

Urban Design Guidelines

Working draft July 9, 2008

The following pages provide detail for Chapter 8, Urban Design Guidelines, of the Task Force summary document. The urban design guidelines support the overall Task Force vision for Tysons Corner and provide the details on how to achieve the vision. They are performance-based guidelines, intended to provide the desired pedestrian-oriented character for Tysons while leaving some flexibility in the actual development of Tysons.

As the Task Force has discussed, creating places that are easily accessible by pedestrians is the key to growth and success of Tysons Corner in the 21st century. This means creating a place that encourages walkability and provides a sense of belonging, safety and shared ownership to the pedestrians. The urban design guidelines encourage walkability by supporting the overarching Task Force urban design principle of vibrant streets and walkable blocks.

The first set of urban design guidelines presented on the following pages relate to the public realm: street and block pattern, street types and streetscapes. They break down the walkability of the public realm into two elements: the street level and the place level. The scale of streets, size of sidewalks, entrances and windows opening on the sidewalks, design of streetscapes, trees, lighting, and street furniture are the elements that play a big role in making the streets walkable. The size of urban blocks, street network density and street grid connectivity play a big role in making Tysons as a whole walkable.

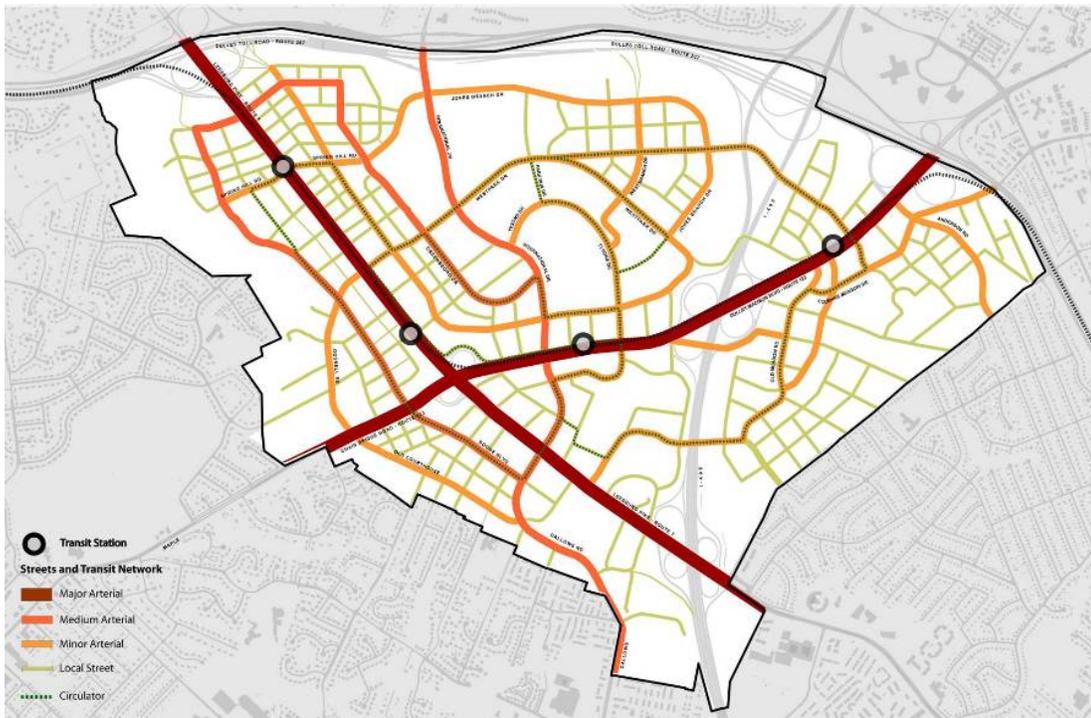
The details on the following pages include both specific recommendations and placeholders for additional information as the recommendations are fleshed out and reviewed by the Task Force. The final language provided should guide the implementation of the vision, but will not be specific plan text, and will apply to both new development and redevelopment projects.

Public Realm

Street and Block Pattern

All development proposals within Tysons Corner should dedicate right-of-way for planned road improvements in a way that follows the street and block design guidelines identified below.

1. Proposed street network: Any new development within Tysons Corner should make the best possible attempt to create a street and block network that follows the proposed street network identified in the plan as closely as possible. If it is not feasible, as it may be in some cases, the developers must provide reasonable justification showing difficulty in following the preferred street network and propose an alternative street layout that follows the block size guidelines below, and achieves a similar level of connectivity as in the proposed street network.



Note: Map does not include most recent grid of streets or circulator routes.

Block Size Guidelines

1. Block Size within Metro Station Areas

All new development and redevelopment projects within the station areas approximately ¼ mile from the station should develop a street and block network pattern where:

- a. The perimeter length of the blocks range between 800 feet to 1600 feet.
- b. Any block side longer than 400 feet be broken up by a public right of way allowing, at a minimum, through pedestrian connections.

c. Ideal length-width ratio for the blocks is no greater than 2:1.

Real life examples of such block sizes, including city blocks of Portland (200ft x 200ft), Chicago Loop (400 ftx300 ft) and blocks of lower Manhattan, will be provided for illustrative purposes.

