The sidewalk zone should always remain clear of encroachments from outdoor dining areas. Outdoor dining space is discouraged in the landscape amenity panel, as separation between the building and the outdoor dining space creates conflicts with pedestrian flow, on-street parking, tree spaces, and alcohol control laws.

The images provided on this page are examples of well designed and integrated outdoor dining spaces.







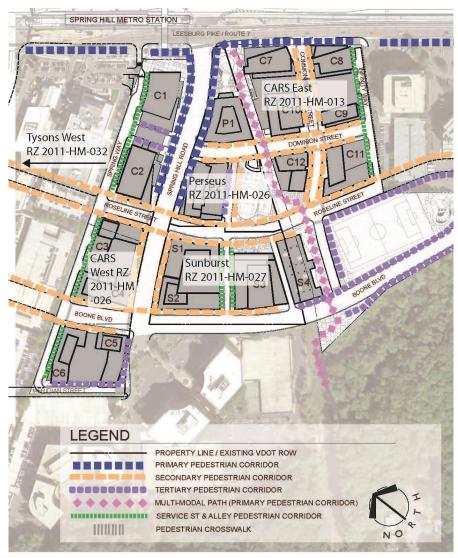
Pedestrian Hierarchy Plan - Map

The pedestrian hierarchy plan is closely aligned with the grid of streets and it may not necessarily relate to the streetscape types described in Chapter 2. Although boulevards may have the greatest vehicular traffic, they may not be the locations of the greatest pedestrian traffic, for example. Many primary pedestrian corridors may be located on smaller streets which have less vehicular traffic and a more appropriate pedestrian scale. Not every development will have a primary corridor; developments should be considered in context with adjacent developments and in relation to the metrorail station.

The pedestrian hierarchy plan shown on this page is an example demonstrating features of a good plan. The previous pages in this chapter provide guidance on the purpose and intent of the plan, as well as additional descriptions of the various features.

A pedestrian hierarchy plan should:

- Extend beyond the boundaries of the site a sufficient distance to encompass nearby features that are pedestrian "attractors" (such as the Metro station on the example plan)
- Indicate pedestrian "attractors" and other significant features that are located further away and not shown on the plan using directional arrows, such as a civic plaza or performing arts venue
- Identify Primary, Secondary and Tertiary Pedestrian Corridors (see pages 2-30 to 2-31)
- ◆ Identify building entrances and other pedestrian "attractors" such as significant features on or off-site (see pages 2-32 to 2-35)
- Identify ground floor uses
- Coordinate with proffered commitments relating to fenestration, building design and activated streetscapes



Opposite Left: Ponce City Market, Atlanta, GA. Image: Stephanie Pankiewicz

Opposite Middle: Outdoor dining space, Image: Staff

Opposite Right: Streetscape in Washington, DC, Image: Staff

Above: Pedestrian Plan from CARS West CDP, Tysons, VA. Image: LandDesign