



I: INTRODUCTION

In the 1950s, Tysons was a rural area of Fairfax County, marked by the crossroads of Routes 7 and 123 and a general store. In the 1960s, the Tysons Corner Center, a large regional mall, was opened, beginning the area's transformation into a major commercial center. Later Tysons attracted a second regional mall, the Galleria at Tysons II, and the county's largest concentration of hotel rooms, including those at the Ritz Carlton and the Sheraton Premiere. Tysons has also become home to several Fortune 500 headquarters and many other prominent national firms, and in 2010 had around one-quarter of all of the office space in Fairfax County.

The construction of the Capital Beltway and the Dulles Airport Access Road in the 1960s improved Tysons' access to highway and air transportation. This made Tysons one of the region's most strategic locations for capturing suburban office and retail development. The subsequent transformation of Tysons was part of a nationwide phenomenon that shifted many traditional business functions from downtowns to the suburbs. Tysons was at the forefront of this trend, and, in fact, was identified as the archetypical "Edge City" by Joel Garreau in his 1991 book of the same name.

Tysons, with its large concentration of office and retail development, is well positioned to take advantage of the Metrorail's new Silver Line. This line diverges from the Orange Line west of the East Falls Church station, and will ultimately extend beyond the Washington Dulles International Airport into Loudoun County. Four Metro stations are located in the Tysons Urban Center: McLean, Tysons Corner, Greensboro, and Spring Hill. The arrival of Metrorail service provides an opportunity to transform Tysons yet again, from an "edge city" into a true urban downtown for Fairfax County. The remade Tysons should provide a better balance of housing and jobs, a transportation system that includes facilities for pedestrians, bicyclists and motorists, and a green network that links existing stream valley parks with open space and urban parks located throughout the area.

Map 1 shows the boundaries of the Tysons Urban Center, and the locations of the four Metrorail stations.

MAP 1



LOCATION AND BOUNDARY

Tysons encompasses approximately 2,100 acres (including road rights-of-way) in northeastern Fairfax County, about halfway between downtown Washington, D.C. and Dulles International Airport. It is located at the confluence of the Capital Beltway/Interstate 495 (I-495) with the Dulles Airport Access Road and Dulles Toll Road (DAAR, Route 267), Leesburg Pike (Route 7) and Chain Bridge Road/Dolley Madison Boulevard (Route 123).

Tysons is roughly triangular in shape and contains the highest natural elevations in Fairfax County. It is bounded on the southeastern side by Magarity Road and on the southwestern side generally by the limit of commercial development along Gallows and Old Courthouse Roads and the natural areas of Old Courthouse Stream Branch. The residential areas on the western side of Gosnell Road flanking Old Courthouse Road are also part of Tysons. The DAAR forms the northern boundary of Tysons.

The residential communities surrounding Tysons, which include McLean, Vienna and Falls Church, help to make Tysons a good business location. These communities provide a wide range of housing types and a relatively large supply of housing near Tysons' employers. The communities surrounding Tysons also have many outstanding features, such as excellent public schools and one of the best educated and highly trained labor pools in the nation.

PLANNING HISTORY

As Tysons grew in the 1960s and early 1970s, its evolution as a dynamic and complex business center required new county studies every few years. In August of 1975, the Board of Supervisors adopted the Area II portion of the Comprehensive Plan, which established the Tysons Corner Complex Area as "... a special study area requiring continual monitoring and restudy ...". In September of 1975, the Board commissioned a special study and created a broad-based task force with representation from large and small businesses in the area, landowners of major undeveloped tracts, and residents of the area, as well as citizen leaders from the surrounding McLean and Vienna communities. As a result of this study, a revised Comprehensive Plan was adopted in June of 1978. The detailed land use recommendations that were provided by this amendment were the primary guide for land use and zoning decisions through 1993.

After 1978, the Tysons plan was amended by means of the Annual Plan Review (later Area Plan Review) or Out-of-Turn Plan Amendment processes. The most significant change was the addition of building height guidelines as a result of the 1984 Tysons Corner Height Study. These guidelines established maximum building heights to be considered during the zoning process, along with building mass, architectural interest and other features, in order to achieve the Plan's urban design objectives.

Between 1989 and 1991, the county's Comprehensive Plan underwent a major review known as the Fairfax Planning Horizons process. The first phase of Fairfax Planning Horizons resulted in the creation of the Policy Plan, which was adopted by the Board of Supervisors in August of 1990. At the same time, the Board adopted The Concept for Future Development and Land Classification System as a guide for the second phase of the Planning Horizons process, the update of the Area Plans. The Concept for Future Development designated Tysons as the county's Urban Center, and set forth a need for a Tysons special study to identify amendments to

the Comprehensive Plan that would guide the area's evolution to a more urban and pedestrian-oriented environment.

In 1990, the Board authorized a study of the Tysons Urban Center and appointed a 24-member task force to work with staff on this planning effort. This task force included representatives of local businesses, developers and civic associations. The resulting Plan Amendment, as adopted by the Board in 1994, incorporated concerns of the community, applicable countywide goals, and the overall objective to develop Tysons as the "downtown" of Fairfax County. A key feature of the 1994 Plan was the location of three Metrorail stations in Tysons. These stations were expected to serve as the catalyst to transform the area from a suburban to an urban area.

Over the next ten years, county, regional, state and national officials worked to ensure that Metrorail through Tysons would become a reality. The final Environmental Impact Statement (EIS) for this project identified four transit stations in Tysons, versus the three stations in the 1994 Plan. As a result of the greater certainty of Metrorail's alignment and station locations, in 2004 twenty proposals for redevelopment in Tysons were submitted under the county's Area Plan Review (APR) process. Since the Comprehensive Plan had not been revised to account for the specific locations of the four stations, the Planning Commission deferred all rail-related APR nominations to be reviewed in a Special Study of the Tysons Urban Center.

TYSONS LAND USE TASK FORCE

In May 2005, the Board established the Tysons Land Use Task Force and described its mission to update the 1994 Plan as follows:

1. Promote more mixed use;
2. Better facilitate transit-oriented development (TOD);
3. Enhance pedestrian connections throughout Tysons;
4. Increase the residential component of the density mix;
5. Improve the functionality of Tysons; and
6. Provide for amenities and aesthetics in Tysons, such as public spaces, public art and parks.

The members of the Task Force represented a wide range of community interests and perspectives. Between 2005 and 2008 the Task Force studied the issues and conditions in Tysons and looked at examples of how transit-oriented communities have been designed and implemented elsewhere in the U.S. The Task Force also formed six committees that met regularly, interacted with county staff and relevant experts, and provided detailed recommendations for Task Force review. Committee topics included transportation, affordable and workforce housing, implementation, livability and walkability, landowner coalitions, and communication.

The Board also directed the Task Force to engage in extensive public outreach to involve and incorporate the views and concerns of surrounding communities, citizen groups, smart growth advocates, businesses, employees, environmentalists and other special interests, in addition to landowners and developers. The full Task Force held over 60 public meetings in addition to the meetings of its subcommittees. Another 45 public meetings and workshops were held and attended by over 2,000 stakeholders. In addition, public input was obtained through the county's Tysons website. The input received from the public outreach initiatives helped to shape

the Task Force's recommendations. The recommendations and vision to transform Tysons were presented to the Board of Supervisors in September 2008.

The Board accepted the Task Force's Areawide Recommendations report and referred it to the Planning Commission and staff for the development of detailed Comprehensive Plan text. The Board directed that, in addition to the Task Force Recommendations, the Plan text be guided by the population and employment forecasts for Tysons developed by George Mason University's Center for Regional Analysis, and the transportation and public facility impact studies conducted in 2008 and 2009. Utilizing these analyses, as well as a fiscal impact analysis also requested by the Board, staff worked with the Planning Commission's Tysons Committee and the Tysons Land Use Task Force's Draft Review Committee to formulate the Plan Amendment, ST05-CW-1CP, which was adopted by the Board of Supervisors on June 22, 2010.



2: VISION FOR TYSONS

Imagine the future Tysons as a different, better place than today. Clusters of high density buildings surround the four Metrorail stations, and tree-lined streets connect neighborhoods. This vision for Tysons is not just about tall buildings. It is about creating a place in which people are engaged in their surroundings and a place where people want to be. Imagine seeing people at sidewalk cafes, walking or jogging down tree-lined boulevards, enjoying public art and outdoor performances, and playing in the parks. Over the long term the vision calls for:

- 75% of all development to be located within a 1/2 mile walk of Metro;
- An urban center that could include 200,000 jobs and 100,000 residents;
- A jobs/housing balance of approximately 4.0 jobs per household;
- A sustainable Tysons with restored streams, a green network of public parks, open spaces and trails, and green buildings; and,
- A redesigned transportation system with circulator routes, community shuttles, feeder bus service, and vastly improved pedestrian and bicycle routes and connections.

GUIDING PLANNING PRINCIPLES

The vision for Tysons is grounded in the following Guiding Planning Principles.

1. Move Tysons forward within its existing boundaries as the employment and commercial economic engine of the region and an expanding contributor to the tax base of Fairfax County.
2. Retain compatible transitions at the edges to adjacent neighborhoods through a combination of use, intensity, scale and/or building heights.
3. Transform Tysons from a suburban office park and activity center into a 24/7 urban center marked by the diversity of residents and workers, a wide range of ideas, opportunities, and activities, the quality of buildings, aesthetics, and open spaces, and connections and accessibility for all.

4. Reduce the time, cost, and inconvenience of accessing and moving within Tysons by promoting a functional and accessible system of pedestrian walkways, trails, shuttles, bike routes, a grid of streets, transit connections, and standard principles of trip reduction.
5. Reduce the suburban focus on isolated buildings, surface parking and moving vehicles through Tysons to somewhere else and connect new buildings, urban parks, structured parking, and pedestrian and bicycle accommodations to form engaging streetscapes and connected neighborhoods.
6. Attract mixed use transit-oriented development and private investment to Metrorail station areas and transit connection locations throughout Tysons, including increased housing supply, choices, and price points, service opportunities, and office space.
7. Engage people, communities, institutions, and the private sector with government to include in Tysons the distinctive architecture, civic focal points, cultural and educational institutions, places of worship, medical facilities, entertainment and recreation, libraries, and public safety facilities that mark environmentally sound, safe and inclusive urban communities.
8. Respect the unique natural features and topography of Tysons in all plans, expand useable and publicly accessible open space and improve the existing natural environment.

THE FRAMEWORK TO TRANSFORM TYSONS

The guiding principles provide a framework for the future of Tysons – one that envisions a dynamic community for residents, employees and visitors. The framework includes six elements that are essential to future development. While the details of each element will evolve over time, all are important and must be in place and working together for the vision to be realized. The six elements of the framework are described below.

1. Creating a people-focused urban setting. The Tysons of tomorrow will be a place for people. A people-focused urban setting will be created by providing mixed use, transit-oriented neighborhoods that promote pedestrian, bike, and transit use. The new transportation and land use concept for Tysons creates a people-focused urban setting by:
 - Encouraging transit-oriented development (TOD)
 - Improving the jobs/housing balance
 - Providing diverse and affordable housing
 - Creating defined neighborhoods
 - Protecting the edges
 - Incorporating community benefits
 - Creating excellence in the public realm
2. Redesigning the transportation network with a strong focus on transit. The creation of a multi-modal transportation system within Tysons will provide diverse and accessible transportation choices. The choices will encourage people to walk, bike or take transit to destinations within Tysons. Ultimately, Tysons could be a place where owning a car may be unnecessary and certainly is not essential. The transportation network should:

- Encourage mobility within Tysons
 - Establish and construct a grid of streets
 - Create a system of circulators
 - Promote regional connectivity
3. Placing a strong focus on the environment. The plan to transform Tysons recognizes the long-term value and importance of protecting and enhancing the environment; this can be achieved through such goals as reducing greenhouse gas emissions, restoring streams, encouraging sustainable development, and promoting the efficient use and conservation of resources. Some key features of environmental stewardship are:
- Low Impact Development (LID) techniques to control stormwater
 - Supporting the creation of environmentally sustainable buildings
 - Creating a network of parks, open spaces and trails
 - Conservation of resources such as energy and water
4. Developing a vibrant civic infrastructure. The transformed Tysons will include facilities and programs for arts and culture, recreation and education. These will be part of the essential fabric of a livable Tysons, and should be included in the initial planning for new development. Such facilities and programs should:
- Build upon educational excellence
 - Provide urban recreation facilities within Tysons
 - Meet the community's needs for cultural and arts facilities
 - Provide public art for public places
5. Enhancing Tysons as the county's major employment center and regional economic engine. Fairfax County is the heart of the Washington area technology sector and Tysons is its economic and employment center. Further, Tysons is one of the nation's largest employment and retail centers. The transformed Tysons is expected to continue to generate significant increases in revenues to the county from real estate taxes, sales taxes and business licenses. The county should continue to capitalize on Tysons' growth as a regional economic engine.
6. Creating an implementation strategy that provides the flexibility, accountability, and resources necessary to achieve the vision, including the creation of an entity to focus on implementing the vision for Tysons. A strong implementation strategy will make the vision of a transformed Tysons a reality. The implementation strategy should specify an approach that guides and coordinates individual projects with the phasing of urban infrastructure and community benefits that are necessary to achieve the overall vision. The balancing of opportunities for development with needs for appropriate infrastructure will provide certainty for landowners as well as county residents that the vision will be implemented as desired. The implementation strategy should include:
- Detailed planning that links infrastructure provision with development
 - Creation of an implementation entity
 - Establishment of a funding strategy for public infrastructure

- Revision of the regulatory framework
- Formation of public-private partnerships

ACHIEVING THE VISION

The vision of the future Tysons is one of greater density, a synergistic mix of uses, more pedestrian and transit friendly, and sustainable in design and function. This new Tysons will be highly attractive with residential communities where people will want to live, raise families, and retire. Tysons will be an active 24-hour place, providing a variety of residential, office, retail, civic and entertainment uses that will attract tourists and other visitors. Pedestrian-friendly connections and frequent transit service will enable people to move easily within Tysons or to other portions of the region on Metrorail's Silver Line. High quality parks and open space will give people a variety of places to gather and socialize.

The auto-oriented streets of Leesburg Pike (Route 7) and Chain Bridge Road/Dolley Madison Boulevard (Route 123) will be transformed to tree-lined boulevards designed to calm traffic through the most urban parts of Tysons while still moving traffic. People will be able to walk or bike safely within Tysons to nearby businesses. Circulator routes will provide frequent transit access to almost all areas within Tysons. These elements will constitute a new and forceful example of how to realize automobile trip reduction.

Planning Horizon

The transformation of Tysons will occur incrementally over the next 40 or more years. New buildings, streets, infrastructure, and public spaces will be completed over time. Development occurring in the early years of the Plan's implementation will significantly advance the street grid, parks, and public facilities, and provide the framework and infrastructure for growth occurring in later years. Development, infrastructure, and public facilities should be monitored regularly. Subsequent planning efforts should continue to move Tysons toward the ultimate vision.

Major Elements of the Plan

Redevelopment proposals will be evaluated for conformance with all of the guidance provided in the Comprehensive Plan. The following are major elements of the Plan that are necessary to achieve the vision for Tysons:

- Mix and arrangement of uses
- Affordable and workforce housing
- Green buildings
- Stormwater management
- Consolidation performance objectives, as recommended in the Land use section
 - Demonstrating how other unconsolidated properties in the subdistrict and in the general vicinity of the proposal can develop in conformance with the Plan
- Transportation
 - Grid of streets on and off-site

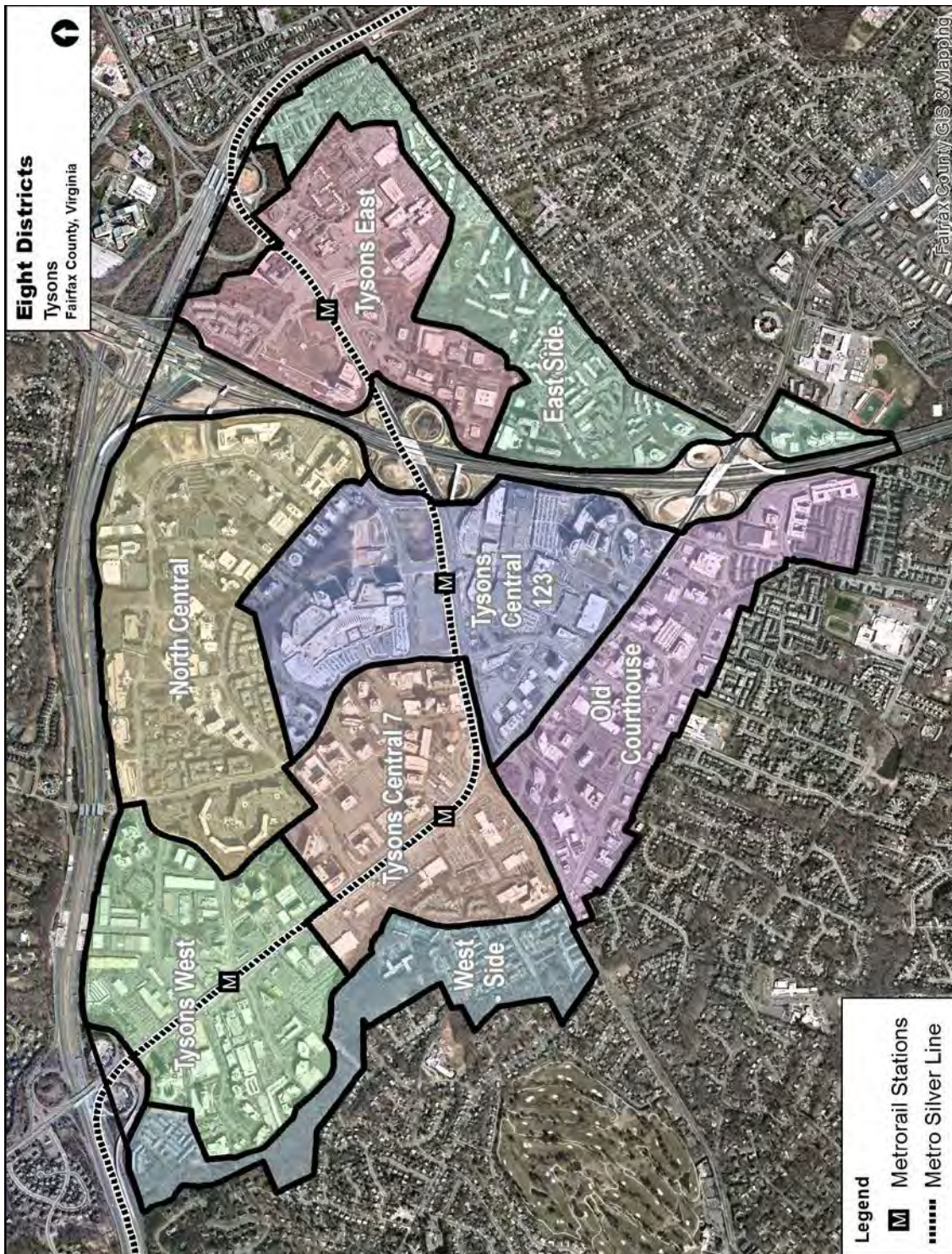
- Vehicle trip reduction objectives
- Parking management
- Phasing to transportation improvements and programs
- Traffic impact analysis evaluating three time periods: (1) first phase, (2) interim phases (as needed), and (3) Plan build-out
- Implementation of a multi-modal transportation network
- Pedestrian circulation
- Urban design
 - Achievement of the building, site design, and public realm design guidelines to achieve the urban aesthetic vision for Tysons
 - A variety of buildings heights with the tallest buildings in the ranges specified by the building height map
 - Shadow and wind studies demonstrating that the design creates an inviting environment and does not cause a canyon effect
- Urban park standards
 - Provision of new urban parks onsite within new developments
 - A variety of park types to meet the range of urban parks needs
- Active recreation facilities
 - Offsetting the impact to facility service levels by providing recreation facilities onsite and within Tysons
 - Collaboration among Tysons landowners to provide adequate land area for full sized athletic fields
- Public facilities

DISTRICTS WITHIN TYSONS

The transformed Tysons will be organized around eight districts, each with a mix of land uses. The transit-oriented developments (TODs) around the four Metrorail stations will resemble intense and busy downtowns. The four non-TOD Districts will include lively neighborhoods leading to the edges of Tysons. Closer to the neighborhoods outside of Tysons, the pattern of development will carefully transition down to a scale and use that respects the adjacent communities. Map 2 shows the boundaries of the eight districts in Tysons.

Each of the eight districts in Tysons is envisioned to have a different mix of land uses and intensities. Within these districts there will be places to work, to live, to shop, and to play. Collectively, the districts of the transformed Tysons will work together to create an urban center or downtown for Fairfax County. All of the districts within Tysons will be equally important to its overall success.

Each TOD and non-TOD District will have a different character, as described briefly below. People who live and work in Tysons will use all of these places, and each district will be connected to the others. Boundaries between the districts will be blurred as people move



Note: At the appropriate time, the county and community stakeholders may consider modifying the district names in light of the new metro station names and other factors.

seamlessly from one place to the next. The connectedness and uniqueness of each place will be mutually supportive, creating a 24-hour urban center of great vitality.

TOD Districts

Each of the four station areas is considered a TOD District, and is described briefly below.

Tysons West: Tysons West should be a signature gateway to the urban center. Streets leading to and from the Spring Hill Metro station are expected to redevelop with retail uses, drawing people off Metrorail and into the neighborhoods. In addition, Tysons West is an optimal location for an arts and entertainment district, including restaurants and entertainment options that stay open after the workday ends.

Tysons Central 7: Tysons Central 7 District, surrounding the Greensboro Metro station, has two subdistricts, separated by Leesburg Pike. The North Subdistrict is oriented towards Greensboro Drive and is envisioned to be a vibrant 24-hour mixed use center with a high concentration of office space. The South Subdistrict is oriented towards Leesburg Pike and is envisioned as a civic center with a mix of public, residential and commercial uses.

Tysons Central 123: Tysons Central 123 is located to the north and south of the Tysons Corner Metro station. This district contains two major shopping malls and will remain the region's signature shopping destination. Redevelopment is expected to add street-front, ground floor retail and entertainment, and high-rise residential buildings. In addition, high-rise hotel and conference facilities will provide services to local residents and will be a short walk from the office concentration in the Tysons Central 7 District.

Tysons East: Tysons East, located around the McLean Metro station, serves as a signature gateway for those entering the urban center from the east. The defining focus of Tysons East will be Scotts Run, which is envisioned to transform into a great urban park surrounded by mixed use development, including office, residential, hotel, support retail and service uses. In addition, the area could include institutional and public uses, such as educational and recreational facilities.

Non-TOD Districts

The four Non-TOD Districts are generally located between TOD Districts and the edges of Tysons that are adjacent to surrounding residential communities. Each is described briefly below.

West Side: The West Side District is developed with two residential neighborhoods and includes the Old Courthouse Spring Branch stream valley park as a key feature. Because of its location on the edge of the urban center, this district serves as a transition from planned high intensity mixed use in the Tysons West and Tysons Central 7 TOD Districts to the single-family neighborhoods just outside of Tysons.

Old Courthouse: The Old Courthouse District will have smaller scale office buildings and residential developments than TOD Districts and will serve as a transition area between the Tysons Central 123 District and the neighboring communities. With additional infill and redevelopment, portions of this district will evolve into a neighborhood that supports an active 24-hour environment where people go to restaurants or stores after work.

North Central: The land use pattern in the North Central District will allow for a transition between Tysons Central 123 and communities north of Tysons. Office uses would be mostly located adjacent to the Dulles Airport Access Road and Dulles Toll Road (DAAR, Route 267), while residential land uses could be the focus around the proposed circulator route. Future development along this route could result in vibrant, mixed use residential neighborhoods, with local-serving retail, dedicated parks and civic uses, and a pedestrian-friendly street network.

East Side: The East Side District serves as a transition area between higher intensity TOD Districts and the adjacent Pimmit Hills neighborhood abutting Tysons. Portions of this district will redevelop into urban residential neighborhoods, including limited retail and office uses serving the local residential population and providing Tysons with some live-work opportunities.



3: IMPLEMENTATION

Transforming Tysons will necessitate a departure from past approaches to planning. Identifying the vision will not be enough; implementation is key to realizing the vision.

The new vision seeks to transform Tysons from a suburban “edge city” into a truly urban place – the new downtown of Fairfax County. This vision provides a unique opportunity to make Tysons a better place to live, work and play.

The Tysons of tomorrow will be characterized by housing located close to jobs, abundant transit, shopping, and public spaces. The new Tysons will create a living environment less dependent on the automobile. Green architecture and site design will reduce the impact of development on the environment. Density will be highest near Metro to provide a more intense mix of housing, shopping, and employment. New types of housing will be designed to meet the needs of smaller households and people on fixed incomes. Streets will be transformed by implementing design standards that encourage walking, biking, and transit use and de-emphasize the single-occupancy automobile. Existing parks and open spaces will be enlarged and restored, and new ones will be created. The needs of the greater community, the public sector and the private business sector will be balanced within Tysons in an open and transparent process to deliver the vision.

IMPLEMENTATION STRATEGY

Transforming Tysons will require an implementation strategy equal to the challenge, and a strong will to see it through. Central to the strategy will be building and assembling the tools and the partnerships necessary to achieve the vision for a transformed Tysons. It will be an evolving strategy that will be refined and completed over many years.

Implementation of the Plan will be the most complex component of Tysons’ future. The process must be transparent, focused and thorough. Priorities and responsibilities for implementation are outlined in this chapter. Successful implementation will require commitment to the vision and Guiding Principles; committed leadership; dedicated professional staff at the

county and other agencies; the involvement of citizen participants; and private and non-profit sectors willing to work together and with county staff and the surrounding communities. The elements of the implementation strategy include:

Detailed Planning: Detailed planning is required in order to refine and update the general guidance in the Comprehensive Plan, which will be better informed by completed studies and other planning elements over time.

Tysons Partnership: The Tysons Partnership was created in 2011 as a membership organization to provide a forum for stakeholders within Tysons to take an active role in implementing the Plan and the vision for Tysons.

Infrastructure Funding: Funding strategies (including public-private partnerships) should be identified. The feasibility of various financial tools should be assessed, and the mechanisms for financing specific portions of the plan must be identified.

Implementation Framework: Regulatory tools, policy guidance, and evolving processes are needed to implement the type and intensity of new development and to execute the Tysons Urban Design Guidelines.

Public-Private Partnerships: In addition to the implementation framework, public infrastructure improvements and public/private partnerships will be essential in implementing the Plan.

Private Partnerships: Cooperation among landowners will be necessary in order to obtain land for public facilities, parks and open space, the grid of streets, and future circulator rights-of-way within Tysons.

Phasing: A dynamic and evolving phasing plan tying future development to specific public improvements will be critical to ensure that transportation facilities and services and other urban infrastructure and public amenities will be in place as growth occurs.

DETAILED PLANNING

District Plans

Plan language for each of Tysons' eight districts addresses the mix and intensity of land uses and includes additional recommendations for achieving the envisioned future. Over time it is anticipated that the recommendations for each district will need to be refined and updated to reflect new and approved development.

Tysons Circulator

A key component of the future transportation network is a transit Circulator System, linking Metro stations and other areas of Tysons. It is anticipated that this Circulator System will be developed in phases. The first phase is bus service provided in existing rights-of-way. However, over the long-term this service is envisioned to evolve into a higher level of transit service.

Parks and Open Space

Parks provide a sense of place for Tysons and individual neighborhoods. The successful implementation of the parks and open space network and the urban standards for parks and recreation will be critical for Tysons' transformation. Parks should provide:

- Respite from the urban environment,
- A public place to play, socialize and relax, and
- Connectivity to a network of pocket parks, public plazas and common greens.

Guidance on the network of parks, open space, trails and recreational facilities is provided in the Areawide Parks and Recreation recommendations. This guidance will need to be periodically reviewed and refined to reflect the needs and desires of the residents and workers. *The Tysons Park System Concept Plan* was published by the Park Authority in 2014 as a supplement to the Comprehensive Plan to provide further guidance on implementation of the park and open space network.

Environmental Stewardship Strategies

The transformed Tysons should be a model of environmental sustainability. In order to make this a reality, strategies for protecting natural resources, managing stormwater, restoring streams, promoting energy conservation, and minimizing greenhouse gas emissions should be updated and refined. Monitoring programs will need to be established to document the effectiveness of these activities and determine whether these strategies need to be modified in order to achieve the outlined goals.

Civic Infrastructure

An urban, livable Tysons should offer opportunities to participate in the arts, culture, recreation, and the exchange of ideas. Essential civic infrastructure may include arts centers, conference or convention centers, libraries, schools, and public art.

A centrally located civic center is envisioned in Tysons. This site may include a central library, possibly co-located with an arts center. There may be a need for at least two new schools in Tysons. There is also potential for a local university to establish a presence in Tysons which may provide continuing education opportunities for residents, workers and seniors.

Intelligent Transportation Systems (ITS)

Since the Tysons Urban Center should include ICT infrastructure, strategies and programs will need to be developed to ensure that all residential, commercial and public use structures in the Urban Center are designed and equipped to enable such information and communications networking.

IMPLEMENTATION ENTITY

The Tysons Partnership, a nonprofit membership association, was established in 2011 as an umbrella organization for businesses, residents, land owners, developers, civic groups, and professional consultants located in Tysons. The Partnership is organized around topic-focused committees such as marketing/branding and transportation. Fairfax County is an ex-officio

member of the Partnership and its Board. The Tysons Partnership provides a mechanism for the public and private sector to work together to implement the long range vision for Tysons.

INFRASTRUCTURE FUNDING

New strategies for funding infrastructure and amenities are critical to support the transformation of Tysons into a great urban place.

At the direction of the Board of Supervisors, the Planning Commission's Tysons Committee developed recommendations for funding transportation improvements for Tysons. These recommendations were developed through an inclusive process, which included 23 public meetings over a period of seventeen months. On October 16, 2012, the Board heard public comment on the Planning Commission's funding recommendations and endorsed the Planning Commission's funding plan.

The recommendations endorsed by the Board are based upon the goals of developing a comprehensive solution for funding the set of infrastructure improvements identified in the Plan to support the 113 million square feet of development anticipated to occur by 2050. In addition, the funding plan allows for flexibility in funding options and sources, as well as for adjustments to be made based upon the pace of development.

One key component of the funding plan is to provide revenue from rezoning cases to fund a portion of the local grid of streets in Tysons. On January 8, 2013, the Board established the Tysons Grid of Streets Transportation Fund with guidelines for implementing the fund.

Another key component of the funding plan is to identify multiple sources of revenue to fund the Tysons-wide transportation improvements identified in Table 7 in the Transportation section of the Plan. These improvements would be funded through multiple funding sources at the federal, state, regional, and local level and through contributions from the private sector. On January 8, 2013, the Board established the Tysons-wide Transportation Fund with guidelines for implementing the fund.

The Board established the Tysons Transportation Service District on January 8, 2013, as a key component of the funding plan to provide for Tysons-wide roadway and transit projects. The Tysons Transportation Service District is a special tax assessment district which collects revenue based upon the assessed value of all properties within the district. Revenue generated by the district may only be used to make transportation improvements within the service district.

As transportation projects are planned and implemented, the county and the private sector should continue to proactively seek federal, state, and other funding opportunities to maximize revenue from state and federal funding partners so as to minimize the impacts of funding the transportation infrastructure on county taxpayers.

IMPLEMENTATION FRAMEWORK

The ability to achieve the vision requires appropriate regulatory mechanisms to implement the key land use and transportation elements of the vision. The Zoning Ordinance is the primary tool for implementing the planned mix of uses and intensities. To implement the vision, a new Tysons zoning district, Planned Tysons Corner Urban District (PTC), was adopted

in 2010. Rezoning applications in Tysons for development proposals that utilize a redevelopment option must be submitted under this district. Modifications to proffered rezonings that were approved prior to the creation of the PTC District may be permitted under the existing zoning district if the proposed change does not increase intensity by 5% of the approved floor area, not to exceed 100,000 square feet.

Following the adoption of the 2010 Tysons Plan, the county initiated a number of changes to regulations and development review processes to assist in implementing the vision for Tysons:

- The county created a new organizational approach to evaluating development proposals within Tysons, forming an interdepartmental “Core Team” of dedicated staff to review rezoning applications and provide technical analysis. This approach ensures that each development application is dealt with in a fair and equitable manner, and promotes collaboration among staff and cooperative solutions among applicants to address issues of mutual concern.
- An interdepartmental “Steering Committee” also meets regularly to assist in resolving issues related to development applications and to oversee and monitor the full range of activities related to implementation of the Tysons Plan.