Potential block size examples applicable to Tysons Corner include:

- 1) Block size of 200 ft x 200 ft will have total perimeter length of 800 ft and length-width ratio of 1:1
- 2) Block size of 300 ft x 300 ft will have total perimeter length of 1200 ft and length-width ratio of 1:1
- 3) Block size of 500 ft x 250 ft will have total perimeter length of 1500 ft and length-width ratio of 2:1
- 4) Block size of 500 ft x 300 ft will have total perimeter length of 1600 ft and length-width ratio of 1.67:1
- 5) Block size of 400 ft x 400 ft will have total perimeter length of 1600 ft and length-width ratio of 1:1

Illustrative examples:

Street Grid around Tysons West:



Street grid around Tysons Central 7:



2. Block Size in Non-Station Areas

All new development and redevelopment projects outside the ¼ mile station areas should develop a street and block network where:

- a. The perimeter length of new blocks range between 800 feet to 2400 feet.
- b. Any block side longer than 400 feet be broken up by a public right of way allowing, at a minimum, through pedestrian connections.
- c. Ideal length-width ratio for the city blocks is no greater than 3:1.

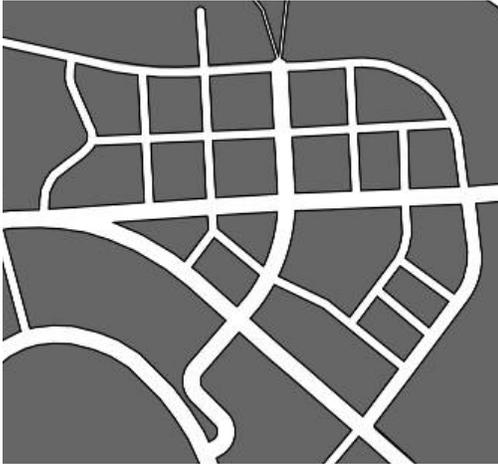
Real life examples of such block sizes, including mid town and upper Manhattan (about 900 ft x 250 ft), and City of Chicago outside downtown (600 ft x 300 ft), will be provided for illustrative purposes.

In addition to all the ones listed in the section above, potential block size examples applicable to Tysons Corner include:

- 1) Block size of 600 ft x 300 ft will have total perimeter length of 1800 ft and length-width ratio of 2:1
- 2) Block size of 600 ft x 600 ft will have total perimeter length of 2400 ft and length-width ratio of 1:1
- 3) Block size of 900 ft x 300 ft will have total perimeter length of 2400 ft and length-width ratio of 3:1. The long side should be divided by a pedestrian connection.
- 4) Block size of 800 ft x 400 ft will have total perimeter length of 2400 ft and length-width ratio of 2:1. The long side should be divided by a pedestrian connection.

Illustrative examples:

Street Grid in North Central district:



Street grid in Old Courthouse South district:



Examples of mid-block pedestrian connections:
Office & Retail



Residential & Retail



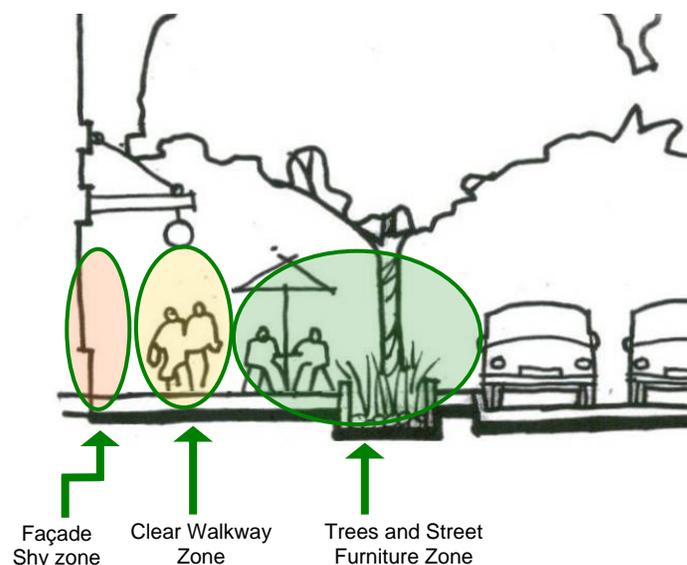
Street Types and Streetscape

In order to create vibrant streets and a walkable pedestrian network, an enhanced grid of streets is required that is designed to provide more direct connections between various locations and better accommodates both cars and pedestrians. Five basic types of streets are proposed to meet the needs of a growing and changing Tysons. The street types are:

1. Major Arterial
2. Medium Arterial
3. Minor Arterial
4. Main Street
5. Local Street

There are multiple variations of each street type. Each street type, however, serves a specific function and has specific design features. There are three elements of the streetscape for each street type:

1. Tree and Street Furniture Zone: This is a portion of the sidewalk adjacent to the vehicular travel or on-street parking lanes and includes elements like trees, planters, street lights, news stands, bike racks etc.
2. Clear Walkway Zone: Next to the Tree and Furniture Zone is the Pedestrian Clear Walkway Zone, defined as an unobstructed area serving as circulation space for pedestrians.
3. Façade Shy Zone: This is the narrow area between sidewalks and the building facades where building entrances, storefronts and other interactive façade elements are located. These elements help define the character of the place, offer shelter from sun and rain, and provide visual interest for both pedestrians and motorists. At a minimum, about one foot adjacent to a building front is considered part of the Shy Zone.



Each street type is described below, with representative typical cross sections as examples. In future iterations, plan views of the streetscape, along with photo images of street type and streetscape examples will be provided.

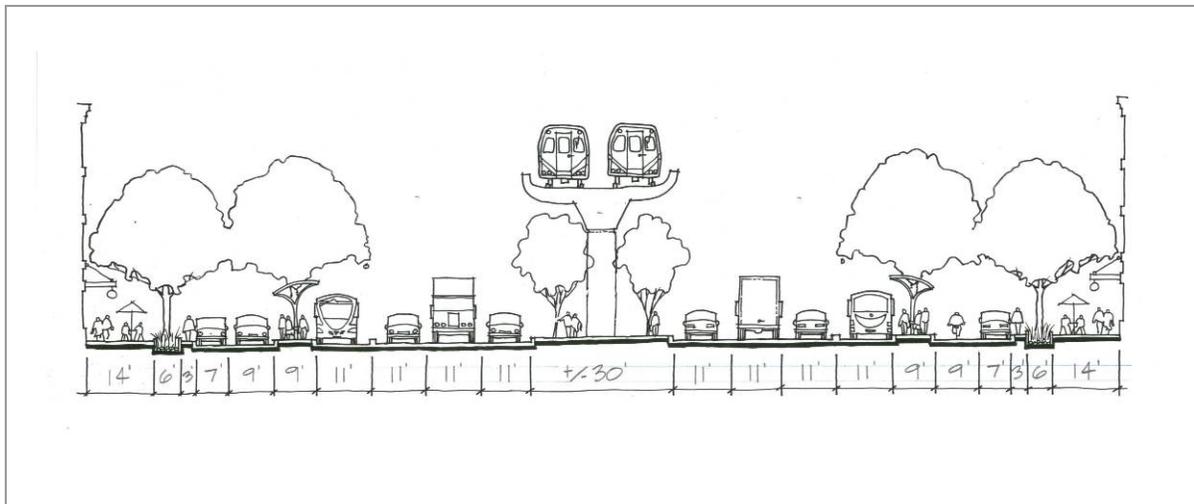
1. Major Arterial

Major arterials are the most important multimodal connectors and thoroughfares within Tysons Corner. In addition to carrying the biggest volume of automobile traffic they also accommodate the Metrorail, circulator, bus, bike and pedestrian modes within their rights-of-way. Route 7 and Route 123 are the two major arterials within Tysons Corner, connecting Tysons with the surrounding communities and the rest of the metropolitan region via Dulles Toll Road and the Beltway.

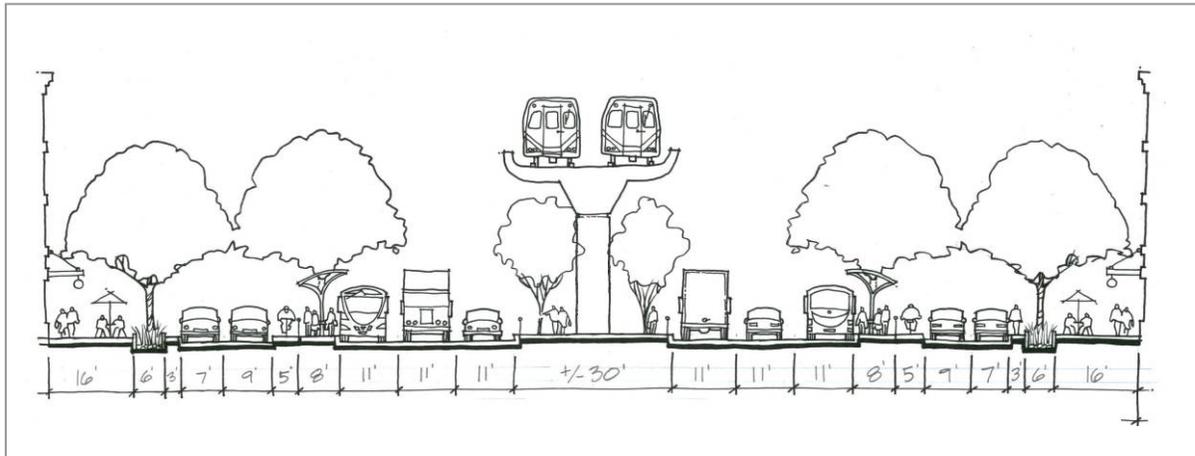
a. Street Section

There are many street section variations of major arterials within Tysons Corner depending on the location. A typical portion of this street type, however, has three travel lanes in each direction, with wide sidewalks and bike lanes on each side. It is divided by a wide median that, in addition to being a pedestrian refuge, also accommodates the Metrorail on portions of Route 7. Some portion of major arterials may include dedicated lanes for the circulator system, and slow-moving service lanes with on-street parking serving the street level uses on either sides.

Major arterial street section Example I



Major arterial street section Example 2



b. Streetscape

The streetscape concept for major arterials includes evenly spaced trees, planters, streetlights, street furniture, sidewalks, bike paths and bus stops.