One example of the need for consistency between the adopted vision and the implementing regulations and policies is the road network. It will be imperative that transportation investments to be made in and around Tysons follow the lead of the Plan. On September 13, 2011, the Board of Supervisors executed a Memorandum of Agreement (MOA) with the Virginia Department of Transportation (VDOT) that sets new standards for streets within Tysons. These standards are based on context sensitive design parameters and a multi-modal approach to street design. The MOA implements the design standards and establishes a framework for snow removal and private maintenance of enhanced infrastructure. VDOT should continue to be a full partner in creating the kind of pedestrian environment and urban street network envisioned by the Plan. To help implement the planned street network, the Board adopted an amendment to the PFM on July 12, 2011, that allows deviations from the street standards in the PFM in accordance with the adopted Tysons standards for acceptance by VDOT.

On January 24, 2012, the Board endorsed the Tysons Corner Urban Design Guidelines. These guidelines are organized into sections that address the pedestrian realm, building and site design, and interim conditions. They also include design recommendations that range from master planning concepts such as creating a street grid, block pattern, and a pedestrian hierarchy to details such as paving, sustainable site design, site amenities, and building materials. The guidelines are a dynamic set of recommendations that are intended to be updated over time so that the recommendations remain relevant and innovative and include current sustainable building methods, and materials.

On April 30, 2013, the Board adopted an amendment to the PFM that allows flexibility in circumstances where strict application of the PFM standards is difficult to achieve or where new and creative designs are proposed for redevelopment in Tysons. This amendment allows the Director of the Department of Public Works and Environmental Services (DPWES) to approve alternative standards for design elements such as street lights, landscaping, utilities, drainage, and stormwater management, subject to certain criteria.

Additional revisions to regulations or programs that may be considered as the Plan is implemented in Tysons include:

- Transportation demand management programs
- Evaluating and monitoring the performance of the transportation system (i.e., achievement of trip reduction goals)
- Transfer of development rights or similar mechanism
- Additional amendments to the Public Facilities Manual (PFM)
- Establishment of a tree canopy goal, based on analysis of existing tree cover

PUBLIC-PRIVATE PARTNERSHIPS

In addition to regulatory tools, public infrastructure improvements and public-private partnerships will be essential to create the synergy needed to implement the Plan. A public-private partnership involves using public funds or activities to foster private investment and development activity that might otherwise not occur. Public infrastructure investments, such as a park or transit system, improve the development climate of an area and make it more attractive for private investment. By using public investments strategically, Fairfax County can reinforce and leverage private sector investments that achieve the vision of the Tysons Plan.

PRIVATE PARTNERSHIPS

A by-product of cooperation among landowners is expected to be consolidation and/or coordinated development plans. The transformation of Tysons will require an unprecedented level of cooperation among area landowners. These private partnerships should ensure that new developments in Tysons can support the dedication of land or building space for parks, active fields, and open space; rights-of-way to implement the grid of streets and the proposed Circulator System; and public facilities such as fire stations, schools, and community centers.

PHASING

The new Tysons will unfold incrementally over the next 40 years. Incremental redevelopment must be balanced by having infrastructure in place when needed, such as the Circulator System, the new grid of streets, parks and recreational facilities, schools and fire stations to successfully support an increased population in Tysons. Each step of redevelopment in Tysons needs to move in the direction of achieving the vision laid out in the Plan.

The phasing of development is essential to assure the provision of public facilities. A phased strategy to grow, monitor that growth, and adjust the implementation strategy based on experience and performance is crucial to Tysons' success. The goal of appropriate phasing is to balance projected development with infrastructure and public facility needs over time. The Areawide Land Use, Transportation, and Public Facilities sections provide guidance on phasing that will be applied during the review of development applications.



4: AREAWIDE RECOMMENDATIONS

A strategic approach is essential to create the type of vibrant, compact, mixed use centers envisioned for the transformed Tysons. The approach takes the vision for Tysons and provides specific strategies so that the individual pieces work together to create a better whole. The key is to remain consistently true to the vision, rather than just building projects.

Areawide Recommendations are intended to help achieve the vision for the future Tysons Urban Center. These recommendations present overall concepts for Tysons and provide the framework for District Recommendations.

Development proposals that involve redevelopment and that increase intensity, increase height, or substantially change the design of a previously approved development should be in general conformance with the Areawide Recommendations as well as the District Recommendations. Areawide Recommendations include:

- Land Use Section, which identifies the land use pattern, mix of uses and intensities, and sets forth guidelines for phasing development with public facilities, infrastructure and amenities;
- Transportation Section, which addresses the grid of streets, the bicycle and pedestrian network, and the proposed system of circulators;
- Environmental Stewardship Section, the system of stormwater management, and the requirements for green architecture;
- Parks and Recreation Section, which addresses the network of parks, open space, recreational facilities, and trails;
- Public Facilities Section, which identifies existing facilities serving the area and additional planned public facilities needed to serve future growth; and
- Urban Design Section, which provides guidance on the pedestrian realm and on building and site design.



LAND USE

Implementing the land use pattern envisioned in this Plan will transform Tysons into a livable place by redeveloping most areas into compact, mixed use transit-oriented developments (TODs) and neighborhoods. The following sections describe the proposed areawide land use pattern, mix of uses, intensities, and amenities proposed for the transformed Tysons. Detailed recommendations for each district and specific portions of Tysons can be found in the District Recommendations.

LAND USE PATTERN

The pattern of land use in Tysons focuses growth within walking distance of Metrorail stations. Intensities will be highest in areas with the closest proximity to the stations, transitioning to mid and lower density areas in the Non-TOD Districts. Most areas within Tysons will include a mix of uses, with most of the retail and office uses concentrated within 1/4 mile from the stations. The Conceptual Land Use Pattern is shown in Map 3.

There are four TOD Districts: Tysons West, Tysons Central 7, Tysons Central 123, and Tysons East. These districts generally encompass the areas within 1/2 mile of each Metrorail station, and are planned for about 75% of all development in Tysons. The four Non-TOD Districts include some areas planned to redevelop as walkable urban neighborhoods, although at a lower intensity than the areas closest to the stations. The Non-TOD Districts also contain areas that should maintain their existing characters, uses, and intensities due to their proximity to adjoining residential neighborhoods.

The urban grid of streets and the parks and open space network will be integrated into the land use framework. Civic uses, public gathering places, and public facilities will be located throughout Tysons to create a full-service community.

MIX OF USES

The proportion of residential population within Tysons should increase as development occurs. Up to 100,000 residents are expected to live in Tysons by 2050 compared to 17,000 in 2010. The number of jobs is also expected to increase from 105,000 to as many as 200,000 by

2050. This iteration of the Tysons Plan focuses on a 20 year period of redevelopment while providing a framework for growth beyond the year 2030¹. Ultimately, the desired land use mix will provide a ratio of four jobs for every household in Tysons – a significant improvement over the ratio of approximately thirteen jobs for every household in 2010. This greater mix of uses throughout Tysons will promote walking by providing more people with the opportunity to live near their jobs and other everyday destinations.

In the future, most areas of Tysons should have a mix of land uses. This mix will include many of the same land uses that existed in Tysons, including residences, offices, retail stores, hotels, and public facilities. However, the land use concept promotes the redevelopment of uses such as car dealerships and strip retail centers into more efficient, higher intensity land uses. Consideration should be given to incorporating retail and service uses, car dealerships, and compatible industrial businesses into new mixed use buildings.

Providing a mix of uses, either in a single building or within a distance of two to three blocks, will reduce the separation among residents, workers, and services, encouraging people to walk or take transit rather than drive to fulfill many of their daily needs. People will be able to engage in routine errands and find restaurants, entertainment, and shopping all within walking distance of their homes, offices and transit. Ground floor retail and convenience services will be essential for residential neighborhoods. Housing can also be successfully co-located with public facilities, such as schools, libraries, and fire stations.

Land Use Categories and Map

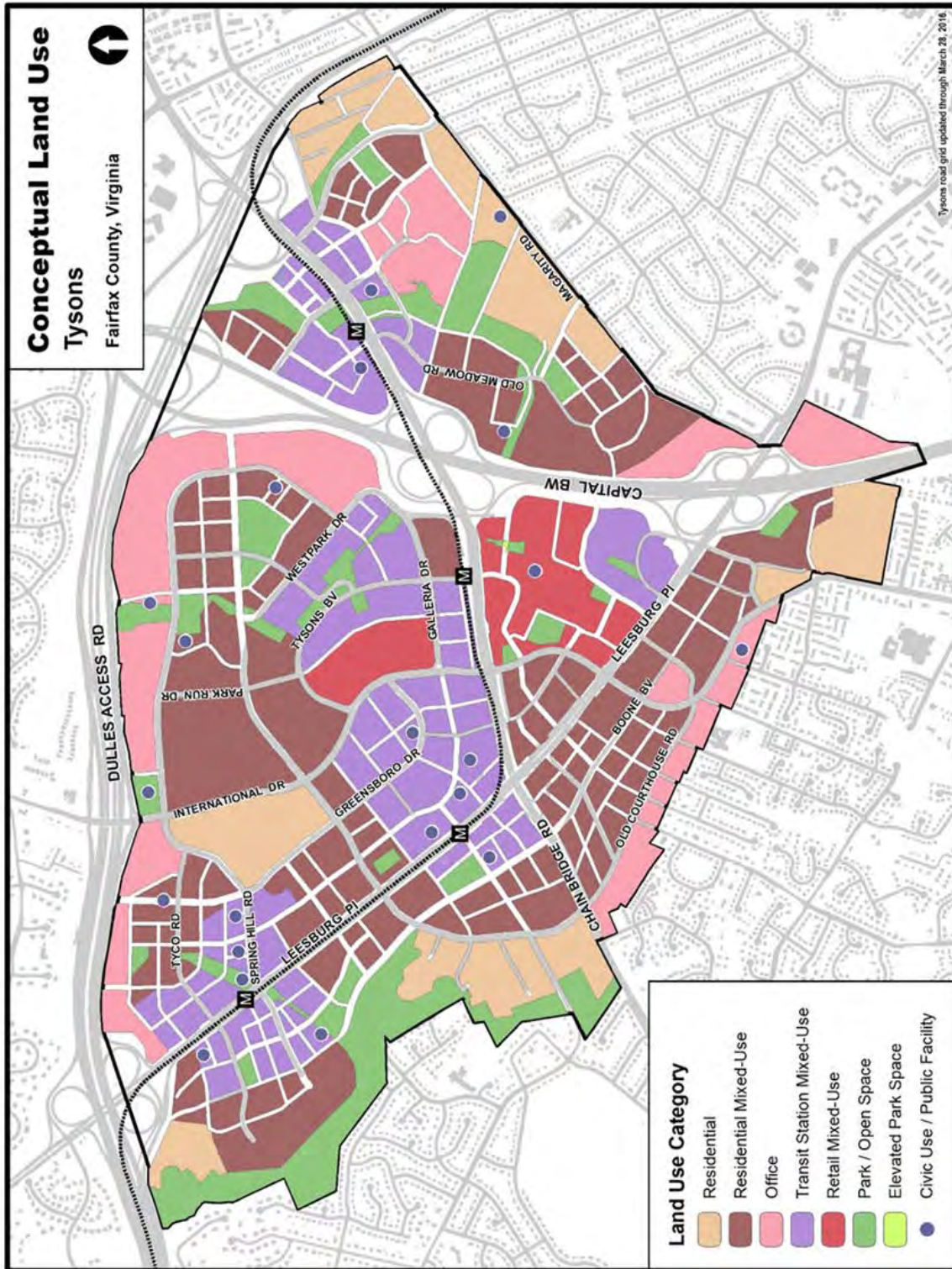
Most of the new office uses built in Tysons are intended to be concentrated in mixed use developments within 1/4 mile of the Metro stations. The areas beyond 1/4 mile of the stations should be developed primarily with multifamily housing units. This pattern reflects studies of transit-oriented development which have found that people going to and from their homes will walk farther to transit than people going to and from their jobs.

The following land use categories correspond to the proposed conceptual land use pattern, shown on Map 3. These categories indicate a general proportion of uses; however, the appropriate mix will be evaluated on a case-by-case basis during the development review process. Projects that contain more than one land use category may be granted flexibility in the location of uses as long as the overall land use mix is consistent with the proportions recommended for the entire project area.

In some cases, the District Recommendations provide multiple land use options that are associated with different intensities. The conceptual land use map generally reflects the highest intensity redevelopment option.

Transit Station Mixed Use: These areas are generally located near the Metro stations. They are planned for a balanced mix of retail, office, arts/civic, hotel, and residential uses. The overall percentage of office uses throughout all of the Transit Station Mixed Use areas should be approximately 65%. This will help Tysons maintain a balance between land use and the necessary transportation infrastructure. Individual developments may have flexibility to build

1 In 2010, it was estimated that by the year 2030 Tysons could have approximately 167,000 jobs and 44,000 residents.



MAP 3

Note: Planned park spaces are shown conceptually on Map 9.

more than 65% office if other developments in the category are built or rezoned with a use mix that contains proportionately less office. The residential component should be on the order of 20% or more of the total development. It is anticipated that the land use mix will vary by TOD District or subdistrict. Some districts or subdistricts will have a concentration of offices and other areas will have a more residential character.

Retail Mixed Use: These areas are planned for regional and sub-regional retail centers that should be a mix of residential, office, hotel, and arts/civic uses. The residential component should be on the order of 20% or more.

Office: These areas are planned almost exclusively for office uses. Supporting retail and service uses, such as hotels, adult/child daycare, and restaurants, are also encouraged in these areas. Educational and institutional uses are encouraged, as well.

Residential Mixed Use: These areas are primarily planned for residential uses with a mix of other uses, including office, hotel, arts/civic, and supporting retail and services. These complementary uses should provide for the residents' daily needs, such as shopping and services, recreation, schools and community interaction. It is anticipated that the residential component should be on the order of 75% or more of the total development.

Residential: These areas are planned almost exclusively for residential uses, including multifamily housing and townhouses. Supporting retail uses are allowed and should be compatible with and integrated into the character of the neighborhood.

Civic Use or Public Facility: These areas are planned for public uses, such as a library, school, arts center, or community center. These uses may be in a stand-alone building or located within a commercial or residential building. The conceptual land use pattern shows the planned locations for civic and public uses identified in the Public Facilities section. In addition, civic or public facilities may also be located in areas planned as Retail Mixed Use, Office Mixed Use or Residential Mixed Use.

Parks/Open Space: These areas are planned for passive and active park land and urban open spaces such as plazas and pocket parks. In instances when intensity credit is given for dedicating land for a park or open space, the land use mix applied to the intensity credit should be consistent with the land use category of an adjacent area. Additional guidance on parks and open space can be found in the Parks and Recreation section.

TIERED INTENSITY

A key ingredient for transforming Tysons is to strategically use intensity to maximize the benefits of Metrorail and transit and to create sustainable, walkable urban environments. This objective is consistent with the county's policy on transit-oriented developments. Intensity can also be an important economic incentive by encouraging the redevelopment of auto-dependent uses, thereby strengthening Tysons' status as Fairfax County's Urban Center.

The land use concept for Tysons links intensity to transit accessibility based on how far most people are willing to walk to and from transit. Expressed as floor area ratio (FAR), the proposed levels of intensity are primarily based on distance from Metrorail stations. Development is planned to be most intense in the areas nearest the stations and least intense at

the edges. Map 4 indicates conceptually where the various levels of intensity are designated in Tysons.

Distance from a Metro station for the purposes of the Plan for Tysons Urban Center should be determined from the primary public entrance to a station. Each Metro station in Tysons has two primary entrances, one on either side of Leesburg Pike (Route 7) or Chain Bridge Road/Dolley Madison Boulevard (Route 123). The point of measurement from an entrance should generally be the base of the escalator.

In order to achieve recommended intensity, the walk to and from the closest station entrance to all buildings within a development proposal should be convenient, safe, and pleasant. As used here, *convenient* means direct, easy, and not overly long. *Safe* means protected from motorized traffic, well-lit, and activated by the presence of other people. *Pleasant* means the walking experience is interesting, with opportunities to shop, browse, or eat.

Projects that include areas of varying intensity recommendations should have an overall intensity based on the proportion of land area associated with each intensity recommendation. The resulting development pattern should generally conform to the goal of locating the highest intensities closest to transit. In addition, proposed intensities should be consistent with the urban scale envisioned for the area.

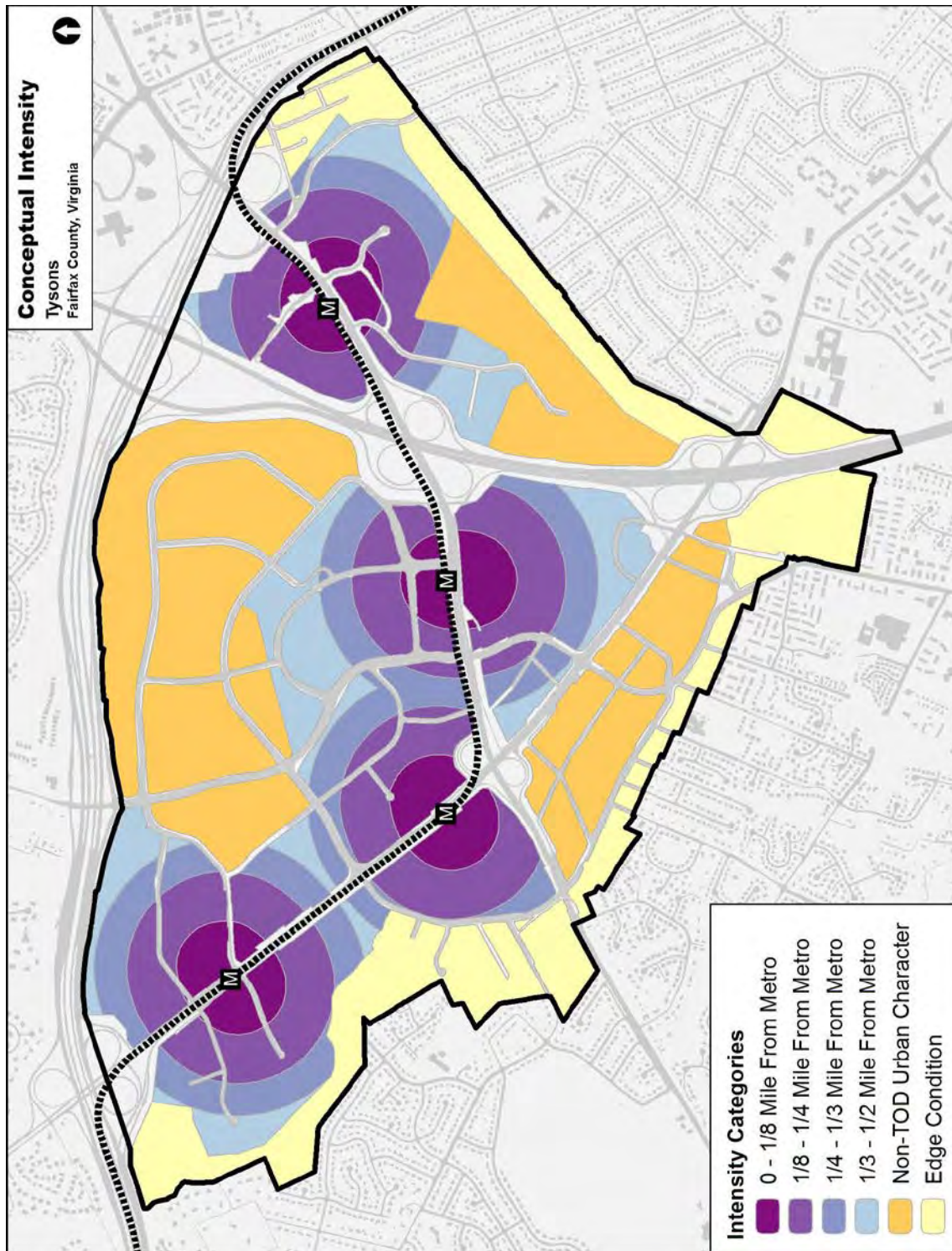
To encourage public-private partnerships, when building space is provided for a public facility, the floor area of that facility should not be counted toward a development's allowable FAR.

Intensity alone will not create a livable, vibrant Tysons; a mix of land uses, public facilities, civic uses, parks, and infrastructure must also be in place. The recommended intensities are conditional and contingent upon livability factors provided in a manner that is phased appropriately with development. Components of a healthy community will attract new residents to Tysons and enhance the quality of life in Tysons. The provision of this civic infrastructure will be the responsibility of both the private and public sectors. Specific needs for Tysons are addressed in the sections on Transportation, Environmental Stewardship, Parks and Recreation, Public Facilities, and Urban Design, as well as the District Recommendations.

Rezoning applications seeking a redevelopment option will be evaluated for conformance with all of the guidance provided in the Comprehensive Plan, including the Major Elements of the Plan. These elements are listed in the Vision for Tysons section, and detailed guidance on each element is located in the Areawide Recommendations.

Milestone Development Level

To implement the first 20 year increment of the ultimate vision for Tysons, a Milestone Development Level (MDL) of 45 million square feet of office uses built and approved was established in the Plan. This amount is the office component of the high forecast for the year 2030 prepared for Fairfax County in 2008 by George Mason University's (GMU) Center for Regional Analysis. Office floor area to be counted toward the MDL included all existing office uses and any office development approved through a proffered rezoning, a special exception, or a by-right site plan. Office floor area reserved for public facility bonuses would also be counted toward this milestone development level.



MAP 4

To encourage new housing development in Tysons, residential uses were not limited by the MDL and could be rezoned at levels above the forecast for housing. Uses such as neighborhood retail, hotels, and arts/civic space could also be rezoned at levels above the forecast if they did not have a significant impact on peak period vehicle trips.

The Land Use and Transportation sections of the Areawide Recommendations provide guidance on monitoring activities that are necessary to track development performance. Monitoring will also be essential to future planning efforts. An important condition to be monitored is the achievement of transportation improvements needed to mitigate the impacts of new development. If a reliable mechanism for funding these improvements needed beyond the year 2030 is established, then the Plan stated that the MDL of 45 million square feet of office uses could be increased through a Tysons-wide or area-specific Plan amendment.

On January 8, 2013, the Board of Supervisors endorsed a Transportation Funding Plan for Tysons, based on a recommendation from the Planning Commission (who had endorsed the Funding Plan on October 16, 2012). This funding plan is a comprehensive strategy for funding the set of infrastructure improvements identified in the Tysons Plan to support the 113 million square feet of development for all land uses anticipated to occur by 2050. It allows for flexibility in funding options and sources, as well as for adjustments to be made based upon the pace of development and provides a reliable funding mechanism to implement the visionary plan for Tysons. Since a funding plan to support development associated with the 2050 GMU forecast is now in place, the MDL of 45 million square feet of office use has been increased to 55 million square feet of office use.

To ensure that the pace of the transportation improvements and the pace of development are proceeding substantially in tandem, as set forth in the Plan, staff should continue to monitor the pace and location of residential and non-residential development in Tysons, as well as the construction schedule, funding status, and funding mechanisms for transportation improvements serving Tysons. In addition, the development and transportation assumptions in the Comprehensive Plan, and how those assumptions have materialized over time, should be evaluated beginning in summer 2024 (10 years after the initiation of Metro Silver Line service). Based on the results of the 2024 evaluation, adjustments to the development and transportation assumptions may be proposed.

TOD District Intensity

The highest intensities in Tysons should be built in areas closest to the Metro station entrance. Intensities should decrease as the walking distance from the stations increases. This reflects evidence from other urban areas that transit ridership is directly correlated with walking distance to rail stations. Following this pattern, the intensity of redevelopment projects within 1/4 mile of the Metro stations should be determined through the rezoning process. Additionally, because office uses generate a high volume of peak-period vehicle trips (which are a major focus of traffic mitigation in Tysons), they should be subject to additional reviews and controls.

Except for office use, no individual site within 1/4 mile of a Metro station should be subject to a maximum FAR, if the Board of Supervisors determines that the proposed mix of uses meets the goals of the Comprehensive Plan and that appropriate mitigation measures are proposed and/or in place to adequately mitigate the expected traffic. Traffic mitigation measures should be determined through traffic impact analyses and/or operational analyses as deemed appropriate by the county.

Office uses that may be approved through a rezoning to an intensity of up to 2.5 FAR. Intensity above 2.5 FAR for office uses may be approved by special exception (SE) in conjunction with a rezoning to the Planned Tysons Corner Urban District.

As an example, a proposed development requesting a 5.0 FAR that is half office and half residential could be approved by rezoning without an SE (2.5 FAR office plus 2.5 FAR residential), while a similar proposal requesting a 5.0 FAR that is 60% office and 40% residential would require a rezoning and an SE (3.0 FAR office plus 2.0 FAR residential). The requirement for the SE will allow growth in Tysons to be managed effectively while encouraging complete developments.

TOD District areas located more than 1/4 mile from the Metro stations are recommended for redevelopment at 2.0 FAR, and are encouraged to achieve higher intensities by utilizing bonuses for affordable and workforce housing and significant contributions toward implementing public facilities. However, sites located between 1/4 and 1/3 mile from the Metro stations in TOD Districts that do not include any office space or other high-trip generating uses should be allowed intensities of 2.5 FAR, plus development bonuses.

Redevelopment proposals for TOD District areas located more than 1/4 mile from the stations may be allowed additional intensity if they are planned for the residential mixed use category; can demonstrate a convenient, safe, and pleasant walk to a Metro station; can demonstrate that they are unable to achieve the proposed intensity through bonuses for affordable housing or public facilities; and are in close proximity to or redeveloping in coordination with an area that is located within 1/4 mile of a Metro station. Areas that achieve additional density with this provision should be treated as if they are located within 1/4 mile of a station when evaluating conformance with Plan objectives and Zoning Ordinance requirements such as workforce housing and parking ratios. For example, office uses located between 1/8 and 1/4 mile of a station have a maximum parking ratio of 2.0 spaces per 1,000 square feet of office, while those located between 1/4 and 1/2 mile have a ratio of 2.2 per 1,000. Redevelopment proposal using this provision are expected to park at 2.0 spaces per 1,000 square feet.

Specific guidance for each of the four TOD Districts can be found in the District Recommendations section.

Guidance for Special Exception (SE) Applications to Increase FAR in the PTC District

- Rezoning applications that seek additional intensity through an SE should include two development plans, one at the rezoning intensity level and one at the higher SE level.
- The floor area approved by SE will have a time limit set by the Board of Supervisors. Additional time may be granted if adequate progress is being made toward completing the project and meeting performance objectives.
- SE applications should identify how development will be phased and when the project will be completed. Applications should also demonstrate the market feasibility of the proposed phasing and completion dates as part of the justification for the additional intensity.
- Intensity associated with an SE is generally expected to be distributed among the applicable office buildings on a multi-building site, rather than in a single building. If some or all of the SE intensity that is tied to a specific building is not used when the building is constructed, this unused intensity is forfeited and cannot be transferred to

other buildings on the site without a Proffered Condition Amendment (PCA) and a Special Exception Amendment (SEA).

- If bonus office floor area for contributions to public facilities is achieved, the floor area of office and other high trip generating uses that may be rezoned without requiring a SE should be increased by an amount equivalent to the bonus.
- Public benefits proposed by the rezoning applicant should not be contingent on the approval of the SE.

Non-TOD District Intensity

Large portions of the Non-TOD Districts are planned for increased intensity to encourage the creation of urban residential neighborhoods. Each of these areas has a redevelopment option above the base plan identified in the District Recommendations. Some portions of Non-TOD Districts, including neighborhoods at the edge of Tysons and stable residential developments like the Rotonda, are not planned for redevelopment. Specific guidance for each of the four Non-TOD Districts can be found in the District Recommendations.

Circulator Intensity

A detailed study of the circulator transit system proposed in the Transportation section was undertaken in 2013. The routes and expected ridership were used to determine the degree to which additional intensity is warranted for areas located along the circulator routes. Based on this analysis, it is premature to recommend additional intensity along the planned circulator routes. However, should future ridership and analysis support a more robust circulator system, then the concept of circulator related intensity could be reconsidered.

Bonus Intensity

Additional intensity in the form of bonuses is allowed to encourage the provision of affordable and workforce housing and significant contributions toward public facilities. In cases where bonus intensity is utilized, the overall land use mix of a project should generally be consistent with the recommended land use category shown on the land use map as well as additional guidance for land use and development character set forth in the Urban Design section and District Recommendations. More information on bonus intensity for affordable and workforce housing is provided under the Land Use Guidelines.

In addition to intensity credit given for dedicating land for parks and roads, additional floor area could be allowed in limited circumstances for the provision of major public facilities, such as a school, a conference center, or facilities associated with a large urban park. In order to achieve this additional floor area, the facility provided should significantly advance securing the necessary improvements identified in the Public Facilities section and in the District Recommendations. The extent of the public benefit being provided will be considered in determining the amount of additional floor area. These public benefits should be substantially greater than what would be expected to mitigate the impact of the development itself, as described in the “Phasing to Public Facilities” portion of the Land Use section.

The total amount of bonus floor area for public facilities granted through the rezoning process should be no more than 2 million square feet of office uses and 10 million square feet of residential uses throughout Tysons. It is anticipated that the residential public facility bonuses will be applied in areas that are more than 1/4 mile from the Metro stations since the intensity of

these uses within 1/4 mile of the stations would not be subject to a maximum FAR. The office bonuses may be achieved throughout Tysons and could be used to either increase the amount of floor area that is not subject to a special exception (SE) within 1/4 of the stations, or to increase the total amount of development permitted on a site outside of 1/4 mile of the stations.

Allocating Floor Area Between Sites

Floor area planned for a site that is being used for a public purpose may be allocated to another development site through concurrent rezoning applications. For example, if a land owner acquires a 100,000 square foot site planned at 1.5 FAR and dedicates the land for an athletic field, the land owner may utilize the resulting 150,000 square feet on another development site within Tysons through concurrent rezoning proposals considered and approved by the Board of Supervisors. Under no circumstance should floor area be moved from an area without a maximum FAR in the Plan to an area located more than 1/4 mile from a Metro station.

PHASING DEVELOPMENT TO TRANSPORTATION INFRASTRUCTURE AND PUBLIC FACILITIES

A longstanding planning concept is to link development to the provision of infrastructure and public facilities. Growth will need to be supported by Metrorail and other transit options, an urban street grid, and additional transportation improvements that better connect Tysons internally and to the rest of the region. Athletic fields, parks and open space, stormwater management, schools or additional school capacity, and other public facilities will need to be operational in time to meet the demands generated by new development.

The transportation improvements and public facilities recommended in the Plan are based on a Tysons-wide development level of 113 million square feet, with a balanced mix of uses as described in the Land Use section. This development level, which is equivalent to the Plan goal of 100,000 residents and 200,000 jobs, will occur over the course of four or more decades. The Transportation and Public Facilities sections of the Areawide Recommendations provide details on the infrastructure and public improvements needed to support this projected level of growth, as well as estimated timeframes for their completion. The target dates for constructing such facilities are based on analyses of land use forecasts through the year 2050 prepared by George Mason University's Center for Regional Analysis (GMU). These analyses used the highest growth forecast; therefore, the projected population and employment increases may take longer to achieve if growth occurs at a more moderate pace.

Planning for and phasing of new infrastructure must take into account actual and projected growth for different land uses based on the development activities as well as mid and long range market forecasts.

Major transportation improvements and public facilities can take many years to design, fund, and construct. The sequencing of such public improvements will require close monitoring of approved rezonings, building permits, commuting patterns, demographic trends, and population and employment growth. Actual performance in these areas and other market trends may result in the need for the county to perform additional analyses and make adjustments to the timing of transportation improvements and/or public facilities. In this regard there is a need to monitor achievement of Transportation Demand Management (TDM) goals as indicated in Table 5: TDM Vehicle Trip Reduction Goals for Commercial and Residential Development.

Five years after the Silver Line is completed to Dulles International Airport and Loudoun County, the county should assess the following:

- How actual growth compares to the baseline GMU growth forecasts;
- How the pace of growth compares to the provision of transportation infrastructure projects and public facilities;
- Whether the growth anticipated to occur over a five to ten year period is in balance with transportation improvements and public facilities programmed to be completed over the same time period; and
- Whether total development approved through rezonings is in balance with the private and public sector commitments toward achieving the necessary transportation and public facility improvements.

The following strategies are general approaches to achieve a sustainable balance of development with infrastructure and public facilities throughout Tysons.

Incorporating Transportation Improvements and Programs

Accommodating an increase in the amount of development in Tysons depends upon transportation improvements and changes in travel patterns. Planned roadway improvements, such as new street connections, ramps to the Dulles Airport Access and Dulles Toll Road (DAAR, Route 267), and crossings of the Capital Beltway/Interstate 495 (I-495), are necessary to disperse vehicle traffic. Improvements to transit and to the pedestrian and bicycle networks are also needed to encourage travel by these modes. The provision of such infrastructure and the achievement of trip reduction objectives can be thought of as triggers that should occur in concert with future growth.

Redevelopment proposals should be phased to planned roadway and transit improvements and the demonstrated ability to significantly reduce single-occupancy vehicle trips. Tables 7 and 7B in the Transportation section of the Plan prioritizes specific improvements needed to accommodate development as Tysons grows over time. Similarly, Table 5 in the Transportation section sets vehicle trip reduction objectives that increase with development levels.

Development proposals should conduct traffic impact analyses. Mitigation measures identified by these analyses should be considered along with the phasing guidance below.

Development approved in the early phases after Plan approval should provide on-site improvements and the grid of streets; should significantly advance the provision of infrastructure; and meet the applicable levels of trip reduction set forth in Table 5 in the Transportation section. Development approved in later phases should be triggered by achievement of trip reduction objectives and the provision of the infrastructure and other transportation improvements set forth in Tables 7 and 7B in the Transportation section.

Transportation improvements and transit capital and operating costs rely on both public and private sources of funding. Public funding comes from state and federal sources, general fund allocations, and/or other sources. The private sector's share is planned to include on-site improvements, including the grid of streets, contributions to the Tysons-wide and Tysons Grid of Streets Transportation Funds, and taxes collected through the Tysons Transportation Service

District. Private sector participation in funding transportation improvements is critical to the long term future of Tysons.

Phasing to Public Facilities

The Public Facilities section of the Areawide Recommendations identifies and describes the public services, infrastructure and utilities needed to serve Tysons. Providing these facilities in pace with the planned employment and residential growth will be a challenge. Securing land area or space for public uses within privately-owned property is critical. Past practices employed by the county to provide space for public facilities in largely undeveloped suburban areas cannot be relied upon in an intensely developed area where most of the land is privately owned.

The public facilities planned for Tysons over the next 40 years are based on growth projections prepared by George Mason University. As the pace of growth may be faster or slower than the projections, there is a need to monitor development to determine when it is actually necessary to construct the public facilities. While facilities may actually be constructed throughout the planning horizon based upon need, it is critical that space for most, if not all, of these facilities be secured as soon as is possible.

Therefore, rezoning proposals should commit to provide the necessary land and/or space to ensure that facilities may be constructed in concert with the pace of growth. Commitments to dedicate building space or land for most, if not all, of the public facilities needed by 2050 should be provided as development approvals occur during the first 10 or 20 years of Plan implementation.

The levels of development set forth in the Plan are intended to enhance the ability of the private sector to provide the necessary public space for facilities. In addition, when building space is provided for a public facility, the floor area of the facility should not be counted toward a development's allowable FAR. In Tysons it is critical that land area or spaces for public uses be incorporated within private developments at no cost to the public sector.

In addition to facilitating public facility objectives through zoning actions, it may be necessary for landowners throughout Tysons to work collaboratively and creatively through partnerships to meet public facility objectives.

Since larger developments can better facilitate the achievement of one or more public facility objective, substantial consolidation for rezoning proposals is important. However, in some instances a development with lesser acreage than the goal for consolidation may be able to provide the space for and/or construct a necessary public facility in the appropriate location, either independently or through a partnership.

Cash contributions are not the preferred method for offsetting impacts on public facilities. During the early years of Plan implementation, funds would likely be insufficient for the county to acquire developed properties for public facilities. Therefore, the preference is for land or building space dedicated for facilities. It may be preferable for a development proposal to address one or more, but not all, public facility needs in a significant way, rather than providing smaller commitments toward many facilities.

Phased Site Development

It is anticipated that most development projects in Tysons will be phased over time. Each phase of a development proposal seeking zoning approval should be reviewed for conformance

with the overall vision, with careful consideration given to interim conditions. Priorities that should be addressed in the earliest phases of site development plans include critical links within the street grid, parks and open space, a balanced mix of uses, pedestrian access to the Metro stations, and the integration of development with the station entrances. Developments should be phased in such a way that interim conditions are experienced by pedestrians as a complete urban environment.

Interim conditions that will enhance the urban character of Tyson are encouraged for the portions of a project that will not be built until the later phases. Examples include pop-up parks, green space, interim recreational facilities, or low intensity temporary uses with an urban form. It may also be acceptable to maintain existing uses as long as they do not preclude the achievement of other priorities, such as the street grid. Additional guidance on interim conditions is found in the Urban Design section.

Data Collection and Application

Collecting and applying key information and data is essential for continued planning efforts. Information and performance data that should be monitored for Tysons include the following:

- Land use by floor area and number of dwelling units for built, approved (including both Conceptual and Final Development Plan approvals), and permitted buildings (including development options and proffered development conditions, especially as they relate to phasing)
- Relationship of built and approved development projects to planned intensities
- Employment, population, and demographic information, such as average residents per dwelling unit, vacancy rates, housing tenancy (owner-occupied or rental)
- Employment, population, and demographic forecasts
- Average dwelling unit size
- Number, location, size, and type and connectivity of urban parks and open space
- Trip-making and travel behavior, including commuting patterns, transit ridership, transportation mode splits, and vehicle and non-motorized trips generated by different land uses
- Transportation Demand Management performance, both Tysons-wide and for individual sites
- Number, location, size, and type and connectivity of urban parks and open space
- Progress toward environmental stewardship goals, including the condition of natural resources
- Green building performance and energy/resource conservation
- Utilization and capacity of public facilities, including public schools, both inside and outside of Tysons, that enroll students living in Tysons
- Progress toward implementing the street grid and urban design goals
- Progress toward implementing facilities for pedestrians and bicycles
- Number and location and types of parking spaces

Additional guidance on monitoring transportation performance can be found in the Transportation section.

The Plan should be regularly reviewed and monitored by the county, and development approvals, site plans, and occupancy permits should be continuously tracked to facilitate monitoring activities. The review process should consider the data collected through monitoring activities along with the expected outcomes described in the Plan. Careful consideration should be given during this review process as to whether the amount and location of planned development potential should be modified.

LAND USE GUIDELINES

The following land use guidelines are necessary to achieve the vision for Tysons. These guidelines should be considered along with the general Land Use recommendations above and the District Recommendations in evaluating development proposals in Tysons.

Affordable Housing

A critical aspect of the vision is to provide housing choices and ensure that a population with a variety of income levels has the ability to live in Tysons. The Policy Plan states that affordable housing should be located close to employment opportunities and should be a vital element in high density and mixed use development projects. A specific objective in the Policy Plan is to encourage affordable and workforce housing in Tysons. Affordable housing may include Affordable Dwelling Units (ADUs) required pursuant to the Zoning Ordinance and Workforce Dwelling Units (WDUs) administered consistent with the Board's administrative policy guidelines for such units, or other such price controlled units that the Board deems to meet the intent of these provisions.

All projects with a residential component that seek to utilize the redevelopment option in the District Recommendations should provide 20% affordable and workforce dwelling units. These projects are allowed a 20% residential floor area bonus and flexibility in how and where Workforce Dwelling Units can be provided within Tysons.

Because development proposals within 1/4 mile of the Metro stations are not subject to a maximum intensity, the FAR proposed for rezoning applications in these areas is considered to include the bonus floor area allowed for meeting the affordable and workforce housing expectations.

For Affordable Dwelling Units (ADUs), the provisions of Part 8 of Article 2 of the Fairfax County Zoning Ordinance shall apply, unless the dwelling units proposed in the development are specifically exempted from compliance with the ADU Program.

For Workforce Dwelling Units (WDUs), the following housing conditions and the guidelines in the Housing section of the Policy Plan (except as modified below) apply to any residential development built under the redevelopment option, regardless of whether or not the development elects to utilize the available bonus density.

- 20% of the residential units in new developments should be affordable to households with incomes ranging from 50 up to 120% of AMI (Area Median Income), as set forth in Table 1A. Within 1/4 mile of the Metro stations, the 20% applies to the total number of

dwelling units to be constructed in the proposed development. Beyond 1/4 mile of the Metro stations, any units created with bonus floor area should be excluded from the 20% WDU calculation. In a development that is required to provide ADUs, the ADUs and ADU bonus units may be deducted from the total number of dwelling units on which the WDU calculation is based.

- For WDUs associated with high-rise condominiums, the income tiers may be adjusted to three (3) income tiers as follows: one-third up to 70% AMI, one-third at 71 to 80% AMI, and one-third at 81 to 100% AMI, as set forth in “Table 1B: Income Tiers for Workforce Dwelling Units in High-rise Condominiums.” In addition, if the applicant provides all of the for-sale workforce housing units onsite, the percentage of WDUs should be reduced from 20% to 14%. If the units are provided as new construction for-sale units but are transferred to another property offsite in Tysons, the percentage to be provided should be 16%. If rental workforce housing units are provided onsite or offsite in Tysons in lieu of the for-sale units, the percentage of rental units to be provided should be 20% and follow the income tiers outlined in Table 1A.
- To account for market conditions such as increases in interest rates that may affect the published Workforce Dwelling Unit Pricing for High-rise Condominium Buildings approved by the County Executive on January 16, 2015 or as amended, the income tiers may be adjusted upward 5% (i.e. 70% to 75%, 80% to 85%, and 100 to 105%) at the time of delivery as may be approved by the Department of Housing and Community Development and the County Executive.
- If required by the Zoning Ordinance, ADUs may be counted toward the 20% affordable housing objective identified in the previous bulleted item, above. Any such ADUs could be used to satisfy the lower income tiers identified in Tables 1A and 1B for WDUs.

Table 1A
Income Tiers for Workforce Dwelling Units
(except for high-rise condominiums)

101-120% of AMI	5% of total units
81-100% of AMI	5% of total units
71-80% of AMI	5% of total units
61-70% of AMI	3% of total units
< 50-60% of AMI	2% of total units

Table 1B
Income Tiers for Workforce Dwelling Units in High-rise Condominiums

Income Tiers	14% - For Sale Units Onsite	16% - For Sale Units Offsite in Tysons
81-100% of AMI	4.67% of total units	5.33% of total units
71 – 80% of AMI	4.67% of total units	5.33% of total units
< 70% of AMI	4.67% of total units	5.33% of total units

- A maximum 20% increase in residential floor area is allowed for achieving the workforce housing objective. In mixed use developments, some of this increase in floor area may be used for commercial purposes. The percentage of nonresidential and residential bonus floor area should be similar to the project's overall land use mix. In order to provide more flexibility with the bonus, the Policy Plan's size restrictions on bonus market rate units do not apply within Tysons.
- The WDUs provided should have a similar mix in the number of bedrooms as the market rate units. The minimum unit size of WDUs should be consistent with the Policy Plan.
- WDUs should be price controlled as set forth in the Board of Supervisors' Tysons Corner Urban Center Workforce Dwelling Unit Administrative Policy Guidelines, adopted June 22, 2010, or as may be amended.
- WDUs are preferred to be provided on-site. However, developers may aggregate land for workforce housing off-site and/or transfer to others the responsibility for creating such units in building structures where the advantages of financing and operating affordable and workforce housing can be realized. Units provided in this manner should be located within Tysons, should be in general conformance with the applicable land use, intensity, public facility and urban design objectives, and should include all of the income tiers set forth in Tables 1A and 1B.
- Efforts should be made to preserve market rate housing units that are affordable to households earning below 120% of AMI. Land owners may meet their affordable housing objective by purchasing existing units and preserving their affordability as set forth in the Board of Supervisors' Tysons Corner Urban Center Workforce Dwelling Unit Administrative Policy Guidelines, adopted June 22, 2010 or as may be amended. Redevelopment of existing housing units should satisfy Objective 11 in the Land Use section of the Policy Plan, including increased affordable housing opportunities and positive impacts on the environment, public facilities and transportation systems.
- The WDUs should be provided concurrently with market rate units or with some form of surety that they will be built.
- A housing trust fund will be established and used to create affordable and workforce housing opportunities in Tysons.
- Cash contributions in lieu of providing WDUs are not desired. However, in the rare event that a payment in lieu of affordable units is considered, this payment should be 3% of the total contract sales price for each market rate unit within the building that is subject to the WDU policy, payable at the time of settlement to the Tysons Housing Trust Fund. Any combination of units and cash contribution may be considered provided that the combination of WDUs and monetary contribution is proportional to the overall requirement. The applicant must coordinate with both the Department of Housing and Community Development and the Department of Planning and Zoning for implementation.
- Programs that capitalize on either the development of housing or on the incomes of households, such as low income housing tax credits, tax-exempt housing bonds, tax increment financing, tax abatement, or a county housing fund, should be considered.

- Flexibility in the total number of WDUs provided may be considered for projects that meet additional housing needs that have been identified by the county. Examples include providing a higher proportion of units in the lowest income tiers or providing units with more bedrooms than would otherwise be expected. Such proposals should be evaluated on a case-by-case basis.
- Creative strategies for achieving housing objectives should be considered. These could include a system similar to wetlands banking in which a developer builds additional affordable and workforce dwelling units and the credit for providing the units is sold to another developer who has an obligation to provide affordable housing. Another strategy could be to incorporate units into public buildings. Facilities for populations with special needs, including those who are homeless, should also be considered.

A housing trust fund will be used to create affordable and workforce housing opportunities in Tysons. Nonresidential development throughout Tysons should contribute a minimum of \$3.00 per nonresidential square foot (adjusted annually based on the Consumer Price Index) or at least \$0.25 per nonresidential square foot over a period of time to be determined at the time of rezoning approval. Such developments may provide an equivalent contribution of land or affordable units in lieu of a cash contribution. Nonresidential contributions could also be used to fund affordable housing opportunities in Tysons through a partnership. If nonresidential floor area is achieved through a bonus for providing affordable and workforce dwelling units, the bonus floor area should not be included when calculating the contribution amount. Ground level retail located in office, hotel, and residential buildings should also not be included when calculating the contribution amount.

The provision of workforce housing should be viewed as a collective responsibility that will directly benefit employers in Tysons. New office, retail, and hotel developments will benefit from having a range of affordable housing opportunities within a short commuting distance of the jobs in Tysons.

Green Buildings

All new buildings in Tysons should receive green building certification under an established rating system such as the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program. The green building rating system used should be based on individual building certification, such as LEED-NC (New Construction) or LEED-CS (Core and Shell). LEED Silver certification, or the equivalent, is the minimum expectation for nonresidential development in Tysons. Residential development should be guided by the Resource Conservation and Green Building Practices of the Environment section in the Policy Plan.

In the future, tax abatements or other cost recovery strategies may be considered as an incentive for buildings that are certified at the LEED Gold or Platinum level, or the equivalent. At this time, tax abatements are unavailable for use.

Coordinated Development and Parcel Consolidation

Piecemeal development proposals for individual parcels could make it difficult to implement the vision, particularly the grid of streets, parks, public facilities, and infrastructure. In order to achieve the vision, property owners in each district or subdistrict will need to have on-going coordination with each other and the county to refine an area's grid of streets as well as to determine the location of open space and public facilities (e.g. athletic fields). Private

partnerships or agreements will likely be needed in order to effectively address the multitude of redevelopment issues.

Parcel consolidation may be necessary to achieve planning objectives. Proposed parcel consolidations should demonstrate how the project will function in a well-designed and efficient manner. Each phase if any should be linked to the provision of public facilities and infrastructure and demonstrate the attainment of critical plan objectives, such as a functioning grid of streets, trip reductions, shared parking, green buildings, and stormwater management. Through parcel consolidation, a grid of streets can be planned in a way that enhances the value of the land and achieves greater connectivity and consistency with the Tysons Plan.

Alternately, coordinated proffered development plans (i.e., concurrent rezoning applications) that achieve the same Plan objectives as consolidation are encouraged, if commitments can be made ensuring that both projects will function in a well-designed, efficient manner and allow development on adjacent parcels to occur in conformance with the Plan.

Desired acreage for consolidations or coordinated development plans varies because of each district's unique parcel configurations and planning goals. Guidance for areas near the Metro stations is included in the District Recommendations. Where guidance on consolidation is not set forth in the District Recommendations, the extent of land area necessary will be determined on a case-by-case basis.

Performance Objectives for Coordinated Development and Parcel Consolidation

In all cases, consolidations or coordinated development plans should meet the following objectives:

- Commitment to a functioning grid of streets both on-site and off-site;
- Provision of parks, open space, and recreational facilities as set forth in the Parks and Recreation section of the Areawide Recommendations, either on-site or within the subdistrict through a partnership;
- Provision of land and/or building space for public facilities as set forth in the Public Facilities section of the Areawide Recommendations;
- Conformance with the guidance in the Urban Design section of the Tysons Plan and any urban design guidelines for the district or subdistrict; and
- Demonstration of how adjacent parcels could be redeveloped in a manner that is compatible with the proposal and in conformance with the Plan.

Existing Development Services

Most existing development in Tysons is not consistent with the long-term vision for Tysons. However, expansion and remodeling of existing buildings may be permitted as long as these changes are not counter to Plan objectives. Proposals to modify an existing use should be considered if they result in significant public benefits and do not delay or interfere with the achievement of the long term vision for Tysons. Improvements to open space, streetscapes, and streets identified in the Plan are encouraged; if full compliance with the Plan is not feasible due to an existing building's location on the site, alternative improvements may be considered.

It is desirable to maintain many services, such as auto dealerships, service and repair shops, and storage facilities, even if their physical surroundings change. For example, auto showrooms and other retail and service uses could be incorporated into street-level retail spaces provided through mixed use redevelopment.

Residential and Other Noise-Sensitive Uses

Significant noise impacts are likely in some parts of the Tysons area due to the existence of major transportation infrastructure. The Policy Plan indicates that new residential and other noise-sensitive uses should not be built in areas where current and future noise levels exceed 75 dBA DNL (a day-night weighted average noise level). As Tysons transforms into a more urban place, there is an increasing possibility that the land use recommendations for residential and hotel uses, and the urban design guidelines which seek to locate these uses closer to the street, may be in conflict with the current noise policy. Therefore an areawide study of noise levels along Tysons' major transportation corridors should be undertaken. The noise study should clearly define noise contours with current noise levels and future noise levels based on a minimum 20-year traffic volume projection for the roadway and other transportation noise sources. Once noise contours are mapped and compared with planned locations for future residential and hotel development in Tysons, the implications of applying the current noise policy can be evaluated.

TYSONS URBAN DEVELOPMENT AREA DESIGNATION

Section 15.2-2223.1 of the Code of Virginia permits a locality to voluntarily designate one or more Urban Development Areas in its Comprehensive Plan. An Urban Development Area (UDA) is defined as an area designated by a locality that is (i) appropriate for higher density development due to its proximity to transportation facilities, the availability of a public or community water and sewer system, or a developed area and (ii) to the extent feasible, to be used for redevelopment or infill development.

Fairfax County has designated the Tysons Urban Center as an UDA. The Tysons Urban Center boundaries found on the Comprehensive Plan Map reflect the boundaries of the UDA. The Tysons land use plan is consistent with the UDA criteria for (i) minimum densities and intensities for development, (ii) the appropriate planning horizon for Fairfax County (iii) inclusion of principles of traditional neighborhood design, and (iv) incentives for development.



TRANSPORTATION

Tysons is located at the intersection of two major regional highways, the Capital Beltway (I-495) and the Dulles Toll Road (DTR), and centers on the intersection of two principal arterials, Leesburg Pike (Virginia Route 7) and Chain Bridge Road (Virginia Route 123). These major highways and arterials, as well as other arterials, have historically served the vast majority of trips to, from, and through the Tysons area. Although extensive, this roadway network has become increasingly strained as the Washington, D.C. region has grown and Tysons has become one of the largest office and retail markets in the country. Planned road improvements will abate some of the increase in traffic congestion in and around Tysons but this strategy is not sustainable in the long term. Right-of-way limitations, the high cost of adding highway capacity, and limits in the accommodation of vehicle traffic in a dense urban environment, such as what is planned for Tysons all constrain the ability to widen and expand the roadway network.

While still accommodating automobiles, the transportation system in the future must give people choices for making trips to, from, within and through Tysons. Providing choices requires a balanced transportation system that: a) provides attractive public transportation connections between Tysons and other locations; b) moves people within Tysons via an enhanced connected network of walkable streets, bike lanes, and a robust transit network; and c) moves automobile traffic more efficiently. The extension of the Metrorail system, with four stations in Tysons offers an opportunity for a well-balanced, interlinked, multimodal transportation network in Tysons.

To be successful, a transformation of the Tysons Transportation System, at the fundamental level, is required. This is anticipated to take many years, but its implementation will result in a vastly improved network that will accommodate all modes of travel. Remaking Tysons into a transit-oriented, urban center requires a balance among safety, mobility, community and environmental goals in all planning for Tysons. For example, streets help define the quality of the public realm, supporting the needs of pedestrians, bicyclists and transit users. In many circumstances, creating a livable and walkable place will require that the needs of pedestrians, bicyclists, and transit users be given preference over the need to move people by automobile.

In order to complete this transformation, several transportation elements must be created and/or enhanced. They include the following:

- The current superblock street network should be transformed into a grid system of smaller, connected streets to provide alternative pathways for traffic flow. This will also provide a safe, accessible pedestrian and bicycle environment.
- Streets should become “complete streets,” designed to create a sense of place and promote walking, and the use of bicycles and transit services.
- Regional transit service should continue to be provided through Metrorail and buses to Tysons.
- For trips within Tysons, a Circulator System that allows frequent, quick and inexpensive movement, as well as easy connections to regional transit service, is needed. The existing Circulator System currently operates on-street, in mixed traffic. In future years, the Circulator System will contain segments that will operate within its own rights-of-way.
- A neighborhood feeder bus network should connect nearby communities to Tysons.
- Enhancements to the automobile network, such as improved I-495 crossings, additional connections to the DAAR, and state of the art traffic management systems should be provided.

Alternatives to automobile travel, especially transit, will become increasingly important to maintain a balance between land use and transportation, ensure tolerable levels of congestion are not exceeded for long periods of time, limit negative impacts to economic activities, and create a healthier, more sustainable environment. For these reasons, alternatives to automobile travel should meet increasingly higher targets over time. To achieve this, it is essential to implement the following strategies:

- Provision of the necessary transit infrastructure and services to increase transit use over time.
- Achievement of higher vehicle trip reduction levels over time through transportation demand management (TDM) programs including an increase in carpooling, telework, the application of variable working hours, and reducing the ratio of parking spaces to commercial floor area.

The increase of residential development in Tysons over time will replace automobile trips to and from Tysons with walking or transit trips within Tysons. A monitoring system to verify that these requirements are realized as planned is necessary and the ability to make adjustments if there are variations from the recommendations on how a balance will be maintained is critical. The transformation of Tysons is highly dependent on the provision of transportation infrastructure, services, and programs in a timely manner.

These programs are in turn dependent on measured growth, an optimum mix of land uses, excellent urban design, and the successful integration of development with transportation infrastructure and services. Several significant transportation analyses were done, and will continue to be done, to inform the Comprehensive Plan guidance regarding this balance between land use and transportation. A Scenario Analysis compared the impacts of different levels of growth. This analysis was done throughout the multi-year planning process. A Beyond 2030 Sketch Planning Analysis provided the target non-SOV mode shares that would be necessary beyond 2030.

A Countywide Transportation Demand Management (TDM) study was conducted, in 2010, to provide the county with the information necessary to institute robust TDM programs. The findings of this study were used to establish the TDM trip reduction goals and the new parking rates for Tysons, shown in their respective sections of this chapter. To ensure that the impacts on the areas surrounding Tysons were taken into consideration, a Neighborhood Traffic Impact Study was conducted. The Neighborhood Traffic Impact Study determined mitigation measures, in conceptual form, and associated right-of-way requirements at select intersections in the vicinity of Tysons. These improvements, and the associated right-of-way, should be considered when development takes place adjacent to each recommended improvement.

Finally, a Phasing Study, conducted in 2011, provided insight into how the recommended transportation improvements should be prioritized. A comprehensive analysis allowed the conceptual grid of streets to move beyond a concept to a planned grid. Finally, a longer term Circulator Study also moved conceptual Circulator routes to planned routes to be implemented in the future. The monitoring of the implementation and utilization of these provisions over time is essential.

TRANSPORTATION INFRASTRUCTURE AND SERVICES

Public Transportation

In order for Tysons to develop into a great urban center, public transportation needs to serve an increasingly higher percentage of trips over time. Specific goals for the percentage of trips served by public transportation at specified development levels are listed below. These goals account for people who work in Tysons but live outside of Tysons, people who live in Tysons and work elsewhere, and those who live and work within Tysons. Metrorail is the most significant public transportation improvement and is expected to carry the majority of public transportation trips in the near term. Metrorail will serve passengers travelling to Tysons from the Dulles Corridor to the west and from Arlington and the District of Columbia to the east; both directions contain significant residential and employment centers. It will also serve residents of Tysons travelling to these areas.

While Metrorail is necessary for Tysons to develop into a more efficient urban center, it is not solely sufficient to support development at the Comprehensive Plan level. Other regional high quality public transportation services, such as express bus routes serving Tysons from the regional network of High Occupancy Vehicle (HOV) and High Occupancy Toll (HOT) lanes, are needed. In addition, two urban rail transit corridors, with significant residential centers, need to connect to Tysons.

A system of circulator buses is necessary to connect areas of Tysons to the Metrorail stations and to provide a robust internal transit system within Tysons. Finally, local bus routes, will continue to connect nearby communities to Tysons for trips that are generally shorter than the trips served by the regional rail and bus networks. All of these public transportation services are described in more detail below.

Public Transportation Goals

To support 113 million square feet of development, it is necessary for transit to achieve a 31% mode share of all person trips to, from and within Tysons during peak periods. (Mode share is defined as the percentage of person trips that use a specific mode of transportation.) As

the level of development in Tysons increases, the transit mode share should increase, as shown in Table 2, so that a 31% transit mode share can be achieved with 113 million square feet of development.

To be able to achieve the increase in transit use as indicated in Table 2, the following transit services should be provided for Tysons. The level of development associated with these improvements is listed in Table 7.

- The extension of Metrorail in the Dulles Corridor to Loudoun County
- Express bus/BRT routes on Interstate 66 (I-66), Interstate 95 (I-95)/I-495 and Leesburg Pike east of Tysons
- A Circulator System serving Tysons
- Expanded local bus service
- Additional BRT routes and other supporting services, including park-and-ride and feeder bus routes to rail stations.
- Two additional urban rail corridors with substantial TOD development; for example, a more direct connection to a future Orange Line extension and a I-495 rail line to Montgomery County, both having TOD at their stations.

Table 2
Transit Mode Share at
Increasing Levels of Development

Development Levels (total GSF) and forecast timeframe	Required Transit Mode Share During Peak Periods (person trips, all trip purposes, to and from Tysons)		
	TOD Areas	Non-TOD Areas	All of Tysons
84 million (2030)	25%	13%	22%
96 million (2040)	29%	15%	25%
113 million (2050)	36%	18%	31%

Note: The required transit mode shares specified in this table are included as a strategy to meet a target automobile trip reduction level to be achieved through transportation demand management. Please refer to Table 5 for recommended transportation demand management goals.

Regardless of mode type, transit improvements should be planned in accordance with estimated trip-making characteristics and should contain the following characteristics that make transit effective and convenient such as:

- Directness of travel
- Simplicity, connectivity, and as few transfers as possible
- Operating flexibility
- Efficient and effective integration with other modes
- Efficient and effective placement of stops and operational facilities

Metrorail

The extension of Metrorail into the Dulles Corridor, with four stations located within Tysons, offers mobility and accessibility from many portions of the region to Tysons. More importantly, Metrorail provides a necessary alternative to the automobile in order for Tysons to retain its economic viability and achieve its full potential. The Metrorail service also provides greater opportunities for people to reside in Tysons and use transit for much of their daily travel. Map 5 shows the locations of the four Tysons Metrorail Stations.

Express Bus Service/Bus Rapid Transit (BRT)

Express bus service is a high-speed limited-stop service generally operating within transportation corridors oriented to a principal destination. It consists of longer trips, especially to major activity centers during peak commuting hours, and operates long distances without stopping. Bus Rapid Transit (BRT) is a limited-stop service that relies on technology to help speed up the service. It combines the quality of rail transit and the flexibility of buses. Bus Rapid Transit can operate on exclusive rights-of-way, within high-occupancy-vehicle (HOV) lanes, on expressways, or on streets.

In November 2012, the Beltway High Occupancy Toll (HOT)/I-495 Express Lanes opened with three new connections to Tysons providing an opportunity to serve Tysons with a significant express bus network while extending the regional HOV/HOT network to destinations such as the I-95 corridor and the I-66 corridor. These corridors are identified as “Enhanced Public Transportation Corridors” in the Fairfax County Transportation Plan. This designation indicates that major public transportation facilities could be added to these corridors based on a comprehensive alternatives analysis at some point in the future.

Along with Metrorail, Bus Rapid Transit and express bus services are potential transit options for Tysons. Robust express bus service is needed to complement Metrorail. Existing express buses use the Metrorail stations as terminal points allowing passengers to transfer to an internal Tysons circulation system just like Metrorail passengers.

System of Circulators

To increase the use of Metrorail for trips to, from and within Tysons, a system of transit circulators is essential. The Tysons Circulator system should achieve the following:

- Provide quick and convenient access for Metrorail passengers to and from locations within Tysons but beyond walking distance from the Metrorail stations
- Provide a quick and convenient way to travel within Tysons
- Extend the reach of the Metrorail System and connect the various districts within Tysons.
- Provide connections with the Metrorail stations that are as close as possible to the station entrances. If a circulator route cannot be adjacent to a station entrance, a clear visual connection should be maintained for the convenience and perceptions of users.
- Decrease auto-based trips. In addition to increasing transit mode share and decreasing vehicle use by making travel to, from and within Tysons more attractive, the circulator



MAP 5

should be convenient enough to serve as a substitute for long walking trips within Tysons.