Tree and Street Furniture Zone:

- a. Street Trees and Planters: A typical portion of a major arterial should be planted with rows of major shade trees on both sides of the street at about 40 foot spacing, using trees that are about 3-inch caliper in size at the time of planting. The trees on sidewalks can be located in tree pits, grates, planters, or planting strips depending on the level of activity of the streetscape and associated street. The planters should occur closest to the sidewalk, leaving room adjacent to the road for street lighting and signage.
- b. Street lighting: Street lighting should be distinctive, and designed for both pedestrian and vehicular use. The following guidelines are provided for achieving the boulevard streetscape character:

Clear Walkway Zone:

- a. A minimum 8 feet of clear unobstructed pedestrian right of way should be provided throughout the length of the major arterials on both sides.

Façade Shy Zone:

- a. No building element should project more than 6 inches, and must not obstruct movement and safety of pedestrians in any way.
- b. All the elements like awnings and weather shades that project over sidewalks must be at least 8 feet or higher.

Streetscape (Insert Plan)



Example: A major arterial sidewalk with various zones



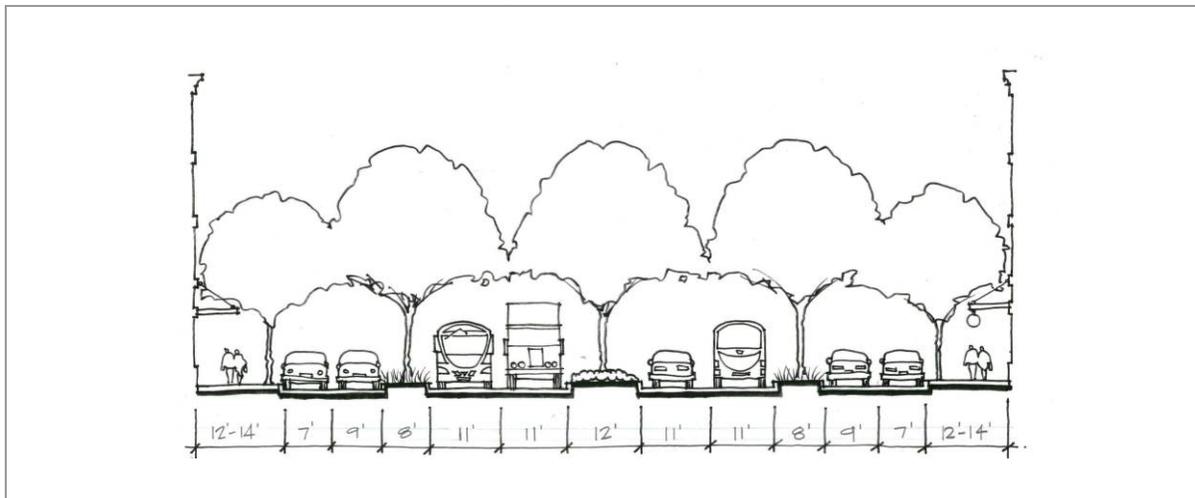
2. Medium Arterial

Medium arterials within Tysons Corner play a very important role in taking the pressure off of the major arterials and helping them become pedestrian friendly multimodal streets instead of asphalt barriers possessed by zooming auto traffic. Portions of medium arterials will also accommodate circulators and provide desirable addresses to new business and residential development. Boone Boulevard extension and International Drive are two examples of medium arterials within Tysons Corner.

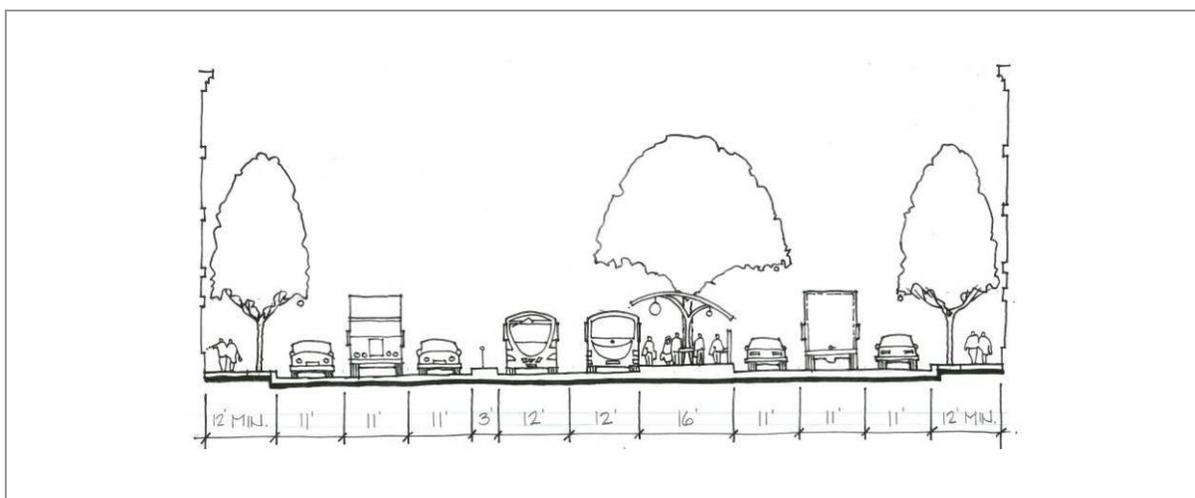
a. Street Section

Depending on their context and location the street sections of medium arterials vary significantly within Tysons Corner. A typical portion of this street type generally has two to three travel lanes, wide sidewalks and bike lanes on either side. It is generally divided by a 12 foot wide median that also serves as a pedestrian refuge. Some portions of medium arterials may have on-street parking served by the side lanes and can be very encouraging to street level retail activities. Other portions of medium arterials could also include dedicated circulator lanes.