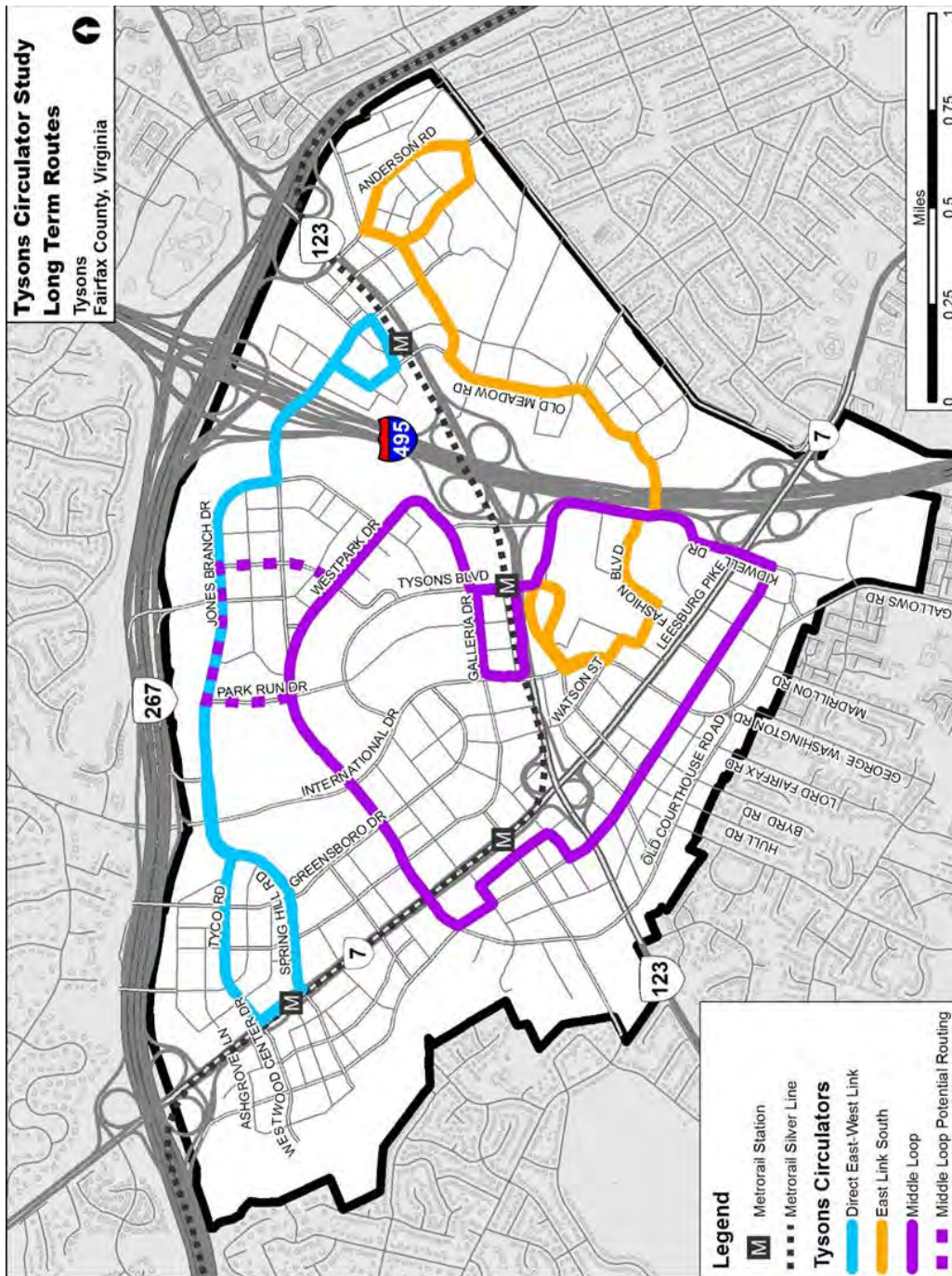
- Include service to locations with higher existing concentrations of trip origins and destinations as well as locations that will have high concentrations of residential and employment in the future.
- Reflect industry best practices, including the provision of real-time arrival information at station locations.
- Provide signal priority to circulators and to selected bus routes.
- Provide Circulator stops that are comfortable for passengers, offering protection from the weather and real-time schedule information.
- Provide service operating in both directions, on each of the proposed circulator routes, to maximize accessibility to the four Metrorail stations.

The first phase of a Tysons Circulator System, serving the four Metrorail stations in Tysons, is a bus service operating in mixed-traffic, within existing rights-of-way. Three of these routes are currently operating. In order to develop a longer term Circulator System intended to support the Tysons Area by 2050, when the residential population is anticipated to be 100,000 and the employment population is anticipated to be 200,000, the Fairfax County Department of Transportation (FCDOT) completed the Tysons Circulator Study.

The Tysons Circulator Study used detailed analysis to refine conceptual circulator routes. The study did the following:

- Identified a Circulator network to maximize transit ridership and provide service to the greatest number of potential riders.
- Identified bus as the most appropriate transit mode for each route within the overall recommended network based on projected ridership demand and required capacity to meet that demand, as well as additional factors such as ease of construction and impacts on pedestrians, bicyclists and automobiles. Modes analyzed include bus, streetcar and driverless people movers.
- Identified required transit preferential treatments to support fast and reliable transit service such as transit exclusive lanes, queue jumps at intersections, and transit signal priority.
- Left open the longer term possibility of streetcar as a mode option for all routes, if future ridership conditions warrant its implementation.

Map 6 shows the Recommended Circulator Network, from the Tysons Circulator Study, that could serve Tysons in the longer term once the grid and two new I-495 crossings are constructed. It should be noted that all Circulator Routes are anticipated to provide two-way service. The ultimate alignment may change based upon the availability of the necessary rights-of-way and other factors i.e. ownership.



Note: Map 6 shows the Final Recommended Circulator Network (Longer Term), from the Tysons Circulator Study. It should be noted that all Circulator Routes are anticipated to provide bi-directional, or two-way, service. Ultimate alignments may change based upon the availability of the necessary rights-of-way and other factors. The feasibility of Beltway crossings shown will need to be further evaluated.

MAP 6

Local Bus Service

Over one dozen bus routes currently serve the Tysons area, with about two-thirds of these routes being operated by WMATA and the others by the Fairfax Connector. These routes connect Tysons to the Metrorail system and directly to various parts of northern Virginia. Most of the routes stop at the Tysons Corner Center and some routes provide connections to other parts of Tysons.

Local bus routes were realigned to provide better service to the new Metrorail stations, while other existing routes were eliminated or modified. Bus service frequencies were also modified for other routes to achieve consistency with new transit service in the corridor, to better coincide with Metrorail headways and to reduce duplication of service where it exists. Moving forward, local bus service will be evaluated on a periodic basis to identify necessary changes or adjustments to service.

Multimodal Transportation Hubs

Multimodal Transportation Hubs, strategically placed close to Metrorail and circulator stations and/or other retail, employment and residential centers, are needed to allow flexibility in trip making within Tysons. These hubs should provide the following:

- Alternative modes for transit users to reach final destinations that are beyond walking distance from transit stations.
- The opportunity for Tysons residents and workers to travel within Tysons and beyond without the need to own or use a private vehicle.

To develop more detailed plans for these hubs, including hub locations, recommendations for services to offer at each hub, where to place recommended services at each hub, and how to implement service recommendations, the Fairfax County Department of Transportation (FCDOT) completed the Tysons Multimodal Transportation Hub Analysis, in 2013, which resulted in the “Mobility Hubs for Tysons Corner Metrorail Stations Conceptual Plans” document. This document includes detailed recommendations for the four Tysons Metrorail stations, including service implementation and location recommendations for, at a minimum, car share programs, bike share, bike racks, bike lockers, taxi stands, kiss and ride locations, commuter kiosk and civic green locations at each station. The document includes phased plans for each station to allow for changes as redevelopment occurs on the properties surrounding the stations. Recommendations from this document should be considered when redevelopment is proposed adjacent to the Metrorail stations.

The Road Network

Overview

The following principles describe the approach to the planning and design of urban street networks that should be followed in Tysons:

- Street network planning should address mobility and access needs associated with passenger travel, goods movement, utilities placement and emergency services.
- The reservation of rights-of-way for the ultimate width of streets should be based on long term needs defined by objectives for community character and mobility.

- As development occurs, street network planning should be refined and updated to define alignments and establish the role of streets as more detailed planning and development occurs.
- Street networks should provide a high level of connectivity so that drivers, pedestrians and transit users can choose the most direct routes and access urban properties. Connectivity should support the desired development patterns. Street networks should provide intermodal connectivity to easily transfer between modes.
- Street network capacity, including alternative paths, and redundancy should be provided through a dense, connected network (a grid) rather than through an emphasis on high levels of vehicle capacity on individual arterial facilities. This approach ensures that the street network can support other objectives such as pedestrian activity, multimodal safety, access to rail stations, and support for adjacent development.

Context Sensitive Solutions

Context Sensitive Solutions (CSS) is a process of balancing the competing needs of many stakeholders starting in the earliest stages of project development. CSS should be applied in the planning and design of transportation projects in and around Tysons. It also includes flexibility in the application of design controls, guidelines and standards to design a facility that is safe for all users regardless of the mode of travel they choose as follows:

- Balance safety, mobility, community and environmental goals in all projects.
- Involve the public and stakeholders early and continuously throughout the planning and project development process.
- Use an interdisciplinary team tailored to project needs.
- Address all modes of travel.
- Apply flexibility inherent in design standards.
- Incorporate aesthetics as an integral part of good design.

Grid of Streets

Tysons currently consists of superblocks with a relatively small number of streets. This places emphasis on the street system's role as a way to move vehicle traffic, and the large block sizes inhibit transit use, pedestrian and bicycle movement. A grid of streets with smaller block sizes is typical in urban areas. It disperses vehicle traffic and improves mobility for pedestrians and bicyclists. A smaller block size will make a more walkable Tysons by creating convenient and short walk distances. A planned grid of streets is shown in Map 7. This grid was refined according to FCDOT's Consolidated Traffic Impact Analyses (CTIA) for Tysons. Nevertheless, future development, further analyses, and input from stakeholders may necessitate additional changes to the grid.

Implementation of the grid of streets should take the following into consideration:

- Continuity, within the grid of streets, should be maximized.
- Intersections with acute angles, off-set intersections, awkward dog legs, and intersections with more than four legs, should be avoided.
- Safe and convenient pedestrian access to Metro stations should be provided.

- Block sizes should generally be within a 400 foot to 600 foot range with a maximum perimeter length of 2,000 feet.
- Any block longer than 600 feet should contain a mid-block pedestrian connection.
- Service streets should have sufficient rights-of-way to provide for a pleasant pedestrian environment where applicable.
- Block faces along Leesburg Pike and Chain Bridge Road/Dolley Madison Boulevard should ideally be 600 feet.
- Where possible, even spacing between intersections should be maintained.

With the provisions described above, the street network in Tysons will be enhanced and will provide for greater network density and more direct connections between various locations, as well as better accommodating both cars and pedestrians. This network will contain more secondary (i.e., local and collector) streets, providing more choices for connectivity than the existing arterial network. Research and experience indicate that in areas with a fine grid of streets and a mix of land uses, people use transit more and make fewer auto trips than their neighbors in typical suburbs.

The grid of streets should be supported by a street hierarchy that allows different types of trips to use different streets. People wishing to travel across Tysons can choose to use a principal arterial, such as Leesburg Pike. Others who only need to travel a couple of blocks will have a choice to travel on a smaller street within the grid of streets.

Although Fairfax County has in the past used the traditional nomenclature of major arterial, minor arterial, collector and local streets to functionally classify streets and highways, a parallel, urban design oriented nomenclature is also used for classification purposes in this text. Table 3 provides a cross-reference between the two classification schemes.

Table 3
Cross-Reference Between
Traditional Highway Functional Classification Terms and
Urban Design Oriented Functional Classification Terms

Highway Functional Classification	Urban Design Functional Classification
Principal Arterial	Boulevard
Minor Arterial	Avenue
Collector	Collector
Local	Local Street
N/A	Service Street

Note: The cross-references shown in the table above are general in nature. Proper street names are not indicative of a street functional classification. Some variations may occur.

Map 7 shows a functional classification of the Tysons street network, including the grid of streets, Beltway-Express lane ramps and potential new ramp locations to the DAAR. Future analyses will result in updated versions of this map. The existing interchange ramps may need to be modified to accommodate new grid connections. It is expected that the design and

construction of grid segments necessary to maintain acceptable traffic circulation for an individual development will be provided by that development.

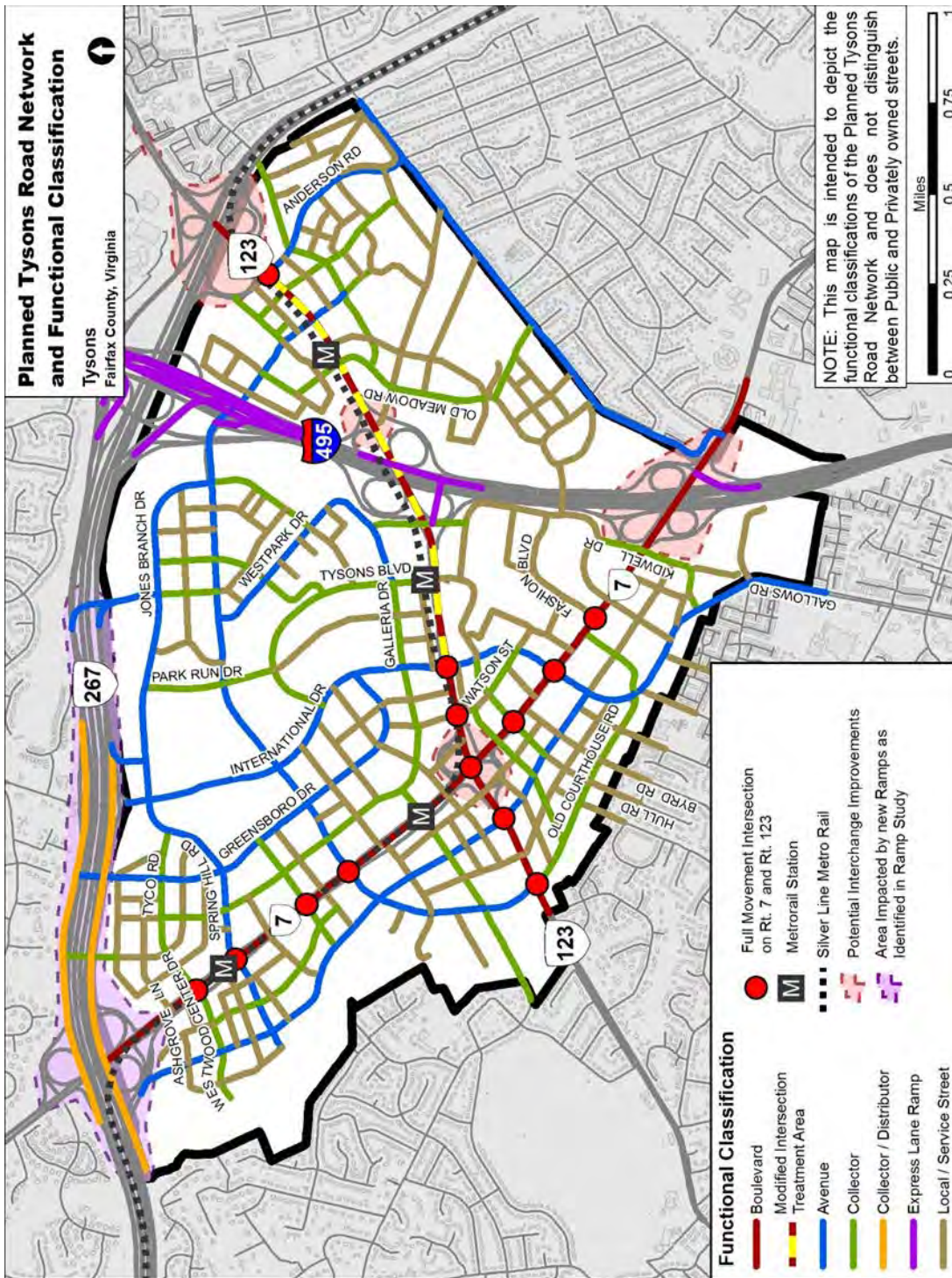
FCDOT conducted a detailed analysis (the New Tysons Dulles Toll Road Ramps Study), in 2013, of the configuration of ramps from Tysons to the Dulles Toll Road. Two final alternatives were identified with both including collector-distributor roads paralleling the Dulles Toll Road and providing connection points to the grid of streets. The analysis found that three ramps connecting Tysons to and from the Dulles Toll Road are necessary in the long term. The findings might be adjusted, pending future analyses and recommendations, by the Metropolitan Washington Airports Authority (MWAA). Changes to the planned Tysons street network, as shown in Map 7, take into consideration the recommendations resulting from this study as well as recommendations associated with the Dulles Toll Road determined by MWAA.

Map 7 also distinguishes additional improvements needed to facilitate the grid of streets:

- **Dulles Toll Road Collector-Distributor Lanes and Additional Lanes** – The current concept for access to the Dulles Toll Road proposes collector-distributor lanes paralleling the through lanes in the Tysons area and where possible, extensions of grid streets tying into the collector-distributor roads to provide access to the Toll Road. In addition, there is a need to extend the collector-distributor lanes farther to the west, from the Rt.7 interchange, as an additional one lane per direction on the Dulles Toll Road. Alternatives should be evaluated to determine if this is needed prior to implementation.
- **Modified Intersection Treatment Area on Route 123** – Left turn movements may be modified at intersection approaches to facilitate regional through movement on boulevards. Prior to implementing such modifications, the county should complete a traffic analysis using simulation to determine the optimum for a modified intersection treatment on Route 123. Consideration should be given to the following:
 - The improvement should be designed in a pedestrian, bicycle, and transit-friendly manner.
 - The improvement should be designed so as to be accommodated within existing rights-of-way to the greatest extent possible and to limit adverse impact to adjacent property.
 - The improvement should be designed so as to reduce congestion-related delay as much as possible.
- **Potential Ramp Improvements** – Changes to ramp configurations and interchange operations are anticipated to facilitate efficient traffic movement and increase ingress and egress opportunities for the area.

Street Types and Design Guidelines

Street types describe the street as an element of the comprehensive framework of Tysons. Street types respond to the needs of traffic from vehicles, bicycles and pedestrians. In April 2010, the General Assembly of Virginia enacted HB 222, “Design standards for state secondary highway system components”, presently codified at Va. Code Ann. Section 33.1-69.001, which required the Virginia Department of Transportation to work in conjunction with Fairfax County to develop new context sensitive, urban design standards for the county.



Note: The Tysons Road Network is subject to change pending results from more detailed analyses of the connections to the DAAR and the Grid of Streets, as well as individual development proposals. The feasibility of Beltway crossings shown will need to be further evaluated. Typical cross-sections are provided for Boulevards, Avenues, Collectors, and Local Streets. Final street design may vary from typical sections to reflect the character of adjacent neighborhoods or districts. Magarity Road represents a special case in that it abuts low density residential neighborhoods outside Tysons; due consideration to this fact must be given in the design of the road, to mitigate impacts on lower-density areas adjacent to Tysons.

MAP 7

In 2011, county staff worked with VDOT and Tysons stakeholders to develop context sensitive design standards to implement the comprehensive plan. The Memorandum of Agreement (MOA) and Transportation Design Standards represent a different set of design standards for Tysons. While the standards do not address every single condition encountered, they do provide significant flexibility, and will substantially reduce the number of design exceptions/waivers that VDOT would require under its existing Secondary Street Standards.

Street types in Tysons have been identified, with a conceptual overview of each type's functionality, cross-section, scale, modal mix, and character provided on the following pages. The cross-section for each street type contains flexibility to be able to respond to particular needs in different locations.

Within Tysons, street cross-sections are to be designed to fit in an urban environment meeting the goals of Context Sensitive Solutions (CSS) while addressing safety, operations, and capacity needs. The following should be taken into consideration in the design of streets in Tysons:

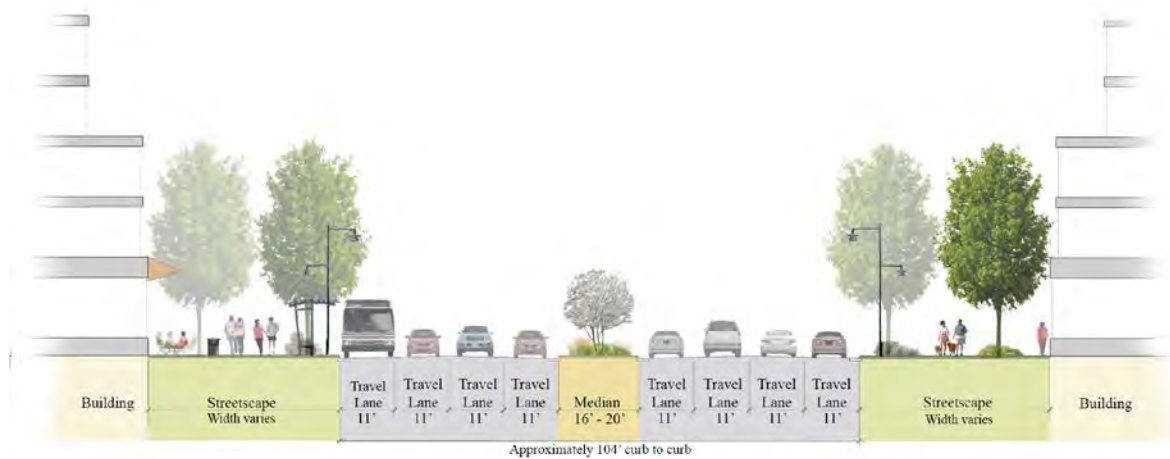
- Continuity of streets is desirable in order to achieve a more effective grid.
- Streets in Tysons will be designed and operated, to enable safe access and movement for pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Streets in TOD areas are expected to be attractive environments for walking, commerce, and casual interaction, and include wide pedestrian facilities, dedicated bicycle facilities and lighting.
- Urban design guidelines for streets, including enhanced pedestrian and bicycle facilities, address the elements of a complete street. Although typical street cross sections are included below, final street designs may include some variations, such as lane width, sidewalk width, or building setback to reflect the changing context of the street as it passes through the many neighborhoods and districts within Tysons.
- Parking is expected to occur on avenues, collectors, and local streets.
- All public street designs should conform to the Transportation Design Standards for Tysons Corner Urban Center.

Boulevards (Principal Arterials)

Route 7 and Route 123 are both boulevards (principal arterials). Boulevards will be the most important multi-modal connectors and thoroughfares within Tysons. In addition to carrying the largest volume of automobile traffic, they also have the ability to accommodate the Metrorail, circulator, bus, bicycle, and pedestrian modes within their rights-of-way.

Boulevards may have three to four travel lanes in each direction. Medians are necessary to provide a pedestrian refuge, rights-of-way for turn lanes and/or to accommodate Metrorail on portions of Leesburg Pike and Chain Bridge Road/Dolley Madison Boulevard. In addition, boulevards will have wide sidewalks with street trees on each side. Some portions of boulevards may include shared or dedicated lanes for the Circulator System.

Figure 1
Boulevard section with landscaped median



Boulevard cross section dimensions:

- The desirable width of the median is 20 feet to allow safe pedestrian refuge.
- 3 to 4 lanes per direction (11 feet for each lane).
- Refer to the Urban Design Recommendations for guidance on the streetscape.

Typical street cross sections are depicted above. Although dimensions are noted, final street design will require accommodation of all applicable road design infrastructure. Additionally, final street designs may vary as necessary to address other design and engineering goals and requirements.

Avenues (Minor Arterials)

Boone Boulevard, Greensboro Drive, and Westpark Drive are examples of avenues. Avenues support Boulevards by providing alternative paths and diverting vehicular traffic away from them. Portions of avenues may also accommodate circulators and provide desirable addresses to new business and residential development. These streets may generally have two travel lanes in each direction, on-street parking, wide sidewalks, and bike lanes. Medians are not preferred but may be necessary depending on design, safety, operation, and capacity considerations.

Additionally, avenues extend into the interior of Tysons, connecting residential and employment areas. Uses and character of avenues will 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 the avenues could also accommodate circulators on shared or dedicated lanes.

Figure 2
Avenue section with landscaped median

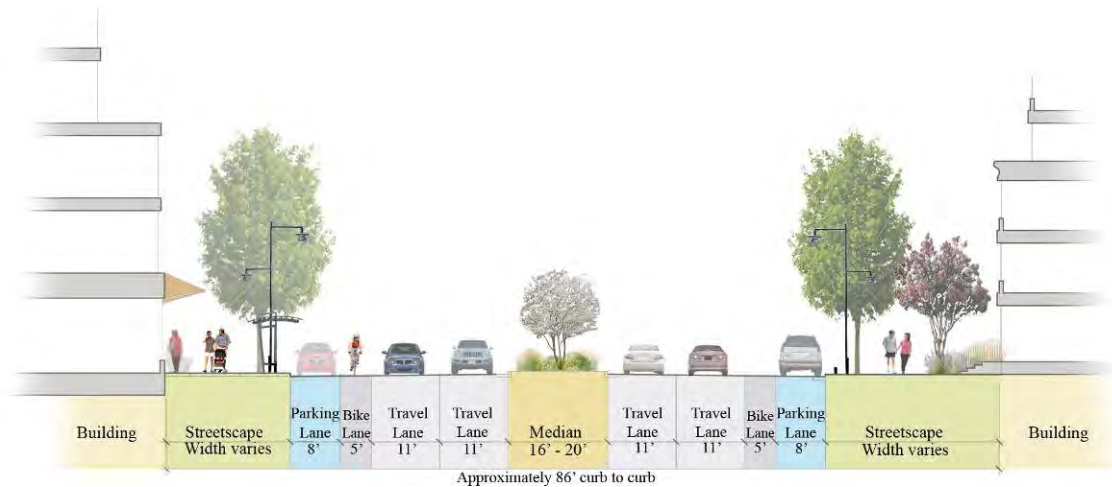
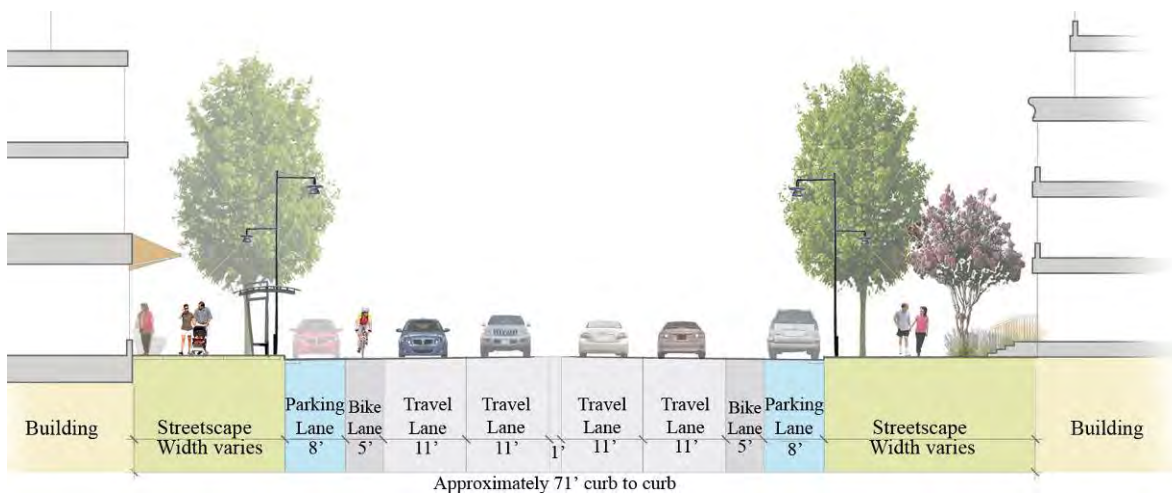


Figure 3
Avenue section with no median



Avenue cross-section dimensions:

- Accommodate Circulator, as identified in the Tysons Circulator Study, or as Tysons Circulator Study may be amended in the future.
- 2 or 3 travel lanes per direction (11 feet for each lane, 10 feet for streets that are residential in character).

- On-street parallel parking is recommended. This parking may be prohibited during peak periods to address traffic capacity needs on some streets.
- 8 feet for on-street parallel parking per direction.
- 5 foot on-road dedicated bike lane per direction.
- The desirable width of the median, if provided, is 20 feet to allow safe pedestrian refuge.
- Refer to the Urban Design Recommendations for guidance on the streetscape.

Typical street cross sections are depicted. Although dimensions are noted, final street design will require accommodation of all applicable road design infrastructure. Additionally, final street designs may vary as necessary to address other design and engineering goals and requirements. For example, a parking lane and a bicycle lane may be combined to operate as a travel lane during peak periods in some locations.

Collector Streets (Collector)

Collector streets within Tysons will connect local streets, with slow-moving traffic, to higher speed facilities like avenues and boulevards. Collector streets typically have one or two travel lanes in each direction. They are slow-moving lanes with traffic calming elements such as bulbouts at intersections, frequent pedestrian crossings, parallel on-street parking, bike lanes and wide sidewalks to maximize walkability. Medians are not preferred but may be necessary to provide pedestrian refuge, or turn lanes.

Figure 4
Collector Street section with
one travel lane in each direction and no median

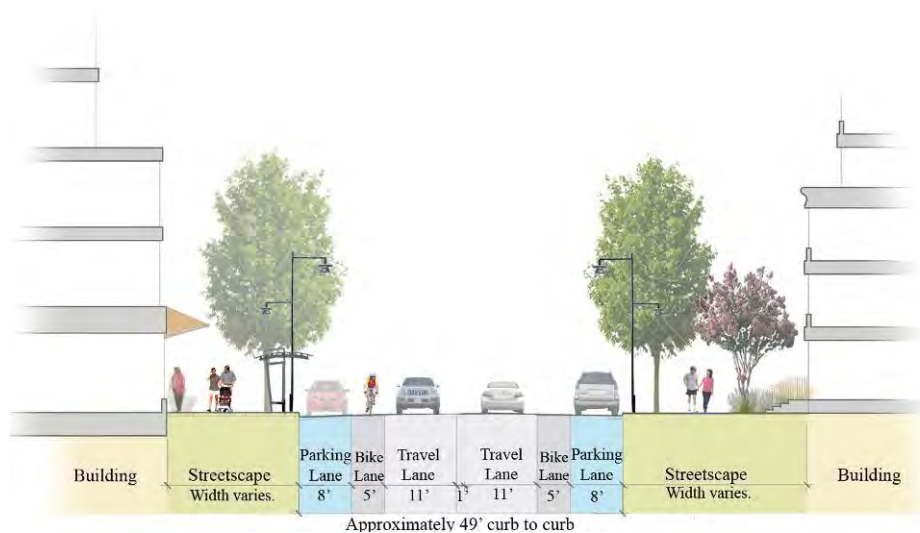
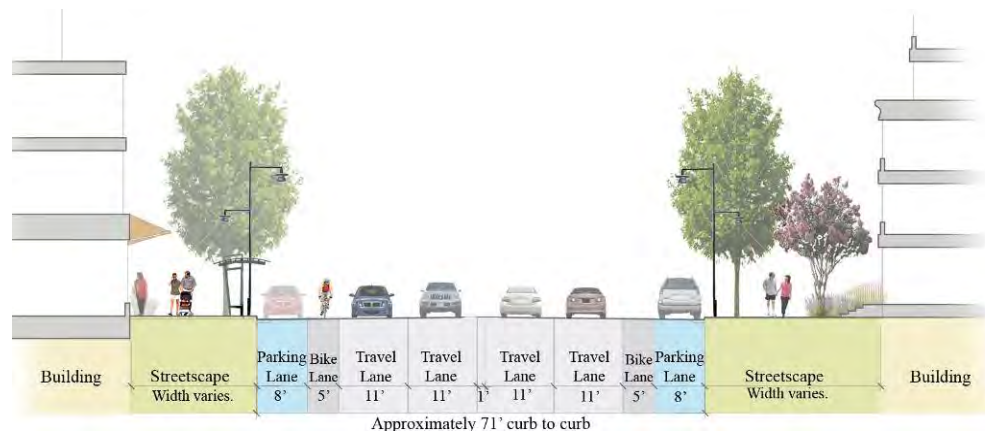


Figure 5
Collector Street section with
two travel lanes in each direction and no median



Collector Street cross-section dimensions:

- Accommodate Circulator, as identified in the Tysons Circulator Study, or as Tysons Circulator Study may be amended in the future.
- 1 to 2 travel lanes per direction (11 feet minimum for each lane, 10 feet for streets that are residential in character).
- 8 feet for on-street parallel parking per direction.
- 5 foot on-road dedicated bike lane per direction.
- The desirable width of the median, if provided, is 4 to 8 feet to allow safe pedestrian refuge.
- Refer to the Urban Design Recommendations for guidance on the streetscape.

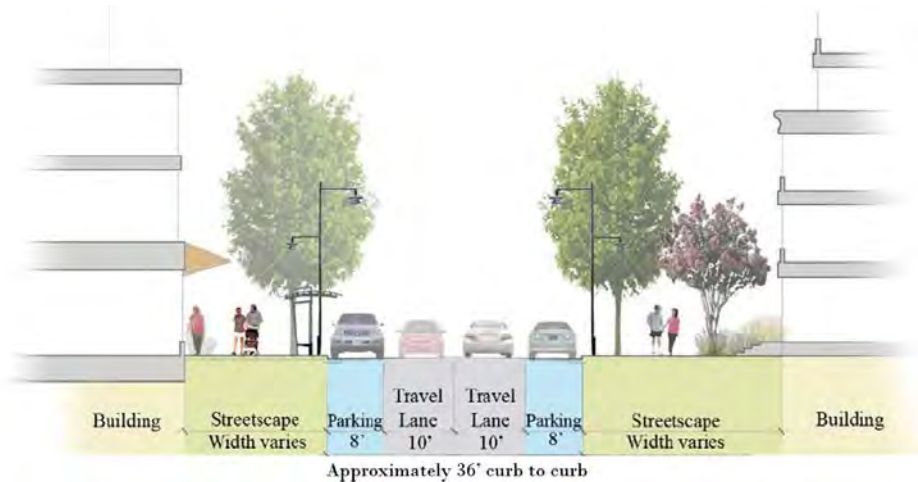
Typical street cross sections are depicted. Although dimensions are noted, final street design will require accommodation of all applicable road design infrastructure. Additionally, final street designs may vary as necessary to address other design and engineering goals and requirements, as well as individual development proposals.

Local Streets (Local)

Local streets will typically be the lowest volume streets within Tysons and will carry slow-moving traffic. Medians should not be considered. Local streets will serve residential and/or employment uses on either side with entrances and windows opening on the sidewalks.

Local street sections are generally narrow, with one lane in either direction, and are flanked by on-street parking on both sides. Due to low vehicle speeds, bicycles may be accommodated in the travel lane rather than in a dedicated bicycle lane.

Figure 6
Local Street section



Local Street cross-section dimensions:

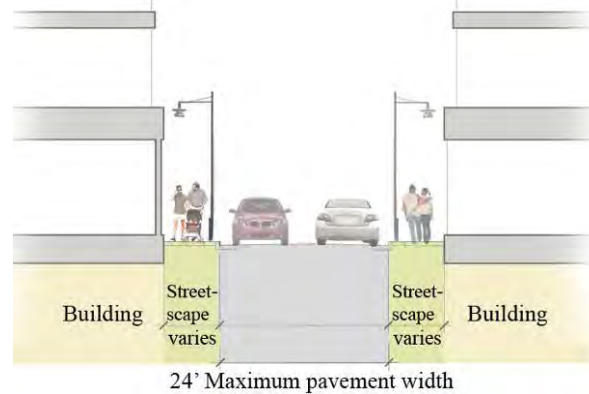
- No medians should be considered.
- 1 travel lane per direction
- 10 foot lane widths may be considered for residential streets.
- 7 to 8 foot on-street parking lane per direction.
- Local streets are low speed facilities that may or may not require bike lanes.
- Refer to the Urban Design Recommendations for guidance on the streetscape.

Typical street cross-sections are depicted. Although dimensions are noted, final street design will require accommodation of all applicable road design infrastructure. Additionally, final street designs may vary as necessary to address other design and engineering goals and requirements, as well as individual development site conditions.

Service Streets (No Functional Classification)

Service streets serve vehicles operating at very low speeds and are generally privately maintained facilities that typically run between buildings to provide access to parking garage entrances, loading and refuse containment areas. Connections to local streets and collectors are encouraged. Service streets should be designed to maximize functionality for service vehicles. Allowances should be made for pedestrian access as needed.

Figure 7
Service Street section



Service Street cross-section dimensions:

- No medians should be considered.
- 1 travel lane per direction.
- Street widths should accommodate expected service vehicles.
- Parking and bus access is not anticipated.
- Landscaping should not conflict with large vehicle movements.
- Mountable curbs should be considered.
- Refer to the Urban Design Recommendations for guidance on the streetscape.

Typical street cross sections are depicted. Although dimensions are noted, final street design will require accommodation of all applicable road design infrastructure. Additionally, final street designs may vary as necessary to address other design and engineering goals and requirements, as well as individual development site conditions.

Highway Connections and Beltway Crossings

Physical improvements to the roadway and transportation infrastructure are necessary to achieve critical access and egress for Tysons. In addition to the grid of streets, the following improvements should be constructed:

- A new I-495 crossing connecting Jones Branch Drive to Scotts Crossing Road (extension of High Occupancy Toll connection), including pedestrian and bicycle access and the ability to accommodate the Circulator.
- A new I-495 crossing connecting the Tysons Corner Center area to Old Meadow Road (limited to transit, pedestrians and bicyclists).
- Ramps connecting Greensboro Drive extension to westbound DAAR and eastbound DAAR to the Greensboro Drive extension.
- Ramps connecting Boone Boulevard extension to westbound DAAR and eastbound DAAR to the Boone Boulevard extension.

- Ramps connecting Jones Branch Drive to westbound DAAR and eastbound DAAR to Jones Branch Drive.
- A collector-distributor road system on the DAAR between the Leesburg Pike interchange area and the Hunter Mill Road interchange area.
- An additional lane on the Outer Loop of I-495 between the Leesburg Pike on-ramp and I-66.
- Interchange improvements at DAAR and Leesburg Pike; and
- Interchange improvements at DAAR and Spring Hill Road.
- Modified intersection treatment configurations along Route 123 between International Drive and the DAAR overpass.
- Changes to the northwest quadrant of the interchange of Route 123 and the DAAR, to tie the grid of streets into the endpoint of the ramp from eastbound DAAR to Route 123.
- Improvements to the connection of Magarity Road and Route 7.
- A grade separation along Route 123, at the Lewinsville Road and Great Falls Road intersection, to increase capacity.
- A reconfiguration of the Route 123/Route 7 interchange to allow additional capacity. Options evaluated should include concepts for an at-grade intersections.
- A new connection between Gallows road and the I-495 Southbound Ramp at Gallows Branch.

These improvements need to be designed to fit into the new Tysons.

Pedestrian Network

The opening of Metrorail service has turned Tysons into a more active pedestrian environment. To ensure appropriate facilities are in place to accommodate the growing number of pedestrians, new streets will be designed, and existing streets will be retrofitted, to be Complete Streets, designed to accommodate all modes of travel.

The Street Types and Design Guidelines section of this chapter provides specific pedestrian facility treatments that should be applied to all streets in Tysons based on their functional classification. The Guidelines recommend minimum sidewalk widths but go beyond the basic provision of facilities. The Guidelines recommend on-street parking, lighting and additional space for activated streetscapes, all of which work to create a safe and attractive pedestrian environment.

In some locations, off-road trails will be necessary to provide adequate pedestrian connectivity to and within Tysons. Where these trails are necessary, lighting should be provided to ensure a safe and comfortable walking environment during all hours. A new grid of complete streets, combined with lighted off-road trails, will result in highly connected pedestrian network in Tysons. This expanded pedestrian network will not only provide alternative paths between Metrorail stations and other locations, but will also enhance the efficiency and desirability of using transit and other alternative modes of travel.

Bicycle Network

Tysons' existing transportation network, with its superblocks, suburban character, and auto-related land uses, makes bicycling a challenge. Despite these conditions, Tysons has significantly more bicycle trips in, around, and through than other areas of the county.

In 2006, the Board of Supervisors unanimously approved a comprehensive bicycle initiative, a program designed to encourage bicycling and make Fairfax County bicycle friendly and safe. New streets will be designed and older streets retro-fitted to better accommodate bicycles. Transit options will become bike friendly with the addition of buses equipped with bicycle racks. Ample safe, secure, and convenient bicycle parking will be installed countywide, including at the Tysons Metrorail stations. Comprehensive wayfinding signage will provide guidance and information about destinations and paths, while a network of interconnected shared use paths, interfacing with an on-road bike network, will establish a cohesive and connected transportation environment conducive to bicycling. The Tysons Urban Center plan affords an opportunity to incorporate these elements of bicycling, making Tysons a bicycle friendly community.

Map 8 shows a conceptual bicycle network, based on the Street Types and Design Guidelines shown earlier in this section, that require on-road bike lanes on all Avenue and Collector Streets. The Fairfax County Bicycle Master Plan, adopted by the Fairfax County Board of Supervisors in 2014, provides more detailed recommendations for specific locations within Tysons.

Bicycle Parking

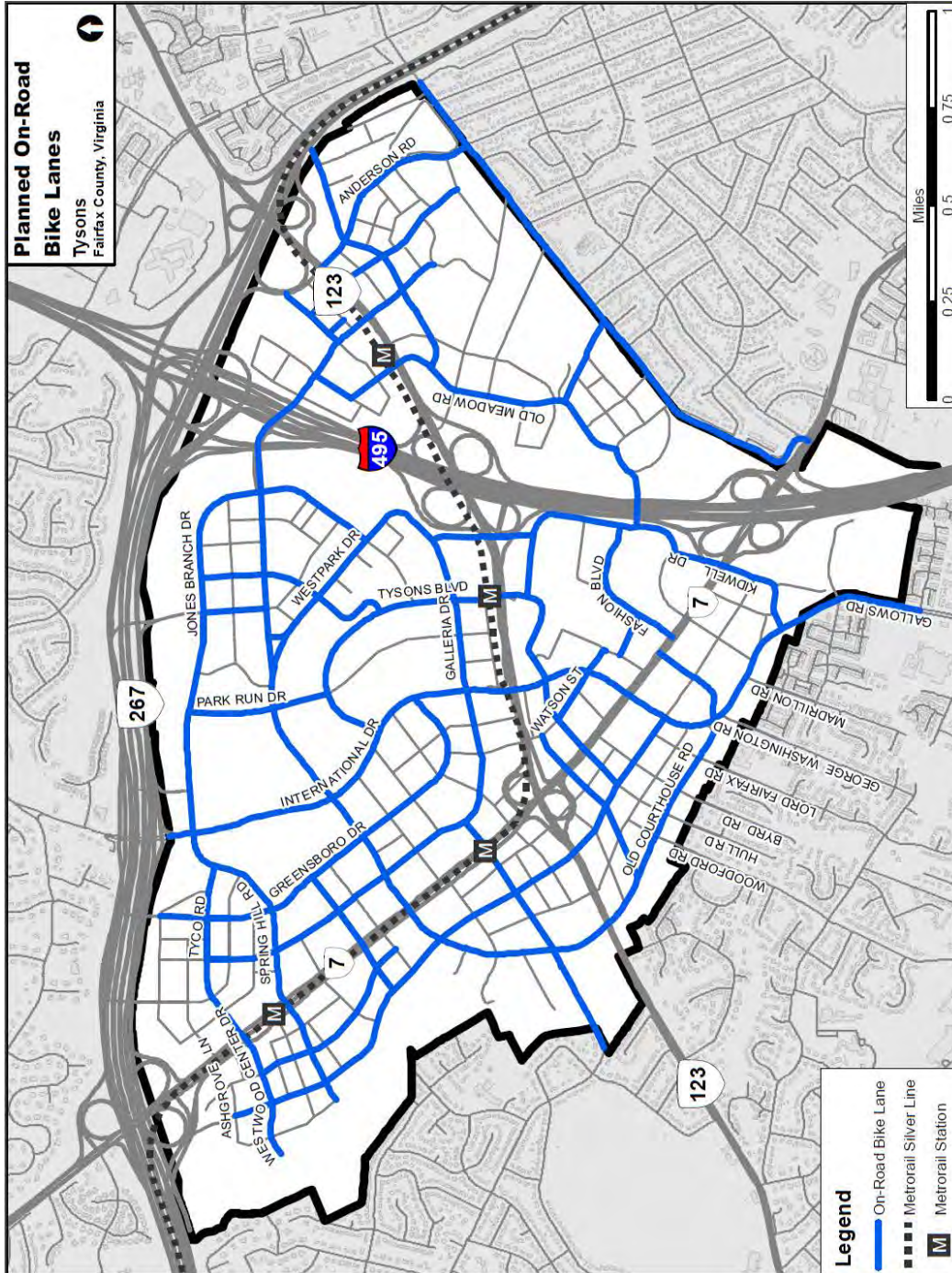
In an effort to encourage bicycling in Tysons, safe, secure, and convenient bicycle parking should be provided. The number of bicycle parking spaces should be based on the proposed land uses in the Tysons Plan. Based on national trends, using a mode share of 1% to 5% for bicycle trips, Table 4 reflects bicycle parking standards to be used in calculating the number of parking spaces for bicycles.

Bicycle parking is defined by two general categories:

Short-term bicycle parking: Emphasizes convenience and bicycle accessibility, providing parking for visitors, shoppers, and guests. Short term parking is typically bike racks that are adjacent to primary entrances at libraries, municipal buildings, schools, and retail centers and are intended for site users. Racks should preferably be protected from the elements, and be highly visible.

Long-term bicycle parking: Provides not only convenience but security. This type of bicycle parking accommodates employees and residents where parking duration is typically longer than short-term parking. Parking amenities include bike lockers, bike cages, and bike rooms. These facilities should be conveniently located and offer fully enclosed and locked storage.

Specific guidelines for bicycle parking are addressed in these documents: Fairfax County Bicycle Master Plan, Fairfax County Policy and Guidelines for Bicycle Parking, and Tysons Urban Design Guidelines.



Note: Map 8 was created using the Street Type Design Guidelines, described earlier in this section, that require on-road bicycle lanes on all Avenue and Collector Streets. Although not required by Street Type Design Guidelines, on-road bicycle lanes may be appropriate on certain local streets, and are included in the on-road bike network to make a connected network. On some of these local roads, alternative bicycle facilities have been approved. The Tysons section of the Fairfax County Bicycle Master Plan provides more detailed recommendations for specific locations within Tysons.

MAP 8

Table 4
Bicycle Parking Ratios for Urban Centers and Transit Station Areas (TSA)

Type of Use	Short-Term Parking	Long-Term Parking
Single Family Detached Residential	N/A	N/A
Multi-Family Residential	One visitor space/25 units of portion thereof	One space/3 units or portion thereof
Commercial-Retail*	One visitor space/5,000 SF of floor area or portion thereof	One employee space/12,500 SF of floor area or portion thereof
Office	One visitor space/20,000 SF of floor area or portion thereof	One space/7,500 SF of floor area space or portion thereof

*Bicycle parking spaces should be installed at interior and/or exterior locations that are convenient to the retail customers and employees. Locations shall be reviewed by FCDOT and OCR (if located in a revitalization area).

Wayfinding

An effective wayfinding system is integral to urban design since it enhances the comprehension and use of the built environment. A wayfinding system should be provided at Metrorail stations to:

- Orient first-time passengers disembarking in Tysons.
- Guide vehicular, bicycle and pedestrian traffic to primary public, cultural, and recreational locations while providing a unified design standard and expressing a sense of place.
- Deliver information at locations where it is most needed.
- Guide Metrorail passengers to main destinations within walking distance and to locations where feeder-distributor modes, such as a circulator, can be accessed to reach destinations beyond walking distance.
- Identify bikeable routes and provide bike route destinations and distance information.
- Provide consistent, clear, and attractive signage that is easy to maintain.
- Include stakeholder involvement in the design of the system.
- Include signs that are designed to easily accommodate changes in the venues listed on the signs.
- Include real-time parking availability information.

Detailed guidelines for wayfinding signage are addressed in the Tysons Urban Design Guidelines.

Level of Service

Impacts on Roads

An overall Level of Service (LOS) 'E' goal is expected for the street network in Tysons. At locations where a LOS E standard cannot be attained or maintained with planned development, remedies should be proposed to offset impacts using the tiered approach described below. The purpose of this tiered approach is to support implementation of the grid of streets, which is more typical of urban areas and improves mobility for pedestrians and bicyclists.

In the development review process, mitigation of problem locations should follow the following sequence:

1. First, determine whether the addition of capacity and/or increased operational efficiency is possible to achieve without decreasing pedestrian walkability and safety. The widening of roads, either for additional exclusive turn lanes and/or through lanes, increases street widths at intersections and works against an attractive environment for pedestrians. For this reason, roadway widenings will in most cases be undesirable. In lieu of additional lanes, it is preferable to add links to the grid of streets where applicable and possible to promote the build-out of the grid of streets and to create additional diversionary paths for vehicles, and in so doing, to decrease the traffic at problem locations in the vicinity of a proposed development.
2. Failing that, decrease future site-generated traffic by: changing the mix of land use within the parameters of the applicable land use guidelines for Tysons (e.g., replacing office or retail uses with residential use), increasing transit use through provision of additional and improved services, and/or optimizing the application of TDM measures which might include greater transit use, walking and bicycling.
3. If the previous measures do not provide adequate improvement of LOS, a development proposal or phase of development may need to be conditioned on completion of offsetting improvements. Financial contributions of significant value dedicated to addressing deficiencies in the Tysons area may be considered as an offsetting improvement. These contributions may not be used as a credit against other contributions toward off-site transportation improvements.

Impacts on Transit, Pedestrian, and Bicycle Facilities

A high level of service should be maintained for transit users that minimizes delay, the need for transfers, and transfer delay. Where it is not possible to maintain a high level of transit service because of extraordinarily high costs, monetary contributions to a fund for the eventual improvement of transit service should be provided in lieu of the maintenance of a high quality transit service.

A high level of service should also be maintained for pedestrians and cyclists, including safety and security, direct pathways and minimized delays at intersections. Within TOD areas, preference should be given to the maintenance of a high level of service for transit, cyclists, and pedestrians over vehicles. Impact studies within TOD areas should quantify the level of service for all applicable modes (vehicular, transit, pedestrians, and cyclists) by applying up-to-date, standard techniques.

TRANSPORTATION MANAGEMENT

Transportation Demand Management

Transportation Demand Management (TDM) refers to a variety of strategies aimed at reducing the demand on the transportation system, particularly to reducing single occupant vehicles during peak periods, and expanding the choices available to residents, employees, shoppers and visitors. The result is more efficient use of the existing transportation system. Transportation Demand Management is a critical component of this Plan. Traffic needs to be minimized to decrease congestion within Tysons, to create livable and walkable spaces, and to minimize the effects of traffic on neighboring communities.

With four Metrorail stations now open in Tysons and denser mixed use transit-oriented development planned and under construction surrounding the stations, a substantial percentage of travelers are expected to commute via Metrorail without any TDM programs in place. This development pattern will also reduce the need for driving trips because jobs, housing, shopping, recreational, and cultural opportunities will be close at hand and accessible by walking or a short transit ride.

A broad, systematic, and integrated program of TDM strategies throughout Tysons can further reduce peak period single occupancy vehicle trips, as well as increase the percentage of travelers using transit and non-vehicular modes of transportation. TDM programs should embrace the latest information technology techniques to encourage teleworking, provide sufficient information to enable commuters and other trip makers to choose travel modes and travel times, or decide if travel is actually necessary at that time.

A large component of TDM will be the promotion of the programs to the various stakeholders within Tysons. A Transportation Management Association (TMA), known as Tytran, has been established to coordinate TDM outreach. This TMA should serve all travelers in Tysons as a unified repository for information, serve to educate commuters on transportation options, and help implement all TDM programs in coordination with the county. The TMA should also assist the development community in implementing their proffered TDM program requirements.

At a minimum, development proposals should include the following elements associated with their TDM program:

- Indicate the trip reduction goals over time (2050 and interim development levels) by using the values specified in Table 5.
- TDM implementation plans. TDM implementation plans should include at least the following:
 - Evaluations of potential TDM measures
 - Listing of TDM measures to be provided
 - Listing of alternate TDM measures which may be provided
 - Phased trip reduction goals
 - Implementation budgets
 - Monitoring arrangements and associated remedial and penalty funds. The remedial fund is to be used if TDM goals are not met and the penalty fund is used, if

unanticipated changes in travel behavior (Tysons-wide) result in an increase in the TDM trip reduction goals. Please see the TDM Monitoring section.

- Commitments to ensure Transportation Demand Management efforts are successful. These may include parking plans that reduce parking ratios before later phases of development are constructed, phasing plans that tie future development to recording successful vehicle trip reductions, remedy funds to improve TDM program delivery, and penalties to deter non-compliance.

Areas closest to the Metrorail stations should have higher transportation demand management requirements. Within 1/8 mile of the stations, development proposals should provide the greatest incentives to reduce single-occupant vehicle commuting. The recommended TDM trip reductions of traffic generation estimates provided by the Institute of Transportation Engineers (ITE) are shown in Table 5.

Table 5

TDM Vehicle Trip Reduction Goals for Commercial and Residential Development				
Gross Square Feet (GSF) of development in Tysons	Distance from Metrorail Stations			
	0 to 1/8 Mile	1/8 to 1/4 Mile	1/4 to 1/2 Mile	Beyond 1/2 Mile
	Trip Reduction Goal (Percentage reduction from the ITE Trip Generation Rate)			
Up to 65,000,000	45%	35%	30%	25%
65,000,000	50%	40%	35%	30%
84,000,000	55%	45%	40%	35%
90,000,000	58%	48%	43%	38%
96,000,000	60%	50%	45%	40%
105,000,000	63%	53%	48%	43%
113,000,000+	65%	55%	50%	45%

Note: TDM reductions include a reduction in vehicle trips due to transit.
 See Table 2 for transit modal split goals.

The TDM trip reductions in Table 5 equate to total trip reductions for Tysons of over 30%; over 40%; and over 50% based on the overall square footage of development that is achieved. These trip reductions include the transit mode shares indicated in Table 2. As the Tysons area is developed, and the land use and transportation infrastructure matures, TDM trip reduction goals should be examined to determine if they are adequate for changing conditions.

Examples of TDM measures:

- Transit and vanpool subsidies
- Pre-tax deduction of transit and vanpool fares

- Telework program
- Carpool and vanpool matching service
- Shower and locker facilities for bicyclists and walkers
- Secure and weatherproof bicycle parking
- Carpool and vanpool preferential parking
- On-site car-sharing vehicle
- Shuttle service to Metrorail
- Guaranteed Ride Home Program
- Commuter information center (bulletin board, web site, brochure table)
- Employee Transportation Coordinator (ETC)
- Flexible or alternative work hours
- TDM education programs directed at the public and employers

TDM programs will only work where parking is not over-supplied, and will be most effective where parking costs are charged directly to users. TDM programs must be coordinated with parking reductions and/or management programs.

Parking Management

In the past, each development was required to provide parking for its own peak demand, an approach that often leads to excess parking supply and a wasted uses of resources. In 2015, the Tysons Parking Study estimated that Tysons had 110,000 parking spaces. This amount of parking far exceeds what is necessary.

A change in philosophy of regulating parking is needed to put Tysons on the forefront of sustainable growth. Parking in the TOD Districts should follow the experience of successful TOD areas around the country by limiting the amount of parking required near rail stations. In the Non-TOD Districts, reductions from conventional parking ratios are required to achieve Tysons-wide trip reduction goals.

For all nonresidential uses, minimum parking requirements are eliminated within 1/2 mile of rail stations. Minimum parking requirements are reduced for all uses located outside of TOD Districts. A parking plan should be submitted along with all development applications. The parking plan should include, along with other required elements, information to demonstrate that the planned loading facilities are adequate for the planned uses. The loading plan may count new, on-street loading areas and synergies among planned uses, to limit the need for additional loading spaces.

To avoid oversupply of parking, maximum parking requirements are set for all areas. Shared parking and the use of existing excess off-site parking are encouraged. Parking rates are indicated in Table 6.

It may be appropriate, in developments with long implementation horizons, to use more parking than indicated in Table 6 for initial phases of development, provided that the following stipulations are met:

- Existing off-site parking should be used to provide parking in excess of the parking ratios in Table 6 during initial phases of development.
- If sufficient off-site parking is not available, additional on-site parking may be provided on condition that TDM goals are not jeopardized and that once all phases are constructed, parking ratios for the total development will not exceed the maximum values in Table 6.
- Parking in excess of the parking ratios in Table 6 should be available to the public at appropriate parking fees where possible.

In Non-TOD Districts and for residential development within TOD Districts, a parking plan can be submitted along with a development application that justifies parking levels below the minimums indicated in Table 6. The parking plan should indicate the techniques to be applied to justify a lower level of parking.

Table 6
Parking Ratios for Tysons

Parking Spaces Per Unit or Spaces Per 1,000 sq. ft.									
Use	Previous (2009)	< 1/8 mile Metro Station		1/8 - 1/4 mile Metro Station		1/4 - 1/2 mile Metro Station		Non-TOD	
	Min.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
Townhouse	2.7	1.75	2.2	1.75	2.2	2.0	2.5	2.0	2.7
Multifamily									
0-1 bedroom	1.6	1.0	1.3	1.0	1.3	1.1	1.4	1.1	1.4
2 bedroom	1.6	1.0	1.6	1.0	1.6	1.35	1.7	1.35	1.7
3+ bedroom	1.6	1.0	1.9	1.0	1.9	1.6	2.0	1.6	2.0
Hotel/Motel	1.08	none	1.0	none	1.0	none	1.05	0.85	1.08
Office	2.6	none	1.6	none	2.0	none	2.2	2.0	2.4

Notes:

1. For retail and service uses located in TOD areas not listed in Table 6, minimum parking requirements enumerated in Sections 11-103, 11-104, 11-105, and 11-106 of the Zoning Ordinance should be used as maximum parking requirements; in non-TOD Districts, the minimum required parking should be 75% of the minimum parking requirement in the Zoning Ordinance and the maximum should be 110% of the referenced minimum.
2. To encourage convenient retail and service uses within walking distance of office and residential development, the first 5,000 square feet of accessory retail and service uses in any such building should have no parking spaces allocated in the parking plan, nor should it be counted toward the maximum parking requirement.

As the Tysons area is developed, and the land use and transportation infrastructure matures, parking requirements should be examined to determine if they are adequate for the changing conditions. Rather than supplying parking for each individual use, parking should be treated as a common resource for multiple uses. Implementing this practice will reap many advantages in creating a more walkable environment. Providing transit service, an effective mix of uses, and an appropriate network of sidewalks will reduce automobile use and, consequently, the need to provide parking.

Additional methods listed below should be pursued to ensure the appropriate amount of parking is provided.

- Encourage shared parking arrangements across parcel lines.

- Create a parking management entity to coordinate shared parking efforts, enforce parking regulations, apply parking pricing strategies where beneficial, and monitor parking demand and supply regularly.
- Secure parking management agreements such as parking pricing.
- Unbundle parking from commercial and residential leases and sales.
- Allow on-street parking, where appropriate, to count towards parking requirements.
- Implement “Smart Parking” technology to maximize parking utilization.
- Provide preferential parking for carpools, vanpools, and car-sharing vehicles.
- Allow reductions for shared parking on mixed use sites.

The application of Intelligent Transportation Systems (ITS) in Tysons has the potential to decrease congestion, increase safety, make trip making more convenient, reduce emissions and improve trip-making decisions. More specifically the following are examples of goals for the application of ITS in Tysons:

- Electronic information infrastructure that works in concert with physical infrastructure to maximize the efficiency and utility of the system (e.g. E-Zpass electronic toll collection systems, SmartTrip rechargeable transit payment cards, and other technology), encouraging modal integration and consumer choice.
- Real-time information for operators and users of the transportation system to help contain congestion and increase the effective capacity of the system while reducing the need for new construction.
- Facilities, technology and information that help reduce energy consumption and negative environmental impact.
- ITS infrastructure, applications, data and communications should have protection from malware, cyber intrusion, and loss of service.

Fairfax County should continue to monitor the advancement of technological infrastructure as it relates to development in Tysons. The county should also develop methods of community outreach to bring awareness of these potentially useful applications and services.

ITS can be used to not only monitor and mitigate traffic congestion, but also to enhance emergency services in Tysons. Through the use of street sensors, signal control transmitters, and video surveillance cameras, real-time traffic management can take place. GPS and other technology can also help public safety personnel respond to incidents in a timely manner. Intelligent transportation systems (ITS) should be applied to the fullest extent possible. Main components of ITS include:

- Traffic management systems. These systems make use of information collected by traffic surveillance devices to smooth the flow of traffic along travel corridors. They also disseminate important information about travel conditions to travelers.
- Crash prevention and safety systems detect unsafe conditions and provide warnings to travelers to take action to avoid crashes.
- Roadway operations and maintenance focus on integrated management of maintenance fleets, specialized service vehicles, hazardous road conditions remediation, and work zone mobility and safety.

- Transit ITS services include surveillance and communications, such as automated vehicle location (AVL) systems, computer-aided dispatch (CAD) systems, and remote vehicle and facility surveillance cameras, which enable increases in operational efficiency, safety, and security.
- Emergency management applications include hazardous materials management, the deployment of emergency medical services, and large and small-scale emergency response and evacuation operations.
- Electronic payment and pricing systems employ various communication and electronic technologies to facilitate commerce between travelers and transportation agencies.
- Traveler information applications use a variety of technologies to allow users to make more informed decisions regarding trip departures, routes, and mode of travel.

New developments should contain the necessary information and communication technology (ICT) infrastructure to enhance the following activities to the fullest extent:

- Telework, teleconferencing, and related strategies to reduce vehicular trips.
- Advanced traveler information to increase the efficiency and effectiveness of decisions on when to travel, how to travel, where to travel, and whether to travel at all.

Traffic Management and Maintenance

To ensure a high level of safety, to minimize breakdowns, to maintain a clean and attractive environment and to monitor systems to optimize efficiency and effectiveness, a traffic management maintenance entity should be designated for Tysons. Such an entity should be responsible for at least the following:

- Traffic monitoring and incident management.
- Streetscape monitoring and maintenance where necessary.

MAINTAINING A BALANCE BETWEEN LAND USE AND TRANSPORTATION

In order to maintain an acceptable level of accessibility in and around Tysons as development occurs over time, it is essential to keep a balance between land use and transportation. To maintain this balance, the increase in development in Tysons should be coordinated with the provision of transportation infrastructure and programs to reduce vehicular trips. Considerable analysis was conducted to determine the need for specific transportation programs and infrastructure for a specific level of development in Tysons.

From the results of this analysis, the following strategies were identified that need to be successfully implemented to maintain a balance between land use and transportation:

- The phased provision of transportation infrastructure as specified in Table 7. Major components of transportation infrastructure are the grid of streets, new transit routes, and new connections in and out of Tysons.
- The achievement of vehicle trip reduction levels as specified in Table 5. Essential in obtaining these vehicle trip reductions are the following:
 - TDM programs, as specified in the TDM section of the Plan.
 - Achievement of transit modal split levels as specified in Table 2.

- Limitations to the provision of parking as specified in Table 6.
- Increasing the amount of residential development in Tysons as specified in the Land Use section of the Plan.
- Excellence in urban design, successful integration with Metro stations, and the achievement of the mix of uses and the facilities which creates the largest possible internal trip capture.
- A monitoring system (see “Monitoring System” on following pages) to verify that strategies are realized as planned and apply timely adjustments if there are variations from the recommendations on how a balance will be maintained.

Considering the importance of successfully implementing these strategies, property owners should commit to the following transportation conditions:

- Achievement of transportation infrastructure and programs for various levels of development as specified in Table 7. This can be accomplished by:
 - Participation in the financial mechanisms established for Tysons as provided in the section entitled “Funding for Transportation Improvements”
 - Phasing development to the required transportation infrastructure and programs
- A demonstrated ability to achieve vehicle trip reduction levels as specified in Table 5.
- If a balance cannot be achieved using the methods described above, contributions should be considered to additional transportation improvements, such as the projects identified in Table 7B.

Recommendations for phasing development in Tysons to transportation improvements and objectives can be found in the Land Use Recommendations.

Table 7 and 7B provide the required transportation infrastructure, programs, and services as Tysons grows over time. Table 7 was based on the initial transportation analysis of Tysons conducted prior to the adoption of the Tysons Comprehensive Plan Amendment in June 2010. Subsequently, a more detailed analyses, the Consolidated Traffic Impact Analyses (CTIAs), was conducted in 2013. In addition, the future land-use allocation in the Tysons station areas was adjusted based on preliminary information obtained from zoning applications. This resulted in additional projects listed in Table 7B. These projects were not added to Table 7 since the current funding plan for transportation improvements is based on Table 7. Projects recently completed, including the construction of Phase I of the Metrorail Silver Line, the construction of the I-495 Express lanes, as well as associated ramps, represent a significant investment in transportation. Periodic re-evaluations of the monitoring and implementation of Tables 7 and 7B should be conducted to reflect when and where redevelopment has occurred within the Tysons Urban Center.