Medium arterial street section example I:



Medium arterial street section example II: with Streetcar



b. Streetscape

The streetscape concept for medium arterials includes evenly spaced trees, planters, streetlights, street furniture, sidewalks, bike paths and bus stops.

Tree and Street Furniture Zone:

- a. ...
- b. ...

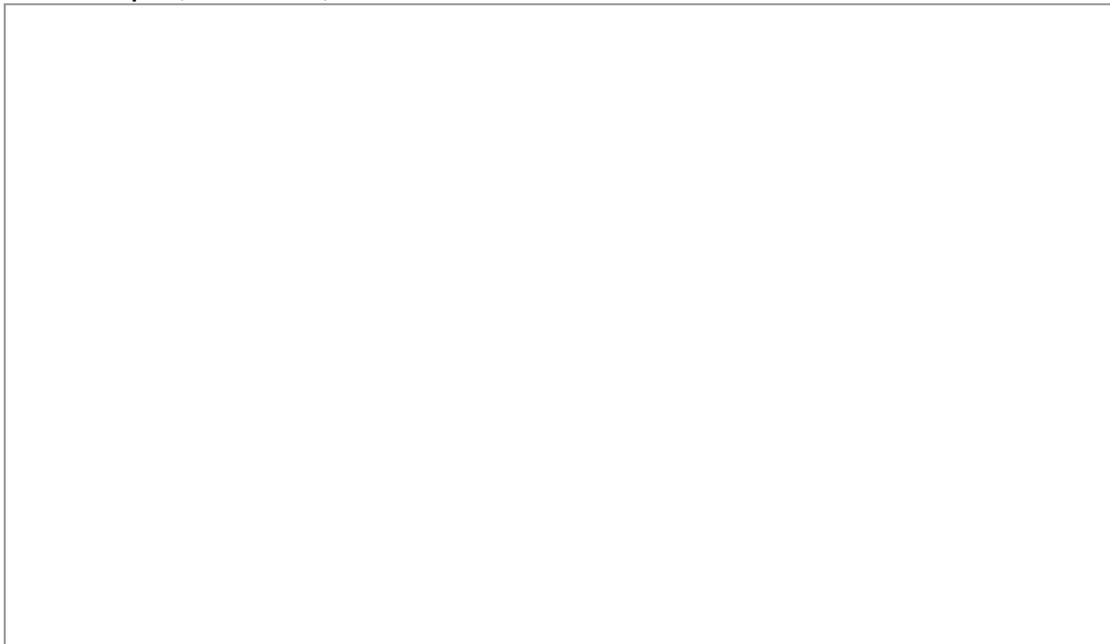
Clear Walkway Zone:

- a. ...
- b. ...

Façade Shy Zone:

- a. ...
- b. ...

Streetscape (Insert Plan)



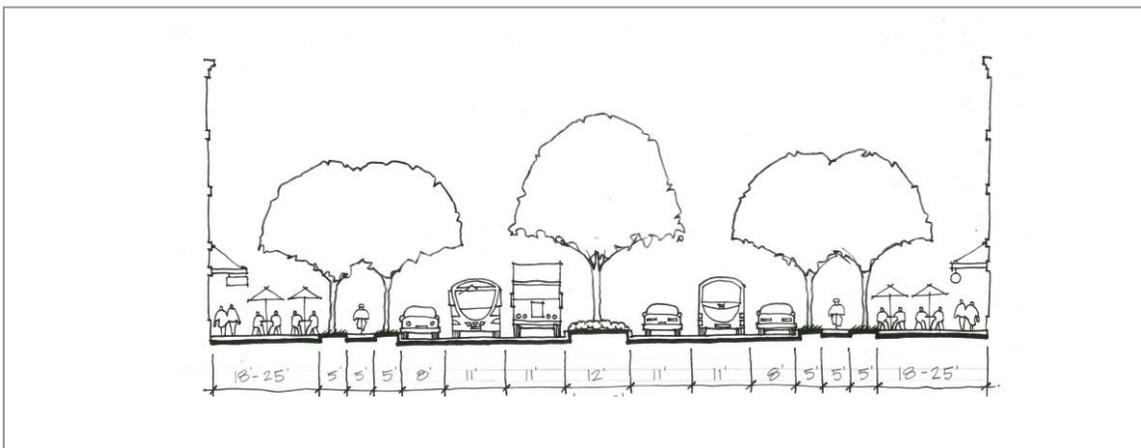
3. Minor Arterial

Minor arterials are relatively lower volume streets extending into the interior of Tysons and connecting the residential and employment uses in the non-station areas with the Metro station areas. Uses and character of minor arterials range from transit oriented mixed use with street level retail within the station areas, to neighborhood residential within non-station areas like East Side and North Central. Many portions of minor arterials also accommodate circulators on shared or dedicated lanes. Spring Hill Road, Jones Branch, Westpark Drive and Old Meadow Road are a few examples of minor arterials within Tysons Corner.