Table 7
Transportation Infrastructure, Programs, and Services,
As They Relate to the Level of Development in Tysons

Type of Transportation Program or Infrastructure Project	Description of Transportation Program or Infrastructure Project	Area Served by Improvement
I. Transportation Improvements Completed		
A. Transit and Pedestrian Improvements		
Rail Transit Routes	Phase I of Metrorail Silver Line Phase I	Tysons-wide/ Countywide
Bus transit routes	Neighborhood bus routes; circulator bus routes serving Metrorail stations; express bus routes on I-95/I-495	Tysons-wide/ Countywide
Sidewalks	Sidewalks to provide connections to developments within walking distance of rail stations (TMSAMS and others)	District
B. Tysons-wide Road Improvements		
Roads – Arterial Widening	Complete widening of Leesburg Pike to 8 lanes between the DAAR and Chain Bridge Road	Tysons-wide
Roads – Freeway Widening	Widen I-495 from 8 to 12 lanes to provide 4 Express Lanes between the Springfield Interchange and the American Legion Bridge	Tysons-wide/ Countywide
Roads – Freeway Ramp	Express Lane ramp connecting to Jones Branch Drive	Tysons-wide
Roads – Freeway Ramp	Express Lane ramp connecting to the Westpark Drive Bridge	Tysons-wide
Roads – Freeway Ramp	Express Lane ramp connecting to Leesburg Pike	Tysons-wide
C. TDM Measures		
TDM	Application of aggressive TDM measures (e.g. 45% reduction in vehicle trips for an office development within 1/8 mile of a Metrorail station)	District
II. Required Additional Transportation Improvements to Accommodate 60 Million sq. ft. of Development		
A. Transit Improvements		
Rail Transit Routes	Completion of Phase II of Metrorail Silver Line (from the Wiehle/Reston East Metrorail Station to west of Dulles Airport with three stations in Fairfax County)	Tysons-wide/ Countywide
Bus Transit Routes	Further improvements to neighborhood bus routes; circulator bus routes serving Metrorail stations; express bus routes I-95/I-495 and additional express bus service on I-66.	Tysons-wide/ Countywide
B. Tysons-wide Road Improvements		
Roads – Arterial Widening	Widen Chain Bridge Road to 8 lanes between Leesburg Pike and I-495	Tysons-wide
Roads – Arterial Widening	Widen Chain Bridge Road, from 4 to 6 lanes, between Leesburg Pike and Old Courthouse Road	Tysons-wide
Roads – Arterial Widening	Widen Leesburg Pike, from 4 to 6 lanes, between I-495 and I-66	Tysons-wide
Roads – Arterial Widening	Widen Leesburg Pike, from 6 to 8 lanes, between Chain Bridge Road and I-495	Tysons-wide
Roads – Connecting Bridge	Bridge connecting Jones Branch Drive to Scotts Crossing Road	Tysons-wide
Roads – Arterial Widening	Widen Leesburg Pike, from 4 to 6 lanes, between the DAAR and Reston Avenue	Tysons-wide
C. Grid of Streets		
Roads – Grid of Streets	Grid west of Westpark Drive	District
Roads – Grid of Streets	Grid bounded by Gosnell Rd., Leesburg Pike, and Chain Bridge Road	District
Roads – Grid of Streets	Grid connections to Greensboro Drive	District
Roads – Grid of Streets	Grid of streets east of I-495	District
D. TDM Measures		
TDM	Application of aggressive TDM measures (e.g. 45% reduction in vehicle trips for an office development within 1/8 mile of a Metrorail station)	District
E. Misc. Improvements		
Bicycle Access Points	Bicycle connections into and out of Tysons	Tysons-wide
Roads and Intersection Spot Improvements	Intersection improvements outside of Tysons as identified in the Neighborhood Traffic Impact Study and other studies	Tysons-wide
Metrorail Station Access	Access improvements as identified in the Tysons Metrorail Station Access Management Study	Tysons-wide

Table 7 (Continued)

Type of Transportation Program or Infrastructure Project	Description of Transportation Program or Infrastructure Project	Area Served by Improvement
III. Required Additional Transportation Improvements to Accommodate 84 Million sq. ft. of Development		
A. Transit Improvements		
Bus Transit Routes	Further improvements to neighborhood bus routes; circulator bus routes serving Metrorail stations; BRT routes on I-66 and I-95/I-495	Tysons-wide/ Countywide
B. Tysons-wide Road Improvements		
Roads – Arterial Extension	Extend Boone Boulevard between Boone Boulevard and Northern Neck Drive	Tysons-wide
Roads – Arterial Extension	Extend Greensboro Drive between Spring Hill Road and Tyco Road	District
Roads – Freeway Ramp	Ramp connecting Greensboro Drive extension to westbound DAAR	Tysons-wide
Roads – Freeway Ramp	Ramp connecting Boone Boulevard extension to westbound DAAR and eastbound DAAR to Boone Boulevard extension	Tysons-wide
Roads – Freeway Widening	Collector – distributor roads along the DAAR from Greensboro Drive extension to Hunter Mill Road	Tysons-wide
Roads – Avenue Widening	Widen Magarity Road from 2 to 4 lanes between Great Falls Street to Leesburg Pike	Tysons-wide
Roads – Arterial Widening	Widen Gallows Road from 4 to 6 lanes between Leesburg Pike and I-495	Tysons-wide
Roads – Connecting Road	I-495 crossing connecting the Tysons Corner Center area to Old Meadow (limited to transit, pedestrians and bicyclists)	Tysons-wide
C. Grid of Streets		
Roads – Grid of Streets	Substantial sections of the grid of streets	District
D. TDM Measures		
TDM	Application of aggressive TDM measures (e.g. 55% reduction in vehicle trips for an office development within 1/8 mile of a Metrorail station)	District
E. Road Safety Improvements		
Roads – Collector Safety Improvement	Improve and enhance the safety of Old Courthouse Road from the Town of Vienna to Gosnell Road	District
F. Misc. Improvements		
Bicycle Access Points	Bicycle connections into and out of Tysons	Tysons-wide
Roads and Intersection Spot Improvements	Intersection improvements outside of Tysons as identified in the Neighborhood Traffic Impact Study and other studies	Tysons-wide
Metrorail Station Access	Access improvements as identified in the Tysons Metrorail Station Access Management Study	Tysons-wide
IV. Required Additional Transportation Improvements to Accommodate 113 Million sq. ft. of Development		
A. Transit Improvements		
Improved Transit	Additional BRT routes, other supporting services including park-and-ride, feeder bus routes to rail stations	Tysons-wide/ Countywide
Urban Transit Corridors	At least two additional urban transit corridors with substantial TOD development: Orange Line Metrorail extension and an additional rail extension	Tysons-wide/ Countywide
B. Tysons-wide Road Improvements		
Roads – Freeway Widening	Widen I-495 (Outer Loop) between Leesburg Pike and I-66 by one lane	Tysons-wide
Roads – Freeway Ramps	Ramps connecting Jones Branch Drive to westbound DAAR and eastbound DAAR to Jones Branch Drive.	Tysons-wide
C. Grid of Streets		
Roads – Grid of Streets	Completion of the grid of streets	District
D. TDM Measures		
TDM	Application of more aggressive TDM measures (e.g. 65% reduction in vehicle trips for an office development within 1/8 mile of a Metrorail station)	District

Note: The order of priority of improvements specified in this table may change based on the geographic location of development when compared with what was assumed in the analysis from which this table was constructed.

Table 7B
Transportation Infrastructure Resulting from Changes in Land Use Distribution and
Resulting from Further Analysis and Planning of the Grid of Streets

Type of Transportation Program or Infrastructure Project	Description of Transportation Program or Infrastructure Project	Area Served by Improvement
Required Additional Transportation Improvements to Accommodate 84 Million sq. ft. of Development		
Road Improvements		
Roads: Intersection Improvements	Modified Intersection Treatment configuration along Route 123 between International Drive and the DAAR overpass	Tysons-wide
Roads: Interchange and grid of streets integration	Changes to the northwest quadrant of the interchange where Dolley Madison Boulevard connects with the DAAR. These changes will tie in the grid of streets with the endpoint of the ramp from eastbound DAAR to Dolley Madison Boulevard	Tysons-wide
Roads: Intersection Improvements	Improvements to the connection of Magarity Road and Leesburg Pike	Tysons-wide
Roads: Intersection Improvements	A grade separation along Dolley Madison Boulevard at the Lewinsville Road and Great Falls Road intersection	Tysons-wide
Roads: Interchange reconfiguration	A reconfiguration of the Chain Bridge Road / Leesburg Pike interchange to allow additional capacity	Tysons-wide
Roads-Freeway Ramp	Gallows Rd, at Gallows Branch, to I-495 Southbound Ramp	Tysons-wide

Monitoring System

Maintaining a balance between land use and transportation is dependent on a number of factors as indicated above. The necessary transportation infrastructure, modal split levels, and vehicle trip reduction levels to maintain this balance have been determined by means of extensive analyses. Analyses are based on known conditions at the time of writing this plan text. However, these conditions include human behavior and a number of factors that are subject to change over time. Factors that might change over time could include, but not be limited to, the average square feet of office space assumed for each employee, the use of automated vehicles or other advancements in technology.

Changes to these factors in the future could result in changes to trip-making behavior that can't be anticipated today. Identifying and monitoring changes, as well as periodically evaluating monitoring practices, will help to improve the efficiency of the transportation system. In addition, it will provide decision makers with the timely information they need to start long-lead programming and funding work on transportation projects identified in Table 7 and 7B, and help to better manage the relationship between land-use and transportation between now and 2050.

Analysis of Monitoring Results and Corrective Measures

The monitoring of the transportation demand side and supply side should provide an assessment of existing conditions and an updated projection of future conditions in terms of maintaining a balance between land use and transportation. The early identification of future variations from the planned coordination between land use and transportation, as shown in Tables 7 and 7B, provides an opportunity to react in a timely manner to allow the necessary adjustments to be made. It might be necessary to conduct an analysis of changes in travel behavior, results from the Annual Report, and the success of TDM programs to determine cost effective measures to correct the projected imbalance between land use and transportation.

Possible corrective measures are:

- The use of TDM Remedial and Penalty Funds to increase TDM activities.

- Changes in funding sources and facility user charges.
- Congestion pricing.
- An amendment to the Plan to modify Plan intensities and/or mix of uses.
- Changes in the order/timing of transportation project implementation.

Funding for Transportation Improvements

The transportation improvements listed in Table 7 require a significant capital investment, as well as on-going operating investment for increased transit services. A variety of both public and private sector funding options will be used. A key factor in the implementation process is the ability to generate stable and ongoing sources of funding, both public and private, for these transportation improvements.

Past efforts have demonstrated that innovative public-private financing options for funding transportation improvements can be effective. A majority of the local portion of Phase I of the Dulles Metrorail Project is being funded through a tax district. Numerous small-scale improvements in Tysons have been funded over the years through the Tysons Transportation Fund, a voluntary contribution for new commercial development. However, this fund does not provide a stable and ongoing source of private sector funding. Moreover, it would generate only a small percentage of the funding needed for the improvements listed in Table 7 that are required for the continued development of Tysons.

In March of 2011, the Board directed the Planning Commission to engage in an inclusive process to address funding the Table 7 items. With a goal of developing a comprehensive solution for funding infrastructure improvements, while allowing for flexibility in funding options and sources and for adjustments to be made based upon the actual pace of development, the Planning Commission provided 31 recommendations to the Board. The Board endorsed the Planning Commission's transportation funding plan and ultimately approved a series of motions implementing the funding plan for Tysons on January 8, 2013. Key components to the Tysons Funding Plan are as follows:

- **Tysons Grid of Streets Transportation Fund:** One key component of the funding plan is for redevelopment to provide or fund the local grid of streets. To this end, the Board established the Tysons Grid of Streets Transportation Fund and set guidelines for how to implement the fund. The contributions to this fund will pay for offsite grid links in Tysons where no redevelopment is planned or occurring. Contributions will be made on a per square foot basis for commercial property or a per unit basis for residential property. Revenue will be received as development occurs.
- **Tysons-wide Transportation Fund:** Another key component of the funding plan is to identify multiple sources of revenue to fund the Table 7 Tysons-wide transportation improvements. Table 7 improvements are intended to be funded by a variety of private and public sources, including state and federal funds. The Board created a new transportation fund, the Tysons-wide Transportation Fund, to collect revenue from redevelopment applications to fund a portion of the Table 7 projects. The funds collected will supplement other funding sources for the Table 7 improvements. Contributions will be made on a per square foot basis for commercial property and on a per unit basis for residential property. Revenue will be received intermittently as development occurs.

- Tysons Transportation Service District: To provide a stable, and consistent, source of revenue for the Table 7 Tysons-wide projects, the Board established the Tysons Transportation Service District. The Tysons Transportation Service District is a special tax assessment district which collects revenue based upon the assessed value of all properties within the district. Revenue generated by the district may only be used for transportation improvements within the service district. The Board also created the Tysons Transportation Service District Advisory Board (TTSDAB) to work with Fairfax County staff and provide input to the Board on the annual tax rate for the Tysons Transportation Service District; transportation project priorities for projects funded all or in part by the Tysons Transportation Service District; issues related to the newly established Tysons road funds; and, potential new and alternative sources of revenue for transportation improvements.
- The Board has expressed their desire to utilize C&I taxes, as well as revenue generated from HB2313 (Revenues and appropriations of State; changes to revenues collected and distribution) to fund projects.

In addition to the funds detailed above, the Board directed staff to continue to proactively seek federal, state, and other funding opportunities and to maximize revenue from state and federal funding partners, so as to minimize the impacts of funding the transportation infrastructure on county taxpayers.

Funding for Table 7B Improvements

As the Tysons Transportation Funding Plan was being developed by the Planning Commissioners, staff was continuing to work on the Consolidated Traffic Impact Analysis (CTIA) to better define the transportation improvements that will be funded to support the amount of development approved by the Board of Supervisors as part of the Tysons Comprehensive Plan Amendment in June of 2010. The CTIA's identified five additional projects that will be needed to support the planned level of development in Tysons. Since the Tysons Transportation Plan had already been signed, and applies solely to the projects listed in Table 7, these additional projects were not included in the plan. These projects will be funded from other sources. The sources include local, regional, state and federal funding, as well as additional contributions from developers as part of the rezoning process. Several developers have already made funding commitments for specific projects on Table 7B.



ENVIRONMENTAL STEWARDSHIP

Tysons has a unique opportunity to become a leader in environmental stewardship through the protection and improvement of both the man-made and natural environments. The plan for a future Tysons recognizes that these environments cannot be addressed in isolation or independently. More efficient land use patterns, along with a strong emphasis on multi-modal transportation systems, as identified in the vision for Tysons, are important first steps in creating a more sustainable community. In addition, the plan for a sustainable Tysons calls for enhanced stormwater management, the promotion of green buildings and low impact development techniques, and the provision of a green network of parks, open space and trails. The goals and objectives identified by this section will ensure that Tysons redevelops as a model sustainable community, creating a healthy and environmentally responsible place to live, work and play.

The vision for a sustainable Tysons recognizes an evolving approach, with a long-term goal of carbon neutrality (i.e., no net increase of greenhouse gas emissions from Tysons). With redevelopment, many steps can be taken to reduce environmental impacts and increase efficiency utilizing the practices and technologies available today. Improved air quality, energy conservation, stream restoration and protection, water conservation and reuse, green architecture, and restored and enhanced natural environments can all be achieved now.

Over the next decades, the benefits of current efforts and many others will be better understood. At the same time, new technology may lead to improvements in water conservation and management of stormwater and wastewater. Improvements in information and communications technology could be used to monitor resource consumption and to make the transportation system operate more efficiently.

Finally, new technologies may provide opportunities for further innovations in energy efficiency and resource conservation. With this knowledge, additional steps in building design and urban planning should be implemented to achieve the long-term goal of carbon neutrality for Tysons by 2030 in support of broader regional greenhouse gas emissions reduction goals (i.e., an 80% reduction in regional greenhouse gas emissions by 2050).

MORE SUSTAINABLE THAN TYSONS TODAY

Redevelopment efforts in Tysons can be expected to contribute to a future Tysons that will be a far more sustainable community than that which exists today, by applying technology, development designs, and practices to protect and enhance environmental resources and improve energy and natural resource conservation and management. To achieve these goals, it will be necessary to implement several strategies to reduce resource use and dependency, decrease detrimental environmental impacts, and enhance the environment. A combination of effective land use and transportation policies creates the basic foundation for the sustainable Tysons, and redevelopment efforts within Tysons will provide opportunities to build upon this foundation.

The concept of transit-oriented development or TOD is being promoted for the Tysons area. TOD is a land use pattern which emphasizes compact, dense, walkable neighborhoods focused around transit stops. National studies have shown that TOD provides increased transit ridership. TOD improves the efficiency and effectiveness of transit service investments by increasing the use of transit near stations by 20 to 40 percent, and up to five percent overall at the regional level.

TOD has also been shown to reduce rates of increase in Vehicle Miles of Travel (VMT). Nationally, vehicle travel has been increasing faster than population growth. TOD has proven to lower annual household rates of driving by 20 to 40 percent for those living, working, and/or shopping within transit station areas. Recent TOD research shows that automobile ownership in TOD areas is approximately one half the national average. By providing safe and easy pedestrian access to transit, TOD has produced lower rates of air pollution and energy consumption. TOD can also reduce rates of greenhouse gas emissions by 2.5 to 3.7 tons per year per household. The street network in Tysons will incorporate Low Impact Development (LID) techniques for additional environmental benefits. In addition to being green, streets will also be “complete streets,” with walking and jogging trails and bicycle paths.

Reductions in greenhouse gas emissions from the transportation sector will be achieved by reducing vehicle miles traveled. Focusing development near Metro stations and the dedicated right of way circulator, and constructing walkable, bikeable, mixed use developments will reduce VMT. Aggressive transportation demand management programs, including parking management, are also critical to achieving VMT reduction goals.

Tysons’ redevelopment should be pursued in a manner that will reduce greenhouse gas emissions to help achieve 80% greenhouse gas reductions within the region by 2050 in accordance with the Cool Counties Climate Stabilization Initiative adopted by the Fairfax County Board of Supervisors. These reductions can only be attained through reductions in energy use and associated greenhouse gas emissions from transportation and buildings. Innovative energy efficiency and conservation strategies should be incorporated into all redevelopment projects.

Toward this end, the following are but a few examples of efforts that could be considered: on-site generation of electricity, such as from solar, wind or geothermal sources (thereby reducing the need for power from the electrical grid); the use of community energy distribution systems; transit-oriented development design; the use of energy efficient heating and cooling systems; and the application of enhanced building commissioning to provide early and ongoing verification of system performance. Numerous other strategies as outlined in green building rating systems such as the U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED) program are available to support energy-efficient development and conservation.

More compact development, like that proposed in the concept for Tysons, is more energy efficient than low density, suburban style development. For residential housing, the energy consumption rates decrease on a per capita basis as the density increases. In addition, green building design, as encouraged through green building rating systems with third party verification such as the LEED program, reduces energy consumption and encourages innovations in water and wastewater technology. A combination of these and other strategies can have a significant impact on resource consumption for individual buildings, and can contribute to a more sustainable Tysons.

STORMWATER MANAGEMENT

Tysons is located in the headwaters area of several of the county's watersheds. Watershed management plans have been prepared for each of these watersheds; these plans identify a comprehensive set of projects needed to improve stream habitat conditions. Efforts are intended to be pursued independent of development proposals and are not dependent upon such proposals for implementation. However, the provision of effective stormwater management controls for new development and redevelopment projects in these watersheds is imperative to the success of watershed planning efforts. Redevelopment offers considerable opportunities to improve upon past stormwater management practices.

Receiving waters downstream of Tysons should be protected by reducing runoff from impervious surfaces within Tysons. By using a progressive approach to stormwater management, downstream stormwater problems can be mitigated and downstream restoration efforts can be facilitated. Achieving a goal of retaining on-site and/or reusing the first inch of rainfall will ensure that runoff characteristics associated with the site will mimic those of a good forest condition for a significant majority of rainfall events.

Measures to reach this goal may include application of Low Impact Development (LID) Techniques (including but not limited to rain gardens, vegetated swales, porous pavement, vegetated roofs, tree box filters, and water reuse). The incorporation of LID practices in the rights-of-way of streets will also support this goal; such efforts should be pursued where allowed. There is also a potential for the establishment of coordinated stormwater management approaches to address multiple development sites.

Stormwater Design

Environmentally-friendly stormwater design should be an integral design principle of the conceptual stage of site development for all redevelopment, recognizing that stormwater management measures may be phased with development. The stormwater design should first seek to minimize the effect of impervious cover, followed by the application of stormwater reuse, retention, detention, extended filtration and, where soils and infrastructure allow, infiltration to improve downstream waters. The incorporation of stormwater management strategies in parks and other open space areas within or adjacent to Tysons may also support this approach while providing recreational amenities. Coordination of stormwater management controls among multiple development sites may also be effective in achieving stormwater management goals in an efficient manner.

Stormwater management and water quality controls for redevelopment should be designed to return water into the ground where soils are suitable or reuse it, where allowed, to

the extent practicable. Reduction of stormwater runoff volume is the single most important stormwater design objective for Tysons. Reduction could occur through techniques that use plants or soils via landscaping measures, through techniques that reuse harvested rainwater in a variety of ways, and/or through approaches that infiltrate water into the ground to replenish aquifers and provide summer base flows to local streams.

Redevelopment projects in Tysons should incorporate innovative stormwater management measures in a manner that will, first and foremost, optimize reduction of stormwater runoff volume and control of peak flows for the remaining stormwater that cannot be completely captured on-site.

The following guidelines are recommended for applications for which a significant increase in density/intensity is proposed (e.g., a redevelopment option is being pursued) and are intended to improve stormwater management controls sufficiently to allow for improvements to the habitat and recreational values of streams in Tysons through natural restorative processes and/or through restoration projects:

- Stormwater quantity and quality control measures should be provided with the goal of reducing the total runoff volume and/or significantly delaying its entry into the stream system. The emphasis should be on Low Impact Development (LID) techniques that evapotranspire water, filter water through vegetation and/or soil, return water into the ground, or reuse it.
- LID techniques of stormwater management should also be incorporated into new and redesigned streets where allowed and practicable.
- At a minimum, the first inch of rainfall should be retained on-site through infiltration, evapotranspiration and/or reuse. If, on a given site, the retention on-site of the first inch of rainfall is demonstrated not to be fully achievable, all available measures should be implemented to the extent practical in order to support this goal and achieve partial retention of the first inch of rainfall.
- At a minimum, stormwater management measures that are sufficient to attain the stormwater-related credit(s) of the most current version of the LEED-NC or LEED-CS rating system [or the equivalent of the credit(s)] should be provided. If, on a given site, the attainment of the stormwater design LEED credits (or equivalent) is demonstrated not to be fully achievable, all available measures should be implemented to the extent practical in support of this goal.
- Equivalent approaches may incorporate coordinated stormwater management on multiple development sites and/or off-site controls. Additional stormwater management efforts should be encouraged.
- Restoration and/or stabilization of degraded streams on development sites should be pursued as identified in the District Recommendations; restoration and stabilization techniques that incorporate ecologically and aesthetically beneficial, vegetated approaches are preferred. Off-site efforts to restore and/or stabilize streams in Tysons should also be encouraged.

Green Building Design and Energy/Resource Conservation

Existing Fairfax County policy calls for certain zoning proposals for nonresidential development and multifamily residential development in mixed-use centers to incorporate green building practices sufficient to attain LEED certification or its equivalent. In addition, nonresidential development in Tysons should seek LEED Silver certification or equivalent as a minimum. Residential development should be guided by the Policy Plan objectives on Resource Conservation and Green Building Practices.

All redevelopment projects in Tysons should incorporate design elements and practices that will reduce per capita the use of energy and water resources. There are numerous strategies available that are outlined in green building rating systems such as the LEED program, and strategies such as these should be pursued in support of or in addition to efforts to attain LEED Silver certification or its equivalent. The following are examples of efforts that could be pursued:

- On-site renewable energy generation, such as solar, wind, and/or geothermal systems;
- If/when on-site renewable energy generation is not cost effective at the time of building design, the provision of building designs that will facilitate future retrofits for on-site energy generation if/when such efforts will become cost effective;
- Orientation of buildings for solar access;
- Energy-conscious landscape design (e.g., natural landscaping; shading);
- Water-efficient landscaping;
- The use of energy efficient heating, ventilation, and air conditioning systems;
- Enhanced building commissioning to provide early and ongoing verification of system performance;
- The use of energy efficient lighting systems;
- The use of energy conserving building materials;
- The provision of vegetated and/or highly reflective roofs;
- The use of community energy distribution systems through which energy/heat generated on one site will be shared among buildings on other nearby sites;
- The use of water-conserving plumbing fixtures;
- The use of harvested stormwater runoff for irrigation;
- Where consistent with building codes, the re-use of grey water;
- The use of information and communications technology to improve the efficiency and economy of building operations; and
- If/when the provision of information and communications technology efforts is not cost effective at the time of building design, the design of buildings to include conduits supporting the future installation of such measures.

Setting Future Environmental Goals for Tysons

Tysons should endeavor to remain the leader in environmental stewardship. The Plan should include flexibility to accommodate new strategies and technologies as they emerge, such

as district energy systems, alternative energy sources, cogeneration, microgrids, district-scale environmental performance measures, innovative stormwater management and stream restoration practices, innovative green building practices, and innovative approaches in the provision and design of park facilities and other open spaces. In order to encourage the use of new technologies as they become available, the Environmental Stewardship Guidelines will need to be reviewed and updated.

NATURAL RESOURCES MANAGEMENT

Protection, enhancement and management of natural resources in the existing stream valley parks in Tysons is critical to the long term viability of those habitats. Both Scotts Run and Old Courthouse Spring Branch and the forested floodplains that surround them have been negatively impacted principally by: years of unchecked stormwater runoff, consumption of understory plants by deer, and encroachment by non-native invasive plant species. Without active management of the natural resources in these parks, habitat and stream quality will continue to decline.

Contributions from development in Tysons towards stream restoration and stabilization in the Scotts Run, Old Courthouse Spring Branch, Rocky Run and Pimmit Run watersheds should be encouraged as part of a comprehensive strategy to restore the water quality and ecological health of Tysons' streams. Associated improvements to the receiving streams and downstream areas could provide greater stability and water quality and improve instream habitat. Stream restoration will also enhance the stream valley parks which are key components of Tysons' green network.

Environmental enhancement efforts should be encouraged and should include efforts such as restoration planting in natural areas, invasive plant control, deer management, stream restoration, and creating new natural areas (including both forested areas and meadows) where disturbed areas currently exist. These expanded natural areas could build on the stream valley parks, adding land that increases riparian buffers and enhances stream valley corridors. Natural areas outside of Resource Protection Areas could serve as nodes for human activity and greatly improve quality of life while relieving stress on existing riparian areas. Stream valley park expansions should not include large hardscape areas other than trails. Resource management should drive park design.

TREE CANOPY GOALS

Trees provide numerous environmental and human health benefits and are considered an essential element in the vision for a new Tysons. Environmental benefits include stormwater management, energy conservation, and mitigation of ozone and carbon in the air. When clustered together, as in a park setting, trees provide habitat areas for wildlife. From an urban design perspective, street trees enhance aesthetics, provide shade and relief from the sun and other elements, and create a sense of safety and protection from street traffic and noise.

In 2009, tree canopy covered about 20% of the total land area in Tysons. Much of the tree cover in Tysons is provided in the Scotts Run and Old Courthouse Stream Valley Parks, with additional stands of trees on private land, primarily in the North Central District. Smaller and younger trees are scattered throughout Tysons as part of parking lot design and office campus open space areas.

The vision for a greener Tysons calls for additions to the tree canopy through planting on existing park land, establishment of small groves of trees in new urban parks, as part of the new urban streetscape, and on some rooftops.

New development should be designed to provide the maximum amount of sustainable tree cover onsite, with a goal of 10% for redevelopment projects. Where developments are not able to achieve 10% tree cover onsite, contributions should be provided to the county's tree fund to support tree planting in other suitable areas to offset the difference. Detailed analysis of existing Tysons tree cover should be conducted before setting a permanent goal.

Care should be taken so that underground utilities do not conflict with street trees. Urban trees also need adequate root zones and soil volume for the best chance for long-term survival. Additional guidance on tree planting is provided in other sections of this plan including Stormwater Management, Green Buildings, Parks and Recreation, and Urban Design.

INFORMATION AND COMMUNICATIONS TECHNOLOGY

Information and communications technology (ICT) in Tysons will serve a variety of end users. These include building owners and operators, residents, workers at Tysons' job centers, customers at its malls and other stores, visitors, and county first responders and environmental specialists. ICT coverage will extend from individual rooms and fixtures to buildings, groups of buildings, roads and rail, each of the eight districts, and the Tysons Urban Center as a whole. The ICT infrastructure will consist of a number of computer-based networks, functioning together in an integrated hierarchy. These networks will be used to improve the efficiency and economy of building operations and of the transportation system. They will also be used to monitor the achievement of environmental goals, such as reduced levels of energy and water consumption. In order to have an ICT infrastructure in the Tysons Urban Center, its components must be included in the design of buildings and roads used for public safety and in support of public transportation.

GREEN BUILDINGS

Currently Fairfax County encourages new buildings in mixed use centers to have Leadership in Energy and Environmental Design (LEED) certification, or the equivalent. The concept of green buildings recognizes that certain design and construction practices can increase the efficiency of resource use, protect occupants' health and productivity, and reduce waste and pollution. LEED, developed by the U.S. Green Building Council, is just one rating system used to measure a building's effectiveness on these measures. Nonresidential development in Tysons should achieve LEED Silver certification or the equivalent, at a minimum. Residential development should be guided by the Policy Plan objectives on Resource Conservation and Green Building Practices.

Buildings are one of the largest consumers of energy in this country. According to the U.S. Green Building Council, buildings use one-third of our total energy, two-thirds of our electricity, and one-eighth of our water. With the extensive redevelopment that will occur in Tysons, a prime opportunity exists to reduce the amount of energy consumed by the built environment through LEED certification, or its equivalent, for new construction.

A study conducted in 2008 by the New Buildings Institute concluded that, on average, LEED certified buildings use 25 to 30 percent less energy than non-LEED certified buildings. Gold and Platinum LEED certified buildings, the highest certification that can be achieved, have an average energy savings of approximately 50 percent when compared with similar buildings without LEED certification.

In addition to green buildings, green roofs (also referred to as vegetated roofs) can enhance the natural environment within Tysons. Green roofs use the traditionally unused part of the building to grow vegetation. Public benefits of green roofs include increased stormwater retention, reduced greenhouse gas emissions, and improved air quality through filtration of airborne particles. Where green roofs are not provided, other roofing systems containing highly reflective materials may be considered, as they can reduce heat absorption and thereby conserve energy and reduce related greenhouse gas emissions.



PARKS AND RECREATION

Parks, recreation and open space are essential throughout Tysons. A comprehensive park system helps to provide a high quality of life for residents by contributing economic, social and health benefits. Such amenities provide visual breaks in the urban landscape, create oases of green in an intensely urban environment, and provide places for people to enjoy passive and active leisure pursuits. Public open space is especially important for residents of higher density housing who may lack access to private yards or recreation facilities. Urban parks improve air quality, reduce stormwater runoff and impervious surfaces, improve community health, and provide opportunities to allow people a full range of leisure pursuits and to interact with neighbors in a safe environment. Parks will help provide a sense of place for Tysons and its individual neighborhoods.

In 2014, there were about 89 acres of public parkland within Tysons, located primarily at the lower density edges of Tysons. The stream valleys at the western and eastern edges provide a respite from urban activity and serve a valuable resource protection function. Only Westgate and Freedom Hill Parks had recreation facilities. Opportunities exist to create an outstanding park system to which all contribute and from which all benefit. As a key part of the vision for Tysons, future residents, employees and visitors to Tysons will be able to enjoy a level of park service comparable to that in exemplary U.S. cities. Outdoor recreational areas should support and foster social interaction as well as sports and recreation activities.

In 2014, the Fairfax County Park Authority endorsed the Tysons Park System Concept Plan, a supplemental document that will guide future park development by the public, private, and non-profit sectors to serve Tysons' residents, employees, and visitors well into the future.

While many Tysons developments will include urban parks as amenities, recreational facilities will also be needed to ensure a park system that serves the wider range of needs. Adopted county-wide recreation facility standards, adjusted for urban demographics and use patterns, will guide the number of facilities provided for residents, workers, and visitors to Tysons, ensuring they will have a full range of leisure opportunities within convenient distances. Facilities for which adopted standards are not available, such as running tracks, game tables, bocce courts, and putting greens may also be provided, since they will provide outdoor

recreational opportunities that are desirable in an urban area. Publicly accessible indoor facilities, such as multipurpose program areas, indoor gyms, and courts may also be provided to meet a portion of the need. Over time, the types of facilities needed and desired may change. Preferences and evolving trends should be monitored through park and recreation trends analyses, needs surveys, and county-wide park and recreation needs assessments. Flexibility, adaptability, and imagination will be needed to allow for recreational facilities and activities yet to be conceived.

A goal of twenty new athletic fields serving Tysons should be achieved through development contributions of land and facilities. Enhancements to and redesign of nearby school and park fields to increase capacity should also be strategies for serving increased sports needs in Tysons.

The provision of athletic facilities that require larger land areas within Tysons is especially important and challenging. Creative approaches to providing for sports needs in Tysons will be necessary, including integrating facilities within development areas, on rooftops, over stormwater detention facilities, in utility corridors, indoors, and other alternative locations. The rooftops of parking structures and other buildings in Tysons will be considered as locations for some of the new athletic fields and courts that are needed to help meet the future demand for active recreation facilities. The use of field lighting and synthetic turf and scheduling that provides for longer and more efficient use will help ensure adequate field capacity to meet the needs of Tysons' growing population. Field designs that accommodate multiple sports can reduce the amount of land needed and maximize recreational opportunities. Adopted countywide field standards are based on a majority of youth participants. It is anticipated that a majority of users will be adults in Tysons. Corporate softball, flag football, kickball, soccer, and adult baseball are anticipated needs. Other field sports may also emerge as a greater need over the horizon of this plan and may need to be accommodated.

Parks and open space should be located to best serve the overall needs of the residents, visitors and employees in Tysons. Park land can be publicly owned, privately owned, or provided through public-private partnerships. It is also important to pursue creative solutions to providing open space and recreation facilities in Tysons. Creative urban park initiatives may include rooftop parks, unique programming areas, recreation facilities and program space provided within commercial buildings, redevelopment at nearby existing parks, and forging new park-provider partnerships. With any of these creative approaches, visual and physical accessibility to the public is essential.

The vision for Tysons calls for a "green network," or a comprehensive system of parks and open spaces that connects all the districts within Tysons through greenways. The green network will have sufficient publicly accessible park acreage to be consistent with the county's adopted urban park service level standard. The network will integrate large and small urban parks with existing environmentally sensitive areas and other built elements to create safe pedestrian and bicycle-friendly pathways throughout all neighborhoods. These pathways will link to transit stations, pedestrian ways, bike trails, shopping and entertainment areas, offices and residential areas. The green network should build on existing parks and the creation of new urban parks. It will include large gathering places that support community events, such as a central, signature park.

Green Network Components

The system of parks and open space is envisioned to build on the foundation of a large, central, “signature” park, existing parks and the creation of new urban parks. The parks and open space network concept is shown in Map 9. This map includes some existing areas associated with residential developments that are not publicly accessible. Specific guidance on parks, recreational facilities and trails is provided in the District Recommendations.

The types of parks and open space recommended for Tysons include:

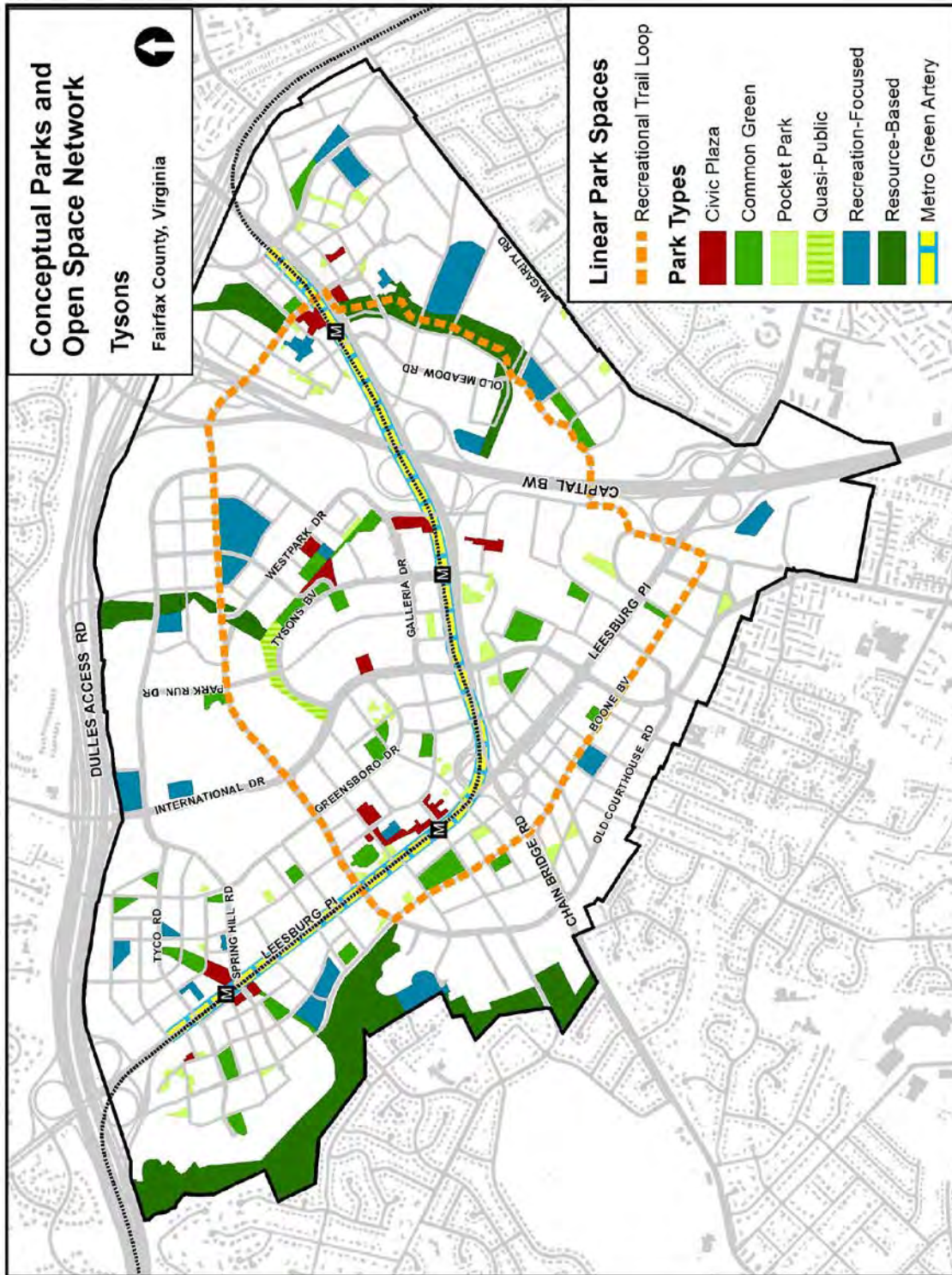
Large Central Park: This will be the “signature” park for Tysons and should be large enough to support public, community, and cultural events, such as a farmers market, outdoor performances, art shows or weekend festivals. Ideally, this park should be co-located with other civic facilities such as museums, a performing arts center, library, or other major civic uses.

Existing Stream Valley Parks: Stream valley parks such as Scotts Run and Old Courthouse Spring Branch provide natural buffers and potential connectivity to and throughout Tysons. If linked to other parks and open spaces within Tysons, they will help serve non-motorized transportation needs. These stream valley parks should not only be protected from development and infrastructure impacts, but be restored and enhanced. Redevelopment in Tysons should contribute to stream and riparian buffer restoration efforts along these stream valleys in order to strengthen Tysons’ existing natural systems and allow for resource protection and interpretation. These stream valley parks can be expanded through dedications of privately-owned portions of the stream valley and in adjacent areas to provide better connectivity. They can serve as major linear urban parks and support the planned trail system with a variety of natural landscapes. These parks will provide a variety of passive outdoor leisure experiences for residents, visitors and workers in Tysons, including outdoor exercise and enjoyment of quiet natural spaces.

Trail Network: The conceptual trail network is included in Map 9. This network will be designed for frequent use through continuous lengths of outdoor trails or spaces that are a minimum of eight feet wide and may include amenities and/or design features such as trailheads, orientation features, and wayfinding signage. These linear parks and trails will be popular for jogging, dog walking, biking, walking, enjoying the outdoors, and general exercising. The space along the Metro rail provides an opportunity to create a “Green Artery” linear park to link the four stations with a pedestrian and bicycle path that could weave under and alongside the Silver Line. Continuous linear spaces that are connected with the grid of streets in Tysons and can be linked with pedestrian and bicycle street elements are an important amenity. The county will pursue lighting of certain trails that provide Metro access and will consider other services to keep trail access open during winter months. The “Tysons Community Circuit” recreational trail loop as proposed along existing and planned roads will be a combined recreational and transportation feature that will add to the diversity of options available for moving through Tysons. *The Tysons Park System Concept Plan* describes features of and implementation strategies for “The Circuit” in greater detail.

Cultural Resource Parks: Freedom Hill Park and Ash Grove Historic Site provide historical points of interest in small park settings. Signs, kiosks and other interpretive features may be incorporated into new urban parks in Tysons to preserve and interpret the history of Tysons as it has evolved from rural crossroads to suburban office park to twenty-first century city.

Multiple Urban Parks: A diversity of public spaces ranging in size, function, and character, to support formal and informal passive and active activities, will be located throughout Tysons.



Note: Planned park spaces shown are conceptual and does not meet the full need for Tysons. To meet Plan goals, additional facilities will be needed.

MAP 9

Locating parks adjacent to residential and mixed use buildings will enhance these uses by providing common outdoor spaces to users who have no private yards. Integration of parks with residential and mixed use developments will also provide “eyes” on streets and parks for a sense of public safety and activity focused on the park. All parks should be publicly accessible to residents, visitors, and workers.

A full complement of urban park types is desirable to create a robust park network and strong sense of place for Tysons. Urban park design elements may be combined in various ways to create a range of urban park types. Urban park types range from the very small “pocket park” situated as a byway on a pedestrian-oriented travel way, to large civic open spaces that encompass diverse amenities and accommodate large community gatherings, to local parks that provide opportunities for organized sports and informal play. Ideally, the park network in Tysons will include a variety of urban park types in order to serve local leisure needs, support environmental and sustainability goals, and contribute to the area’s sense of culture, liveliness, and identity.

Urban Parks Framework

The Urban Parks Framework, found in the Policy Plan, sets forth an urban park typology and urban park service level standards to guide the creation of urban park systems in Fairfax County. The Urban Parks Framework for Fairfax County includes five distinct types of urban parks: pocket parks, common greens, civic plazas, recreation-focused urban parks, and linear parks (see definitions below). The five urban park types span a continuum of purposes, uses, sizes, and features that can flexibly accommodate a broad spectrum of recreational and leisure pursuits for people of all ages in Tysons. Urban parks are separate from vehicle travel ways and urban design elements such as streetscape areas, sidewalk cafes, commercial entertainment venues, and retail browsing areas.

Pocket Park

Pocket parks usually less than one-third acre; these urban parks are small-scale open spaces incorporated into developments and designed for casual use by people working and living in the immediate area. A pocket park is designed as a single “room” to provide limited casual open space to enjoy individually or in social interactions. These spaces may consist of hardscape elements or lawn and landscaped areas, seating, and visual amenities.

Common Green

Common greens are larger than pocket parks, and include flexible open spaces with open lawn areas, serving as the recreation and social focus of a neighborhood or larger area. Size generally depends on the context, function, and area, but should be a minimum of one acre. Although a central lawn is the main focus of this type of park, it may be designed with multiple “rooms” offering a mix of complementary uses and/or large enough to support multiple simultaneous activities. The Common Green could function as unscheduled open space for uses such as picnicking and unstructured play or be programmed for athletics, public gatherings, performances, and special events. Common Greens may include facilities such as off-leash dog areas, community garden plots, landscaping, water features, shade structures, gathering areas, amphitheaters, space for public art, and/or hardscape areas. Recreational amenities may be incorporated as complementary facilities, but do not predominate. Suitable examples include tot lots and playgrounds, small skate parks, fitness courses and paved trails, and sport courts.

Civic Plaza

An important feature of the park network will be a centrally located civic gathering plaza in each district. One of the civic plazas should be a centrally located signature park that serves all of Tysons. Civic plazas include public art and multiple activity areas and are large enough to support casual unprogrammed use as well as community events. This type of urban park includes public gathering spaces set aside for civic purposes and commercial supporting activities. Civic plazas are usually located at the intersection of important streets or other significant locations and serve as a focal point and unique placemaking feature. Public squares that are surrounded by public streets are also an example of this type of urban park. Flexible, programmable spaces in multiple “rooms” are generally included. Design includes primarily hardscape elements, but may include trees or other landscaping, seating, public art, or water features. Size generally depends on the context, function, and area, but should be a minimum of one acre. Depending on size, civic plazas could support open air markets, concerts, festivals, outdoor exercise classes, or special events. Recreation amenities may be incorporated as complementary facilities, but do not predominate.

Recreation-focused Urban Park

Appropriate recreation facilities will serve a variety of needs and add to the vibrancy of Tysons. In densely- populated urban areas, recreation needs should be addressed with the inclusion of recreation facilities in an urban park setting to serve local residents, visitors, and workers. A recreation-focused urban park is distinguished by its primary function to provide recreation facilities for nearby residents and workers. Facilities such as athletic fields, multi-use courts, and skate parks should be provided. Facilities could be scheduled or casually used. Athletic fields which may be located at grade or on garage and building rooftops should have synthetic turf and lighting to maximize use. Support facilities and amenities such as trails, seating, tot lots, shade structures, water features, picnic areas, restrooms, landscaping or hardscape should be provided to complement the recreational component. Parking needs should be addressed through shared parking agreements with adjacent developments. The size of the park should be appropriate to accommodate the recreation facilities and support amenities located there.

Linear Park

Linear parks are characterized by an elongated shape and usually occur in an area between destinations or points of interest and along streams, and frequently double as pedestrian connections. These parks can serve many purposes including providing a variety of recreation facilities (e.g., fitness stations, dog exercise areas). Creation of continuous linear spaces for recreation provides an important amenity that can be linked with pedestrian and bicycle street elements. Linear parks can also provide opportunities for resource protection and may include natural areas with trails and waysides for a combination of active and passive enjoyment. Linear greenways that utilize urban stream valleys for trails and trail connections are one such form of linear park.

The size and design of linear parks vary and depend on their context, function, and area. Frequently these parks link other urban elements and may function as a green spine through an urban area. Due to the variety of linear parks, typical facilities will vary but will generally consist of a continuous multi-use trail, waysides and seating, and other active and/or passive recreation components.

PARKS AND RECREATION GUIDELINES

These guidelines should be considered along with the general Parks and Recreation recommendations above, in evaluating development proposals in Tysons.

Map 9 provides a conceptual plan for a wide-ranging and well-distributed park and open space network in Tysons. It is essential that there be a balanced park system that will support social and recreational needs. Social gathering places and pleasant outdoor spaces will comprise a greater proportion of urban parks in Tysons and can be more easily integrated within developments as an amenity. It will be more difficult, but no less important, to provide parks in Tysons that will support active recreation facilities such as athletic fields for use by Tysons' residents, community leagues and corporate teams. There will be a great need for these facilities in Tysons and they should be well distributed within Tysons to serve each district.

The provision of land should be proportionate to the impact of the proposed development on park and recreation service levels. An urban park land standard of 1.5 acres per 1,000 residents and 1 acre per 10,000 employees will be applied.

Typically, urban parks are less than five acres and often under 1/2 acre. Parks are generally located within a 5-10 minute walking distance (or 1/4 – 1/2 mile) from nearby offices, retail and residences. Typically, on-site parking is only provided for the more intense recreation uses such as sport courts and fields that are located more than 1/4 mile from transit.

Recreational facility service level standards in the Parks and Recreation element of the Countywide Policy Plan should be applied to new development in Tysons, with adjustments made for urban demographics and use patterns. Using 2050 development projections, anticipated urban field use patterns, optimal athletic field design (lights and synthetic turf) and longer scheduling periods, the adjusted need for athletic fields to serve Tysons is a total of 20 fields. This adjusted need should be addressed through on-site development of needed facilities and/or through equivalent monetary or in-kind contributions to the Park Authority for facility development at nearby parks or other sites appropriate for park facilities. In general, the need for an athletic field is generated by the development of approximately 4.5 million square feet of mixed use development in Tysons. Approximately two acres of land is needed for each full size athletic field. Additional space may be needed for support facilities such as parking, restrooms, and warm up areas.

Proposed development in Tysons should be accompanied by the dedication of public or publicly accessible parkland, and by the construction of recreational facilities, such as athletic fields. Provision of parkland and facilities on-site is preferred. If on-site dedication and facility provision are not possible, an equivalent off-site dedication and facility construction within the same district should be sought as a substitution. Where it is not possible to locate facilities within the district, locations that serve Tysons may be substituted. As a last alternative, as for smaller sites, an equivalent monetary contribution to fund local public parks within Tysons may be substituted. If facilities are constructed on publicly-owned land, an offsetting contribution of park facilities, parkland, or cash contribution for parks equivalent to the value of the land used for construction should be provided.

Creative approaches can be used to ensure provision of recreational facilities, especially athletic fields that meet service level standards. This may include indoor and rooftop facilities or those located above underground stormwater management facilities. Co-location with other public facilities is also appropriate. Redevelopment proposals should make every effort to meet

the need for new urban parks onsite, according to the acreage standards noted above. Proposals will be evaluated not only in terms of the quantity of park area provided, but also based on the location, types, and quality of public park spaces.

In cases where there is a shortfall of onsite park space, offsite park improvements may be considered. This may include improvements to transit station plazas, public easements and rights of way, and restoration and enhancement of nearby stream valleys.

Facilities that contribute toward meeting the parks and open space needs in Tysons may be privately owned and privately developed. Regardless of ownership, newly created parks and open space and existing parks and open space that are redesigned in conjunction with a redevelopment project should be publicly accessible during appropriate hours and should meet or exceed the same service level standards as any publicly owned and developed parks or open spaces. The Conceptual Land Use and Parks and Open Space maps include some existing areas associated with residential developments that are not publicly accessible.



PUBLIC FACILITIES

Making Tysons livable requires the provision of public services, infrastructure, and utilities at a sufficient level for the envisioned urban environment. In this section, the public facilities anticipated to serve growth in Tysons through the year 2050 are identified, along with the anticipated time frame for the provision of these facilities. Because growth rates will vary over time, the population, employment, and household thresholds referenced below may be reached in different years. Actual growth levels should be monitored so that infrastructure capacity is phased with new development. Regardless of the rate of growth, commitments of the land for needed facilities should be obtained well in advance of the estimated date of construction. The Guidelines at the end of this section provide additional information on the phasing and design of public facilities, and a table and map consolidating information on what facilities are expected. Information on transportation facilities is found in the Transportation section of the Areawide Recommendations.

SCHOOLS

Tysons is currently served by multiple public schools: four elementary schools, four middle schools, and four high schools, none of which are located in the Tysons district.

Under the envisioned growth for Tysons, there will be a need for at least two new elementary school sites in Tysons. One school could be located in the North Central district where it could share recreational space with the proposed eight to ten acre park. Another school could be located in the East Side district. Additionally, one or more of the existing elementary schools serving Tysons could be expanded.

Typically, an elementary school is constructed with a design capacity for 950 students. In 2010, the existing households in Tysons generated 400 elementary students. Between 2010 and 2030, projections call for 12,900 new households in Tysons. This number of new households could generate approximately 550 elementary students, resulting in a need for a new elementary school by 2030.

Between 2030 and 2050, projections call for another 20,700 new households in Tysons. This number of new households could generate an additional 890 elementary students, resulting in a need for a second elementary school by 2050.

Typically, a middle school has a design capacity for 1,350 students. Between 2010 and 2050, there are projected to be a total of 33,600 new households in Tysons. This number of new households could generate approximately 370 new middle school students. For purposes of long-range planning, capacity enhancements at one or more of the middle schools serving Tysons may be needed by the year 2050 to address the growing student population.

Typically, a high school has a capacity for 2,500 students. Based on the household projections noted above, 800 high school students may be anticipated. For purposes of long-range planning, capacity enhancements at one or more of the high schools serving Tysons will likely be needed by the year 2040.

Pimmit Hills Center may in the future be considered for use as an elementary or middle school. A secondary school may also need to be considered. Further, consistent with the vision of a more urban Tysons, an elementary school, or other school use, could also be located in a commercial office building, provided that all access, safety, security, and play space requirements are met.

LIBRARY

Tysons is currently served by the Dolley Madison and Patrick Henry Community Libraries, and the Tysons-Pimmit Regional Library. Growth in Tysons will generate the need for a new community library when the residential population in Tysons reaches 50,000, or between 2030 and 2040. The recommended site would be near the Greensboro Metrorail station, with possible co-location with a community center or a performing arts center. Proffer commitments exist for construction of a new community library as part of a mixed-use development adjacent to the Greensboro Metrorail Station.

FIRE AND RESCUE

Emergency services to Tysons are currently provided by Tysons Fire and Rescue Station 29 and Dunn Loring Fire and Rescue Station 13. Current planning includes the replacement of Station 29 near the Spring Hill Metrorail station and two new fire stations (for a total of three stations in Tysons). Proffered commitments exist to fund the Station 29 replacement, and for construction of one free standing station with surface parking in the Tysons East District. The location of the third station should account for existing and planned stations as well as access; the preferred location is in the Tysons Central 7 District or the Tysons Central 123 District.

POLICE

Tysons is currently served by the McLean Police District. The projected workload due to growth in Tysons is estimated to exceed the capacity of the current staff by the year 2025. In order to provide a strong, visible police presence for the residents and employees in Tysons, a new police station should preferably be located in one of the central districts. At least one

helipad accessible to public agencies for emergency services should be located in Tysons. The new station could be co-located with the third Fire and Rescue station.

Prior to construction of the new station, it would be desirable to have office space in Tysons to allow for more efficient policing and provide some presence in the area. It would be appropriate for such space to accommodate approximately 20 staff (officers and civilians).

WASTEWATER MANAGEMENT

Wastewater from Tysons is treated at the Blue Plains Treatment Plant, which is owned and operated by the DC Water and Sewer Authority (dba DC Water). In order to accommodate growth in Tysons and elsewhere in Fairfax County, the county has purchased one million gallons per day of capacity at the Loudoun County Sanitation Authority's (dba Loudoun Water) wastewater plant. Most likely, the additional wastewater from Tysons will have to be diverted to other treatment plants such as the county's Noman Cole plant or the Alexandria Sanitation Authority's (dba AlexRenew) plant, which have adequate available capacity.

Over time it is expected that the adoption of water conservation measures will result in less water consumption and less wastewater production by county residents. In any case, growth in Tysons will generate the need to increase the capacities of major trunk lines, to upgrade the Difficult Run Pump Station for diversion of flow to the Noman Cole or the AlexRenew plants, and to invest in other improvements to the current wastewater system.

WATER

On January 3, 2014, Fairfax Water acquired the water system previously owned by the City of Falls Church to become the sole water service provider in the Tysons area. Major facilities within the study area include the following:

- Transmission water mains ranging in size from 16 to 54-inches in diameter;
- Four water storage facilities; and
- Four pumping stations.

Fairfax Water has initiated an integration study to plan for the most efficient operation of the combined water systems. The plan is still underdevelopment; however, several future improvements have been identified to provide for both transmission through Tysons to eastern Fairfax County as well as for local service to Tysons itself. The timing of these improvements is subject to change based on the timing of development and opportunities for cost savings, such as constructing facilities concurrent with roadway projects. It must also be noted that the precise location of needed facilities may be modified as circumstances warrant.

Several projects within Tysons have been identified to meet future needs, including the following:

- 24-inch main from Spring Hill Drive, along Jones Branch Drive, Park Run Drive and Westpark Drive to the 24-inch main near the I-495/Chain Bridge Road interchange;
- 24-inch main from the Tysons II storage and pumping facilities along International Drive, Westpark Drive, Greensboro Drive to the 24-inch main that runs along Route 7;

- 24-inch main from the Lewinsville water storage tank (Chain Bridge Road & Dulles Toll Road) to the Scotts Run Pumping Station (Dolley Madison Boulevard and I-495);
- 24-inch main from the Scotts Run Pumping Station along Old Meadow Road to the 24-inch main along Magarity Road;
- 16-inch main from the Town of Vienna's Wall Street Tank, along Gosnell Road to the 24-inch main along Route 7;
- 16-inch main along the Dulles Toll Road corridor to the 24-inch main that runs along Route 7;
- Development of additional water storage facilities; and
- Development of additional pumping facilities.

ELECTRIC POWER

By the year 2050, Dominion Virginia Power (DVP) projects that growth in Tysons will generate demand for 738 megavolt amperes (MVA). DVP's existing Tysons distribution substation is located on Tyco Road. This substation, and a possible expansion to it, will generally serve the portion of Tysons north of Leesburg Pike and west of Route 123.

A second distribution substation (Spring Hill Substation) is planned for the year 2020, with a preferred location south of Leesburg Pike near Spring Hill Road, adjacent to DVP's existing high voltage transmission line. The new Spring Hill Substation will generally serve the south side of Leesburg Pike, west of I-495.

A third distribution substation (Jones Branch Substation) is planned for 2030 to serve the northern and eastern portions of Tysons, with a preferred location adjacent to the DAAR and proximate to DVP's existing high voltage line.

The new distribution facilities will be developed in an urban format (open roof, walled structures with a reduced footprint) on up to 2.5 acres of land. Consolidation with adjacent development, including coordinated access and stormwater management, may significantly reduce the acreage required for these substations.

In addition to the distribution stations, a transmission station (Scotts Run 230kV Switching Station) will be required by DVP in the 2019 timeframe. This transmission station will split the existing 230 kV Reston Substation to Idylwood Substation transmission loop. Load from the distribution substations serving the areas of Mclean, Pimmit Hills and Tysons is driving the need for this facility. The preferred location, for efficiency, would be within a one-half mile radius of the intersection of I-495 and the Dulles Toll/Connector Road. Depending on location and design, the transmission station site may also be able to serve as the third distribution substation.

In order to ensure a pedestrian friendly environment and to promote a logical pattern of development, DVP's high voltage line between the existing substation on Tyco Road and the new Spring Hill Substation should be placed underground. As an alternative to underground placement, the high voltage line could be relocated to an alignment away from the Metro station entrance.

NATURAL GAS

Washington Gas serves Tysons through a gate station in the Dranesville area. This gate station is centrally located in the region's system of gas pipelines, and is considered to be in a "healthy" condition. By 2050, growth in Tysons is projected to increase output in this gate station by 50%. This assumes high-rise, multifamily housing units, which consume about one-fourth as much gas as single-family units. In the event system improvements are needed as a result of growth in Tysons, any such improvements will be financed through the utility's rate system.

TELECOMMUNICATIONS

It is anticipated that telecommunications services will be able to accommodate growth in Tysons through continuous improvements in technology, funded by user fees. Tall buildings in Tysons should be designed to accommodate telecommunications antennas and equipment cabinets on rooftops. Such design should be compatible with the building's architecture and should conceal antennas and equipment from surrounding properties and roadways by flush mounting, screening antennas, and/or concealing related equipment behind screen walls or building features.

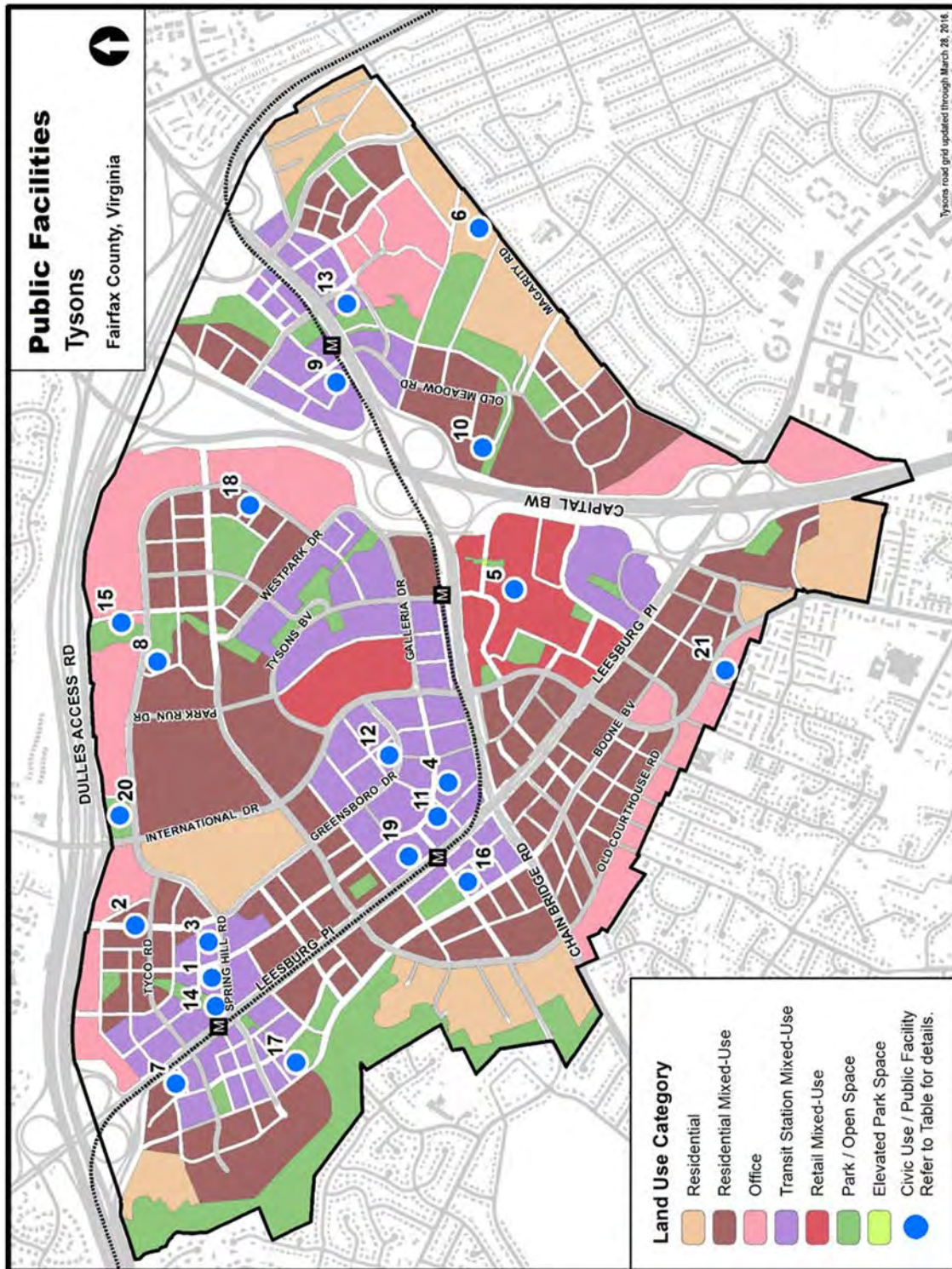
ARTS AND PERFORMANCE FACILITIES

The Tysons area is currently served by nearby arts facilities such as the McLean Community Center, with the Alden Theater and the McLean Project for the Arts (a nationally recognized visual arts exhibit, and the Wolf Trap facilities, including the 7,000 seat Filene Center, 800 seat Children's Theatre in the Woods, 388 seat Barns at Wolf Trap, and performing arts classes at the Center for Education at Wolf Trap. First Stage, a small professional theater company with limited visual arts exhibit space, is currently located on Spring Hill Road, within Tysons.

To provide a 24-hour livable/walkable environment, an arts center should be provided which could include performance, rehearsal and exhibit space for local and visiting artists and/or a home for local theater or dance companies. A potential location for this center could be in the South Tysons Central 7 Subdistrict, collocated with the planned civic plaza. Any arts center location should allow for flexible programming, including, if possible, access to outdoor areas for outdoor arts programming. In addition to the arts center, at least one other neighborhood should include small theaters and/or galleries, as well as adaptable space that allows for the creation of visual art and for audiences and artists to interact.

PUBLIC FACILITY NEEDS AND LOCATIONS

The following table lists existing and identified needs for public facilities in Tysons. It should be noted that, in this context, public facilities includes services provided by the county and other public entities, services provided by utilities, and services such as arts and education facilities that may be provided by public, private, or non-profit agencies. Locations for existing and sited facilities are shown on Map 10: Public Facilities. Information about the preferred location for those facilities which have not been sited is found in the text. Because the public facilities needed to serve the planned growth in Tysons will be constructed over the planning



Note: Planned park spaces are shown conceptually on Map 9.

horizon, the table includes a threshold for need (if available). Information on those facilities that have been proffered but not yet constructed is also included, however, it should be noted due to the long range planning horizon and the time frame for expected development, proffered commitments may change to address current needs as developments return through the zoning process for amendments.