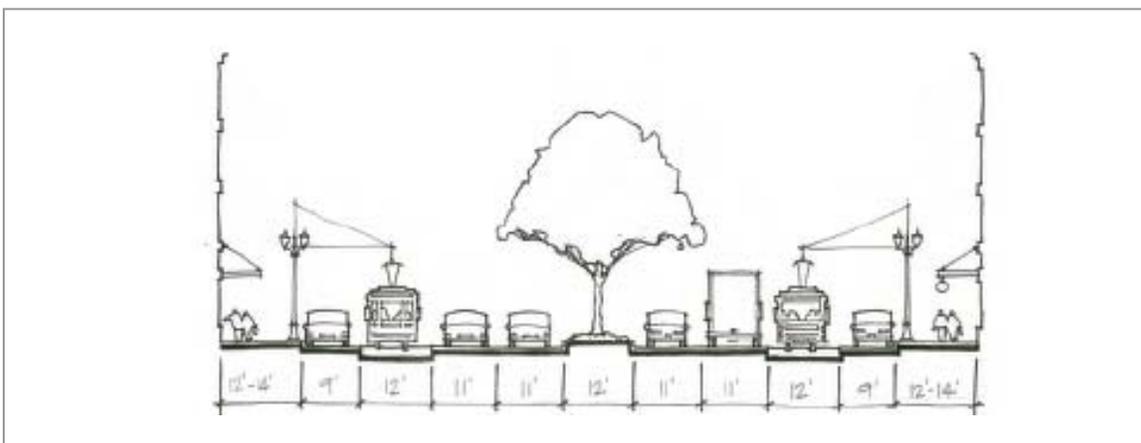
a. Street Section

The street sections of minor arterials vary significantly to reflect specific characteristics of the districts. A minor arterial within the station areas could have two travel lanes in each direction with an 8 foot to 12 foot median and on-street parking on either side. Wide sidewalks with trees, street furniture and restaurant seating are characteristic of minor arterials within station areas. Circulators generally occupy the outermost lane while sharing the right of way on minor arterials.

Minor arterial street section example I



Minor arterial street section example II: with streetcar



b. Streetscape

The streetscape concept for medium arterials includes evenly spaced trees, planters, streetlights, street furniture, sidewalks, bike paths and bus stops.

Tree and Street Furniture Zone:

- a. ...
- b. ...

Clear Walkway Zone:

- a. ...
- b. ...

Façade Shy Zone:

- a. ...
- b. ...

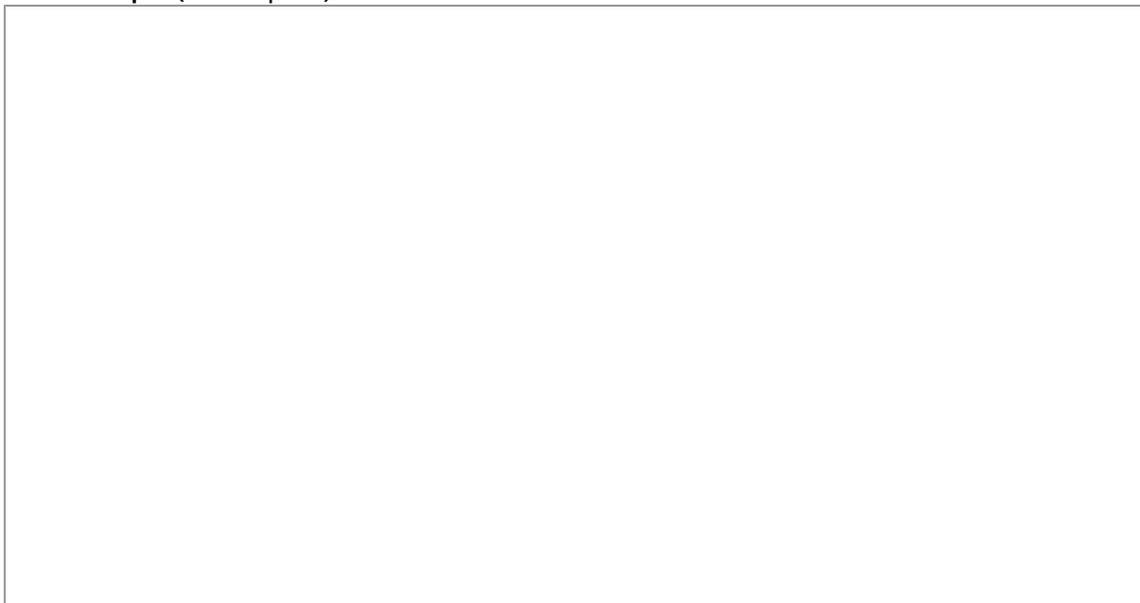
Example: Minor arterial w/ on-street parking



Example: Arterial with Circulator



Streetscape (insert plan)



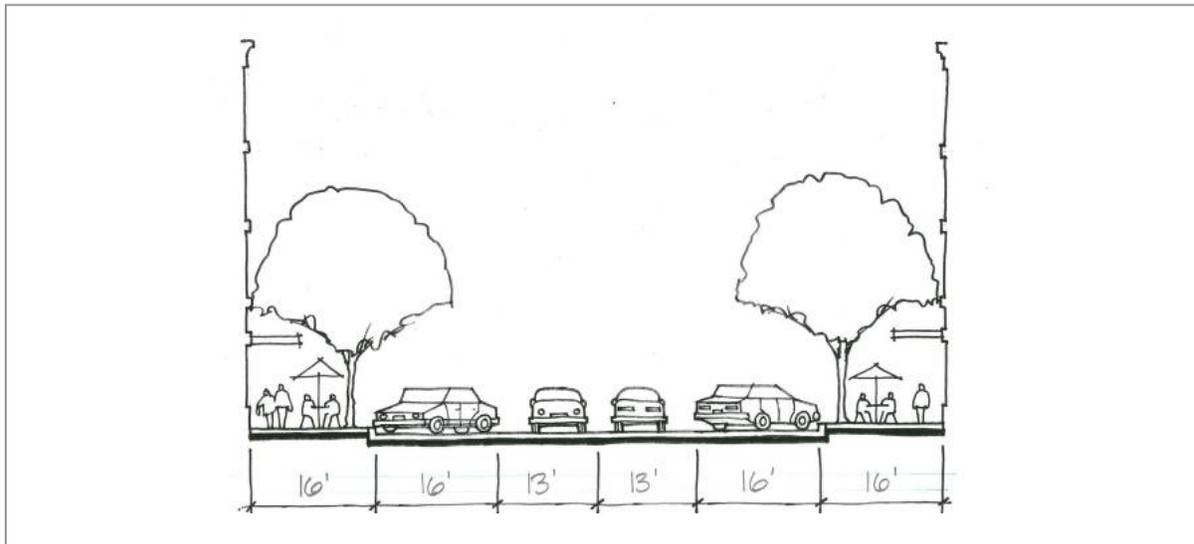
4. Main Street / Retail Street

Main streets are special streets generally extending perpendicular to the stations or within close proximity of the station areas. They carry very slow-moving traffic with retail uses such as restaurants, coffee shops, and bookstores on either side at street level and office or residential uses on upper levels.

a. Street Section

A main street typically has one travel lane on either side. Typically they are slow-moving lanes with traffic calming elements like bulbouts at intersections, frequent pedestrian crossings with paver blocks, and diagonal or parallel on-street parking. They have wide sidewalks rich with carefully designed landscape elements and street furniture to maximize walkability. The building facades at pedestrian level should have a minimum of 70% of their surfaces punctuated with entrances, windows, show windows and other interactive elements.

Main Street Typical Section Example:



b. Streetscape

The streetscape concept for medium arterials includes evenly spaced trees, planters, streetlights, street furniture, sidewalks, bike paths and bus stops.

Tree and Street Furniture Zone:

- a. ...
- b. ...

Clear Walkway Zone:

- a. ...
- b.

Façade Shy Zone:

- a. ...
- b. ...

Example: Main Street w/ Diagonal Parking



Example: Main Street Activities



Streetscape (plan)



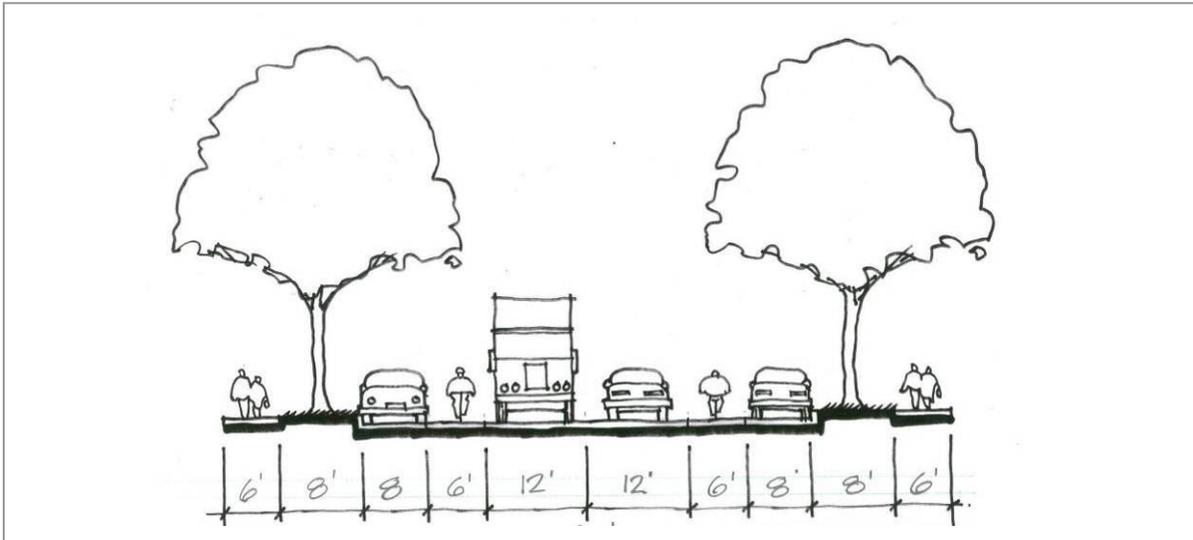
5. Local Streets

Local streets are generally the lowest volume streets within Tysons Corner. They carry slow-moving traffic and can have frequent crosswalks, stop signs and other traffic calming elements. They serve residential or employment uses on either sides with entrances and windows opening on the sidewalks. Local streets typically connect with minor or medium arterials.

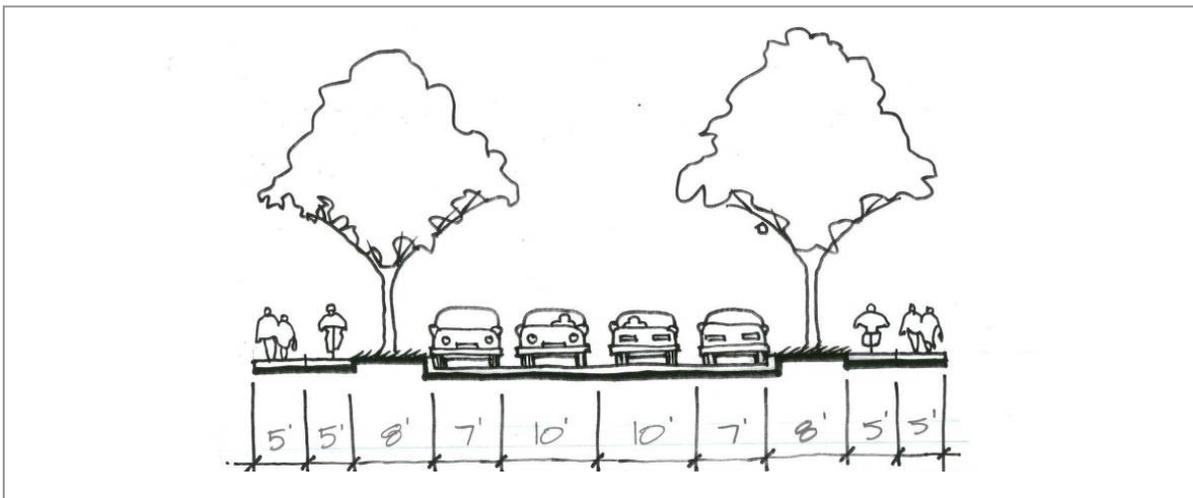
c. Street Section

Local street sections are generally narrow with one lane in either direction and flanked by bike lanes and on-street parking on either side. Sidewalks are a minimum of 6 feet wide lined with trees planters and other landscape elements.

Local Street Section Example



Neighborhood Residential Street Section Example



b. Streetscape

The streetscape concept for medium arterials includes evenly spaced trees, planters, streetlights, street furniture, sidewalks, bike paths and bus stops.

Tree and Street Furniture Zone:

- a. ...

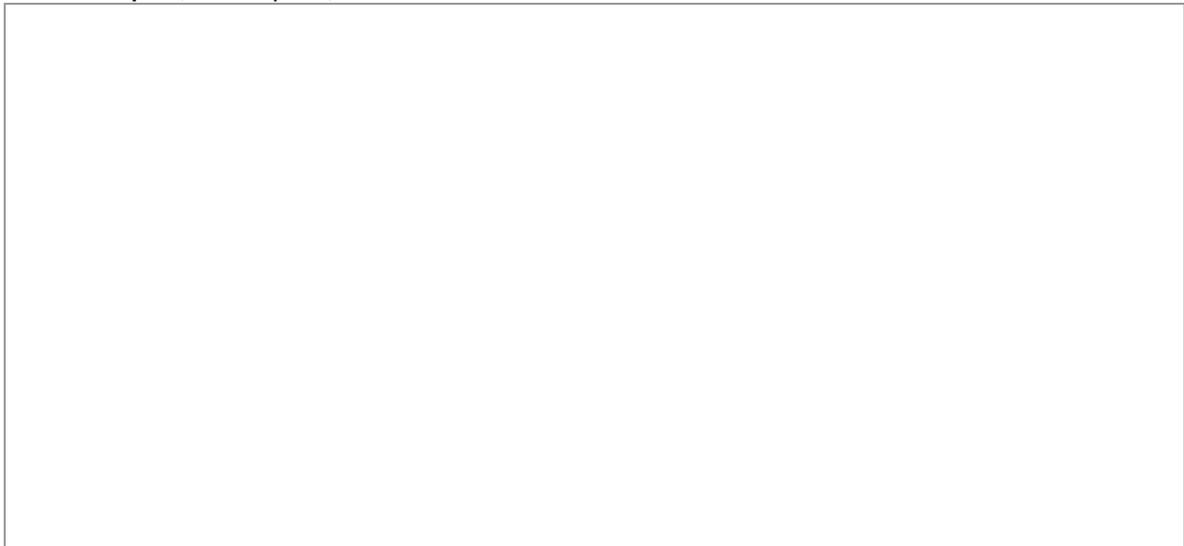
Clear Walkway Zone:

- a. ...

Façade Shy Zone:

- a. ...

Streetscape (insert plan)



Residential Street with on street parking



Appendix 1: Potential Block Sizes

Example of allowed Block Sizes (ft x ft)	Perimeter Length (ft)	Length-width ratio	Example (approximate)
200 x 200	800	1:01	Portland Blocks
300 x 150	900	2:01	
300 x 200	1000	1.33 : 1	
300 x 300	1200	1:01	
400 x 300	1400	1.33 : 1	Chicago Loop/Downtown
400 x 400	1600	1:01	
500 x 250	1500	2:01	Manhattan - downtown
500 x 300	1600	1.67 : 1	
500 x 400	1800	1.25 : 1	
600 x 300	1800	2:01	Chicago outside downtown
900 x 250	2400	3.6 : 1	Manhattan - Midtown