Table 8
Public Facility Needs and Commitments

Map Key	Facility	Threshold	Proffer Commitment ¹
NOT SHOWN	Fire Station 29, relocation	2020	RZ 2010-PR-14A, B, D, E Fund replacement station
10	New Fire Station (East)	2020	RZ 2011-PR-010, 011 Construct, fit-out and dedicate by 2020, free-standing
NOT SHOWN	New Fire Station (Central)	64,000 residents and 188,600 jobs (approx. 2040)	--
NOT SHOWN	Police, interim office space	Current need	--
NOT SHOWN	Police Station	N/A	--
17	Dominion Virginia Power Substation #2	2020	--
15	Dominion Virginia Power Substation #3	Development in North Central and Central 123	--
9	Community Center	N/A	PCA 2010-PR-021 Construct, fit-out and no-cost 70 yr. lease; co-located in office building
8	Elementary School	12,900 new households (approx. 2030)	RZ 2011-PR-023 Dedicate land for elementary school (done)
NOT SHOWN	Elementary School	20,700 new households (approx. 2050)	--
NOT SHOWN	Secondary School Expansion	33,600 new households (approx. 2050)	--
19	Community Library or Regional Library	50,000 residents (approx. 2030-2040)	RZ 2010-PR-022, RZ 2013-PR-009 Construct, fit-out and no-cost 60-yr. lease; co-located in office building
11	College/Community Space	No set threshold	--
NOT SHOWN	Additional Higher Education Facilities	No set threshold	--
NOT SHOWN	Performing and Visual Arts Center	50,000 residents (approx. 2030-2040)	--
7	Arts Office	No set threshold	RZ 2011-HM-032 Construct, fit-out and no-cost 50 yr. lease; co-located in mixed-use building
NOT SHOWN	Athletic Fields ²	One field per 4.5 million square feet of development	--
16	Civic Commons ²	No set threshold	--
12	Indoor Recreation Space	No set threshold	RZ 2012-PR-002 Construct, contribution for fit-out and no-cost 50-yr. lease; co-located in residential building
NOT SHOWN	Two Additional Indoor Recreation Spaces ²	No set threshold	--
NOT SHOWN	Expansion of Spring Hill Recreation Center ²	18,000+ residents	--

Notes:

1. Proffer commitments are reported as of March 14, 2017: commitments may be modified as amendments are approved.
2. See Parks and Recreation section of the Areawide Recommendations for additional information on parks, recreational facilities and trails.
3. See Transportation section of the Areawide Recommendations for additional information on transportation facilities and infrastructure.

Table 9
Existing Public Facilities

Map Key	Facility
1	Fire Station 29, existing (to be replaced)
2	Dominion Virginia power substation (Tyco)
3	US Post Office
4	Fairfax Water water storage tank
5	Tysons Corner Center community space
6	Westgate Elementary School
13	McLean Metrorail Station Kiss and Ride
14	Spring Hill Metrorail Station Kiss and Ride
18	Fire Marshall review office space
20	Tysons West Park Transit Station Kiss and Ride
21	Virginia Department of Motor Vehicles office

PUBLIC FACILITY GUIDELINES

In evaluating development proposals in Tysons, the following guidelines should be considered along with the general Public Facility recommendations above.

Design of Public Facilities

In Tysons, public facilities will be expected to meet the same design considerations as private developments. In particular, buildings should encourage walking and street activity by being located at the street edge, footprints should be minimized by multi-story construction, and parking should be minimized and located in structures, not surface lots. Where feasible, public facilities should be provided in mixed-use developments and even co-located in buildings with other public or private uses. Flexibility in design is encouraged to address the needs of both residents and workers, and to accommodate temporary community uses such as polling places and mass care shelters for environmental disasters.

Reduction of the per capita use of water, wastewater, energy and waste materials is a guiding goal of future public utilities in Tysons. New development should reduce demands on the wastewater system through the use of water-conserving plumbing fixtures and, where consistent with building codes, the use of grey water. Additional discussion of sustainability goals is included in the Environmental Stewardship section of the Areawide Recommendations.

Information and Communications Technology

All residential, commercial, and public use structures in the Tysons Urban Center should be designed and equipped to enable information and communications networking. Both formal and ad hoc networks for voice, video, and data will operate throughout the Urban Center, and will connect to remote points and networks. While some networks will be open access, others will be secure. The various purposes to be served by these networks will include but are not limited to:

- Business: Exchanges of information and data
- Recreation, Arts, and Entertainment: Virtual club meetings; netcasts of performances; teleprograms, and computer games
- Education: Formal and continuing education, originating either locally or from remote locations
- Transportation and parking management: Signal controls; surveillance video; GPS directions to reserved parking or available open access parking
- Energy management: Monitoring data on electrical consumption; exporting locally produced electricity to other buildings and/or to the electrical grid
- Resource conservation: Monitoring data on water supply and consumption
- Emergency response: Notification of emergencies and provision of GPS directions to Public Safety personnel; provision of status information during grid outages, hurricanes, or other emergencies.
- Personal services: Provision of secure access to customer accounts, databases, and other information.

Phasing Public Facilities

In Tysons, an intensely developed area where most of the land is privately owned and already developed, locating new public facilities will be cost-prohibitive if the county has to purchase land to build stand-alone public structures. It will therefore be critical that land for free-standing uses or spaces within buildings for co-located uses is provided within private developments at no cost to the public sector.

While the facilities themselves will be constructed throughout the planning horizon as need arises, it is critical that space for most, if not all, of these facilities be secured as soon as possible. Therefore, rezoning proposals, through proffers, should commit to provide the necessary land and/or building space to ensure locations are available for the county to construct facilities in concert with the pace of growth.

Commitments to dedicate building space or land for most, if not all, of the public facilities needed by 2050 should be provided as development approvals occur during the first 10 or 20 years of Plan implementation.

In addition to facilitating public facility objectives through zoning actions, it may be necessary for landowners throughout Tysons to work collaboratively and creatively through partnerships to meet public facility objectives. Detailed plans for the provision of public facilities, including parks and athletic fields, for a district or subdistrict should be in place prior to or concurrent with the first rezoning approval in that district or subdistrict. Such plans should enumerate the public facilities needed in that district, the proposed locations for the facilities,

their anticipated year of construction, and the private sector's commitments toward the provision of those facilities. The public facilities plans should be coordinated with the county and land owners within the district or subdistrict. The locations of proposed public facilities may be placed on an "official map" as described in the Transportation section.

Public facility and infrastructure analyses should be performed in conjunction with any development application. The results of these analyses should identify needed improvements, the phasing of these improvements with new development, and appropriate measures to mitigate other impacts.

Commitments should be provided for needed improvements and for the mitigation of impacts identified in the public facility and infrastructure analyses, as well as improvements and mitigation measures identified in the Areawide recommendations.

Public facilities will be funded from a combination of public and private sources, including Community Development Authorities at the Tysons-wide, district and/or subdistrict levels. Financing strategies are discussed in the Implementation chapter of the Areawide plan text.

For development thresholds and estimated timing of needed public facilities, refer to Public Facility Needs and Commitments, Table 8.

Additional discussion of phasing public facilities and infrastructure can be found in the Areawide Land Use and Transportation recommendations.

Public Facility Timing

As noted, the public facilities needed to serve the planned growth in Tysons will be constructed over the planning horizon, as growth surpasses the service capacity of current systems. Table 8, Public Facility Needs and Commitments, lists existing and identified needs for public facilities in Tysons. The table includes a threshold for need (if available), as well as information on those facilities that have been proffered but not yet constructed. As noted, due to the long range planning horizon and the time frame for expected development, proffered commitments may change to address current needs as developments return through the zoning process for amendments.



URBAN DESIGN

Urban design is the discipline that guides the appearance, arrangement, and functional elements of the physical environment, with a particular emphasis on public spaces. An urban environment is comprised of many elements; including streets, blocks, open spaces, pedestrian areas, and buildings. These recommendations provide guidance for each of these elements, with a particular emphasis on creating a high-quality urban environment that is walkable and pedestrian-friendly. The goal of these recommendations is to support the transition of Tysons from an auto-oriented suburban place into a cohesive, functional, pedestrian-oriented and memorable urban destination.

This section of the Plan contains general guidance on principles of and recommendations for urban design in Tysons. The Tysons Corner Urban Design Guidelines (“Design Guidelines”), which were endorsed by the Board of Supervisors on January 24, 2012, provide more definitive guidance in implementing the Plan. The Design Guidelines address subjects such as streetscape, building materials, street furniture, and interim conditions; and provide more specific guidance on built forms. They help define distinct identities and characteristics for the various neighborhoods within Tysons. These guidelines supplement the Plan Areawide and District Recommendations.

URBAN DESIGN PRINCIPLES

Development in Tysons is guided by six urban design principles which provide a framework for the Design Guidelines.

Enhance Regional Identity

- Advance Tysons as the vibrant downtown of Fairfax County.
- Transform Tysons into a highly desirable, walkable, transit-oriented, mixed use urban environment.

Establish a Sense of Place

- Create unique and walkable districts, neighborhoods, and centers within Tysons.
- Encourage design elements that highlight the distinct character of each district, as well as common elements that unify Tysons as an urban center.
- Encourage each district to include tree-lined streets, a range of urban parks, and public gathering places.

Improve Connectivity

- Increase the efficiency of vehicular and pedestrian movements within Tysons through well-designed transit and a walkable grid of streets.
- Create pedestrian and bicycle-friendly environments and connections throughout Tysons that are safe, pleasant, and convenient.
- Maximize benefits of rail in Tysons by improving pedestrian and bicycle connectivity to adjacent communities and to regional activity centers.

Design Sustainable Environments

- Encourage sustainable buildings, site designs, and infrastructure.
- Incorporate innovative and environmentally sensitive stormwater design into all new development and redevelopment, and restore and stabilize existing streams.

Respect Surrounding Neighborhoods

- Maintain the character and livability of residential neighborhoods adjacent to and at the edges of Tysons.
- Concentrate the tallest buildings and highest land use intensities near Metro stations.
- Transition building heights to be compatible with lower density neighborhoods adjacent to and within Tysons.

Create a New Destination for the Arts and Design

- Include venues for performing arts and public art in a variety of spaces throughout Tysons.
- Encourage developers to work with artists and arts organizations early in the design process to successfully integrate the arts into their projects.
- Ensure the provision of public art in Tysons by considering a dedicated funding source.
- Maintain high standards for innovative architecture and design which will create a unique identity for each district and Tysons as a whole.

URBAN DESIGN RECOMMENDATIONS

Urban design recommendations expand upon these principles and provide direction for creating urban places within Tysons. The recommendations are organized into two sections, the Pedestrian Realm Recommendations and the Building and Site Design Recommendations.

Pedestrian Realm Recommendations

The pedestrian realm consists of publicly accessible places where people circulate on foot. Sidewalks connect pedestrians to their homes, places of employment, retail establishments, restaurants, parks, plazas, trails, and other public places. The pedestrian realm is the most visible space within the urban environment. It should be continuous but can vary in its character depending upon the proximity to Metrorail, adjacent uses and the scale of the street.

The pedestrian realm also includes building facades and the space adjacent to buildings that can offer outdoor seating areas, commercial displays, planted areas, and shelter through canopies and awnings. Color, texture, signage, and variations in activity can provide visual interest for both pedestrians and motorists. Other elements that enhance the aesthetics and functionality of the pedestrian realm include bicycle racks, benches, bus shelters, and lighting. The design of the pedestrian realm should create a safe and high-quality pedestrian experience for all users.

The pedestrian realm also links to the larger open space network, which includes urban parks, civic plazas and common greens that are accessible to the public. These open spaces provide a break in the built environment, allow opportunities for social interaction, and help to define a district's identity. The design of the public realm should be integrated with and complimentary to adjacent land uses.

The following recommendations address the Street Grid and Block Pattern and Streetscape Design.

Street Grid and Block Pattern

The street grid is the primary organizing element of the new urban Tysons. In contrast to the existing pattern of large, suburban blocks, new development creates smaller blocks through an interconnected system of streets. Additional guidance can also be found in the Transportation section of the Plan. This street system will be walkable, provide travel choices for pedestrians and motorists, and have breaks in building massing to create a built environment that is appropriately scaled for pedestrians.

To implement the grid of streets and an urban block pattern, all proposals should provide for planned road improvements that follow the grid of streets and street types contained in the Transportation section, as amended by additional studies conducted by the Fairfax County Department of Transportation and as further determined in conjunction with the zoning review process.

In cases where additional modifications to the approved road network are proposed, the development team should work with staff to provide a network that achieves a level of connectivity that meets plan goals. In areas where such design studies have not been completed, the street and block network should follow the recommendations in the Transportation section and the following block size recommendations:

- Blocks should be rectilinear to allow for efficient building sites and appropriate intersection geometrics, however, some blocks may not be rectilinear due to topography and other existing conditions.
- Blocks should have a maximum perimeter of 2,000 feet, measured at the curb.

- Any block side longer than 600 feet should have a mid-block pedestrian connection, such as 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.

Pedestrian Hierarchy

An integrated pedestrian network, or hierarchy, can reinforce an enjoyable pedestrian environment and further the transit-oriented character of Tysons. While the street grid will provide a framework for development in Tysons, the streets themselves will vary in character and provide different functions. For example, pedestrians might avoid walking along noisy, high-traffic boulevards and instead concentrate on smaller, local streets that provide more opportunity for interaction. A pedestrian hierarchy plan should be developed and utilized that considers not only the design of streets, but also the location of amenities such as civic and retail uses.

The pedestrian hierarchy should identify where pedestrians will be and what they are doing, and then to orient the public realm around that framework to the extent possible. Although based on the street grid, the pedestrian hierarchy may not necessarily relate to the underlying functional street designations. Some corridors may be used primarily for community movement, while others may be used more for social interaction, shopping and dining. Subsequently, streetscape design, proposed uses, and building design should all be informed by the pedestrian hierarchy. Additional guidance on pedestrian hierarchy plans may be found in the Pedestrian Hierarchy section of the Design Guidelines.

Streetscape Design

Attractive streetscapes include well-designed road edge that contributes to area identity and provide safe, high-quality pedestrian experiences. The streetscape design should vary by the type of street and the adjacent land use, and should create a unifying theme along each of the roads to visually and physically link the various districts and sub-districts of Tysons.

Streetscapes include sidewalks, street furniture, streetlights, trees and other plantings, paving, crosswalks, bus shelters, bicycle racks, public art, and seating areas. The purpose of these elements is to enhance the quality of the pedestrian environment. The integration of the Metro station entrances into the public realm is especially important to the success of the urban environment. The public realm at the station entrances should be attractive, highly visible, and able to safely accommodate high amounts of pedestrian activity.

General recommendations for all streetscapes are noted below, followed by design recommendations for streetscapes along each roadway type (Boulevards, Avenues, Collectors, and Local Streets). The streetscape types are consistent with the street types shown on Map 7 and Table 3 in the Transportation section, except that International Drive (identified as an Avenue for transportation classification) should utilize a Boulevard streetscape type.

As a companion to the recommendations found in the Plan and the more detailed information of the Design Guidelines, Transportation Design Standards for Tysons Corner Urban Center (Tysons Transportation Standards) were developed jointly between the Virginia Department of Transportation and Fairfax County. These urban street standards were adopted by the Board of Supervisors on September 13, 2011.

In addition to specific roadway design geometrics, the Tysons Transportation Standards include detailed recommendations by roadway type that relate to and are coordinated with the recommendations of this Plan. These include guidance on the provision of and geometrics of on-street parking, medians, turn lanes, bike lanes, and pedestrian elements including building zones, sidewalks and landscape amenity panels. Also covered are utility placement and coordination of landscaping with sight distance requirements.

General Streetscape Recommendations

Definition of Streetscape Zones: The streetscape is composed of three zones (see illustrated streetscape cross-sections). The *landscape amenity panel* is located next to the curb and includes trees, lighting, bus stops, bicycle racks, parking meters, traffic signs, pedestrian refuge strips, wayfinding signs, and other urban living infrastructure. The *sidewalk* is reserved for pedestrian movement and should not contain any elements that might impede pedestrian movement. The *building zone* is located between the sidewalk and the building façade; this space is intended to accommodate outdoor dining, planters, door swings, merchandise displays, and building awnings. The character of the building zone is determined by the adjacent land use.

Underground Utilities and Stormwater Infrastructure: Utilities and stormwater infrastructure should be placed underground and should be coordinated with future roadway improvements and sidewalks to foster a pedestrian-friendly environment. To the extent possible, such infrastructure should be located in the building zone or the parking lane (as recommended in the VDOT standards for Tysons); it should not be located under street trees. Access panels, such as man holes, should be placed so that pedestrian movement is not encumbered, preferably outside of the sidewalk area. To achieve this goal, detailed site analysis should take place early in the development process to avoid conflicts between utilities and proposed street tree locations and between access panels and the sidewalk. New development should install underground utility conduits or provide commitments to facilitate future utility coordination. Utility boxes for phone, cable, electricity, natural gas, information systems and/or other services should be located to the rear or side of the development, along service alleys, within buildings, or placed in sub-grade vaults.

Street Lighting: Street lighting should maintain the overall character and quality of the area, provide adequate lighting levels that ensure public safety without creating glare or light spillage, conform to county ordinances, and adhere to green building policy light pollution requirements. Light fixtures should be full cutoff and use energy-saving technology. Street lights should be located so as to not conflict with street trees at their projected maturity.

Design Alternatives: Where pre-existing site constraints might limit the ability of a development to satisfy all streetscape recommendations, some limited variation may be permitted if the proposed alternative meets or exceeds the standards established by this Plan. Where flexibility is granted, the streetscape should include acceptable sidewalk widths, and an acceptable amount of appropriately located street trees.

Streetscape Dimensions: In general, areas with a high level of pedestrian activity, such as major retail streets and the areas surrounding Metro stations, should have wider sidewalks to accommodate increased pedestrian activity. Above all, dimensions within each block should be consistent to avoid the confusion of shifting pedestrian features.

Public Safety: Safety and sight distance should be taken into consideration when locating street trees, other plantings, and amenities in proximity to roadways or within medians.

Streetscape Maintenance: Streetscape improvements may be provided on a combination of publicly owned right-of-way and private property. When the public right-of-way is utilized to provide streetscape improvements, commitments should be made by the property owner to maintain the entire streetscape area. In addition, when the streetscape is not entirely within the right-of-way, additional right-of-way or a public access easement may need to be provided for the portion of the streetscape located on private property.

Pedestrian Crossings: Pedestrian crossings should be well-delineated, ADA accessible, and located in desirable locations, including on all legs of an intersection whenever possible. Crossings at major streets should be highly visible and timed with signalized crossing systems. When medians are provided, they should create a safety island for pedestrians waiting to finish crossing the street.

Median Landscape Strip: New streets in Tysons are not expected to include medians except where they would facilitate pedestrian crossings. Where medians are provided, they should be Attractive Low Impact Development techniques for stormwater remediation in these areas should be considered.

On-Street Parking: Streetscapes with on-street parallel parking should have a pedestrian refuge strip, which is a small paved area adjacent to the curb. The pedestrian refuge strip allows passengers to exit parked cars without having to step into planted areas. Trees should be spaced appropriately to allow car doors to swing open without obstruction.

Planting in the Pedestrian Realm: Street trees should be planted and maintained in an environment that promotes healthy root growth and should be spaced no more than 50 feet apart. Only those varieties that require little maintenance, are resistant to disease, and are adapted to extreme urban conditions such as pollution should be used. In addition to trees, vegetation within planting strips should include supplemental plantings, such as ornamental shrubs, ground cover, flowering plants, and grasses. Consideration should be given to the use of a broad palette of native and drought tolerant species. Supplemental plantings should occur in areas that are clear of vehicles parked on the street. Planting areas should incorporate hardscaped pedestrian crossing points. Where appropriate, special pavement treatments or hardscape elements may be considered to achieve both root-friendly design and pedestrian walkability within the streetscape. Irrigation should be provided.

Low Impact Development Techniques: Streetscape design should include innovative stormwater remediation design elements such as bioretention, permeable pavements, and incorporation of water collection and storage.

Street Furniture and Other Elements: Within each district, selection of street furniture such as benches, bike racks, trash and recycling receptacles should be consistent. Fixed streetscape elements should be located within the landscape amenity panel so as to minimize the disruption of pedestrian flow. Additional guidance on the specific design and character of street furniture and other elements may be found in the Design Guidelines.

Fire Access Coordination: Because of the urban character of Tysons, with buildings located close to the road and often utilizing the entire block, fire safety access will often be co-located with the streetscape. Detailed site analysis should take place early in the development process to avoid conflicts between proposed streetscape features and fire access regulations. Development plans should demonstrate how the proposed streetscape and other site features can be provided while meeting fire access requirements.

Boulevard Streetscapes

The boulevard streetscape applies to Leesburg Pike, Chain Bridge Road/Dolley Madison Boulevard and International Drive. These streets will carry the largest volume of automobile traffic and also accommodate Metrorail, buses, bicycles and pedestrians. See Figures 8a, 8b, 9a, and 9b.

The streetscape concept for boulevards features wide sidewalks, street trees evenly spaced, and medians with plantings of flowering trees, shrubs, and flowers. The style of street lights should be distinctive, and lighting should be designed for both pedestrian and vehicular use. The following recommendations are provided for achieving the boulevard streetscape character:

Landscape amenity panel: This zone should be a minimum of 8 feet wide; however, a 10-foot wide panel is encouraged. In addition to vegetation, this area should include amenities such as bicycle racks and bus shelters.

Sidewalk: A minimum 10-foot wide sidewalk that allows for uninterrupted pedestrian movement should be provided.

Building Zone: A minimum 15 foot wide multi-use zone that accommodates a second row of trees and possibly additional plantings should be provided. Shade trees should be planted to ensure that they have building clearance at their mature size. The trees within the building zone should be planted to achieve a staggered affect with those planted in the landscape amenity panel. When ground level retail is provided in a building, a portion of the building zone should be used for retail browsing or outdoor dining.

Avenue, Collector, and Local Street Streetscapes

While avenues, collectors, and local streets serve different functions from a traffic perspective, their streetscapes are similar. The character of the streetscapes should generally be determined by the pedestrian activities associated with the adjacent land uses rather than by the classification of the street. See Figures 10a, 10b and 11a and 11b.

For local streets, traffic calming measures such as raised mid-block pedestrian crossings, small traffic rotaries, and curb and sidewalk “bulb outs” at intersections may be appropriate.

Guidance to achieve the streetscape character for avenues, collectors, and local streets is as follows:

Landscape amenity panel: This zone should be a minimum of 8 feet wide along avenues and collectors, and a minimum of 6 feet wide along local streets. Street trees should be evenly spaced, and vegetation may also include shrubs and ground cover. Sufficient space should be provided for amenities such as bicycle racks and bus shelters.

Sidewalk: Sidewalks along avenues and collectors should be a minimum of 8 feet wide. Sidewalks along local streets should be a minimum of 6 feet wide.

Building Zone: This width of this zone should range from 4 to 12 feet. When ground-level retail is provided in a building, a portion of this building zone should be used for retail browsing

or outdoor dining. Supplemental plantings (to include shade and flowering trees, shrubs, flowering plants, ground cover, and grasses) may be provided for buildings without retail uses.

Avenue, Collector, and Local Street Streetscapes

While avenues, collectors, and local streets serve different functions from a traffic perspective, their streetscapes are similar. The character of the streetscapes should generally be determined by the pedestrian activities generated by the adjacent land uses rather than the classification of the street. See Figures 10a, 10b and 11a and 11b.

For local streets, traffic calming measures such as raised mid-block pedestrian crossings, small traffic rotaries, and curb and sidewalk “bulb outs” at intersections may be appropriate.

The following recommendations are provided for achieving the streetscape character for avenues, collectors, and local streets:

Landscape amenity panel: This zone should be a minimum of 8 feet wide along avenues and collectors and a minimum of 6 feet wide along local streets. Street trees should be evenly spaced in ordered plantings. Vegetation may also include shrubs and ground cover. Amenities such as bicycle racks and bus shelters should be provided as needed to serve the adjacent land uses.

Sidewalk: Sidewalks along avenues and collectors should be a minimum of 8 feet wide. Sidewalks along local streets should be a minimum of 6 feet wide.

Building Zone: This width of this zone should range from 4 to 12 feet. When ground-level retail is provided in a building, a portion of this building zone should be used for retail browsing or outdoor dining. Supplemental plantings (to include shade and flowering trees, shrubs, flowering plants, ground cover, and grasses) may be provided for buildings without retail uses.

Service Street Streetscapes

Service streets are expected to provide access to parking, loading docks, waste management, utilities, and other back-of-house operations. While they do not primarily serve pedestrians, they should provide a minimum level of accessibility and safety for pedestrians where applicable. See Figure 12.

Sidewalk: A minimum 5-foot wide clear sidewalk should be provided adjacent to buildings. To the extent possible, no poles, utilities, or other appurtenances should be located in the clear sidewalk area. Attractive street lighting should be provided to illuminate both the street and the sidewalk. In lieu of pole lights, attractive safety and wayfinding lighting may also be attached to the building face.

Building and Site Design

Building and site design must support pedestrians and create a vibrant urban environment. The location of a building on a site should not create a barrier to pedestrians by interrupting the pedestrian circulation system. Typically, buildings should be located close to the sidewalk to allow for active storefronts and other uses that engage pedestrians. Non-active uses such as loading docks, mechanical rooms, utility vaults, and exposed parking decks should be

Figure 8a
Boulevard Streetscape, Section

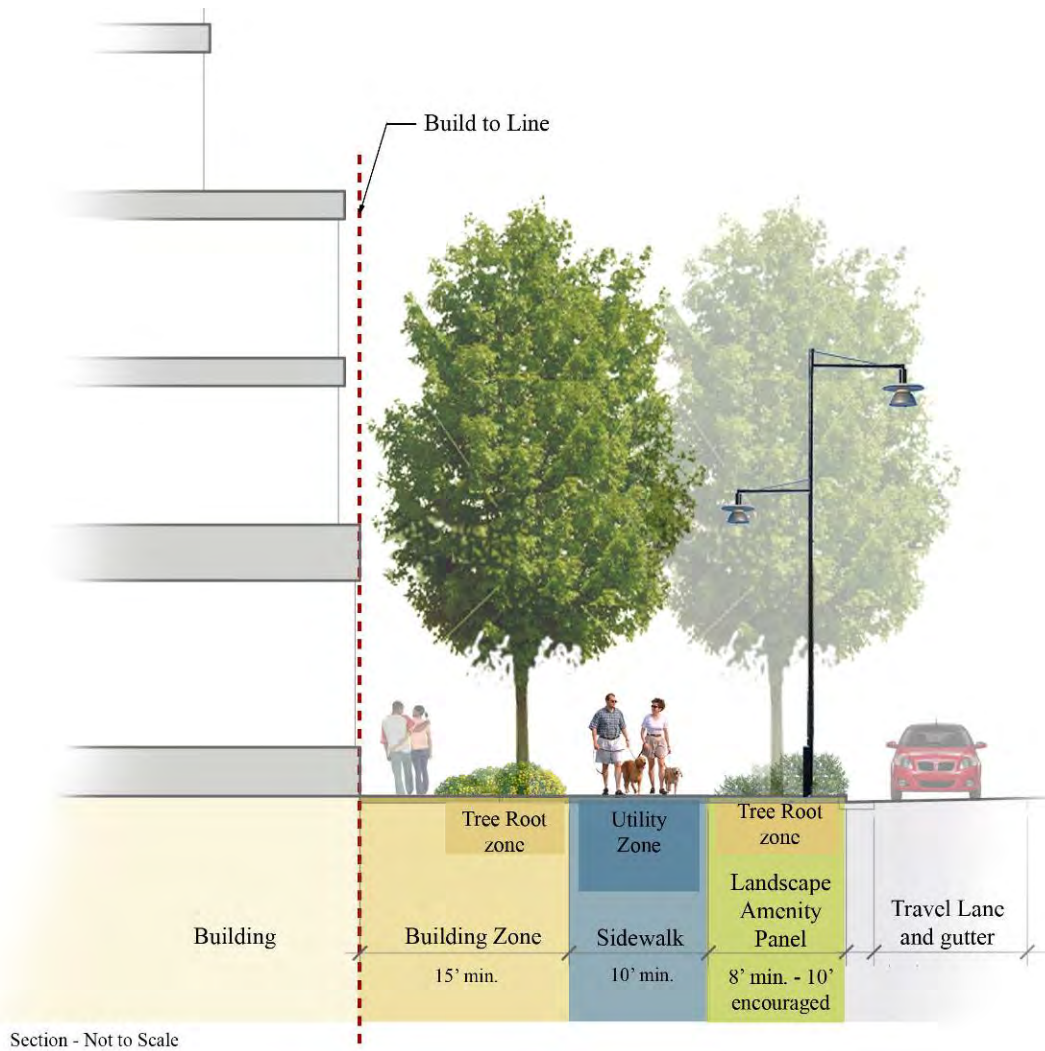


Figure 8b
Boulevard Streetscape, Plan

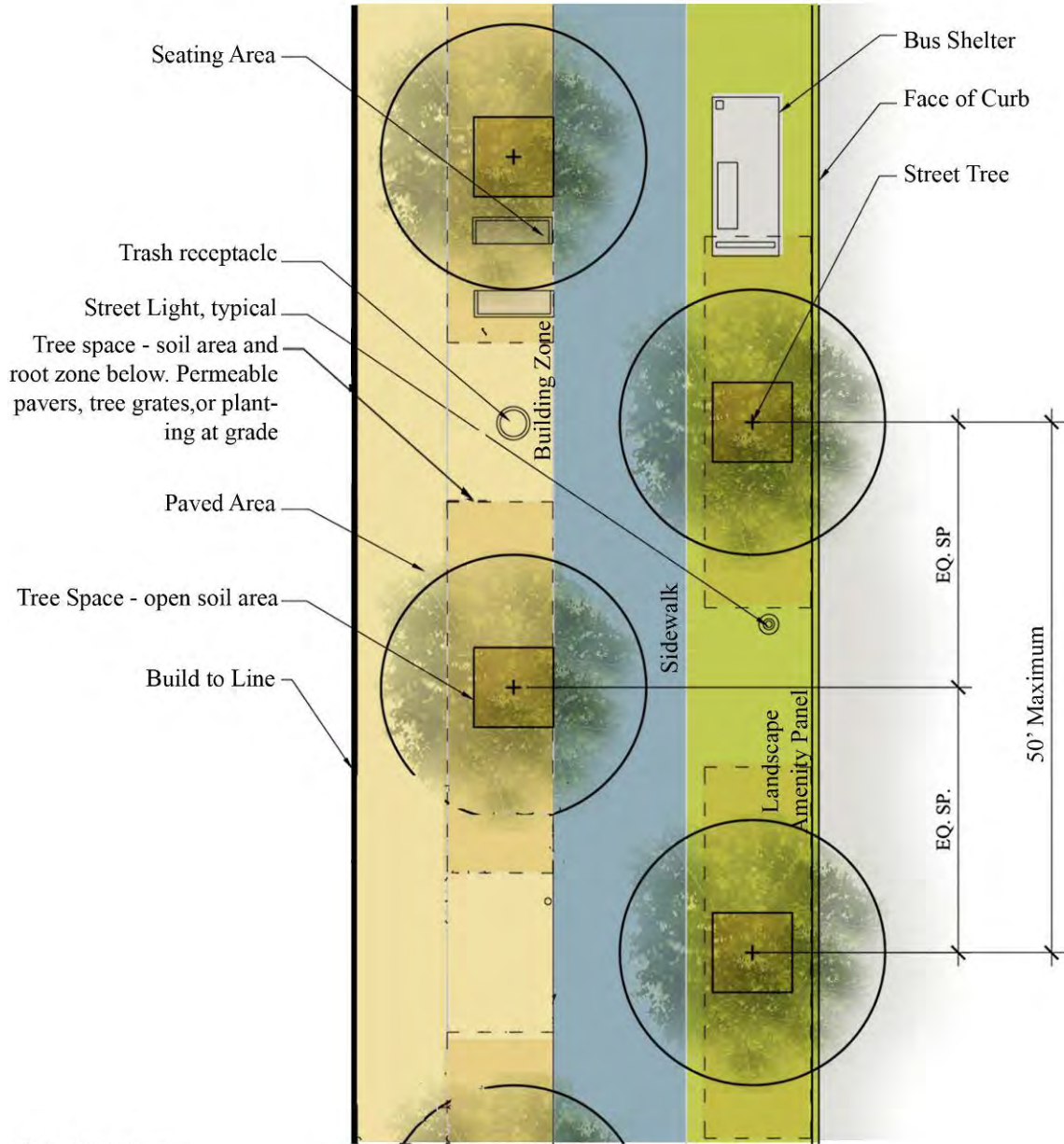


Figure 9a
Boulevard Streetscape with Outdoor Dining, Section

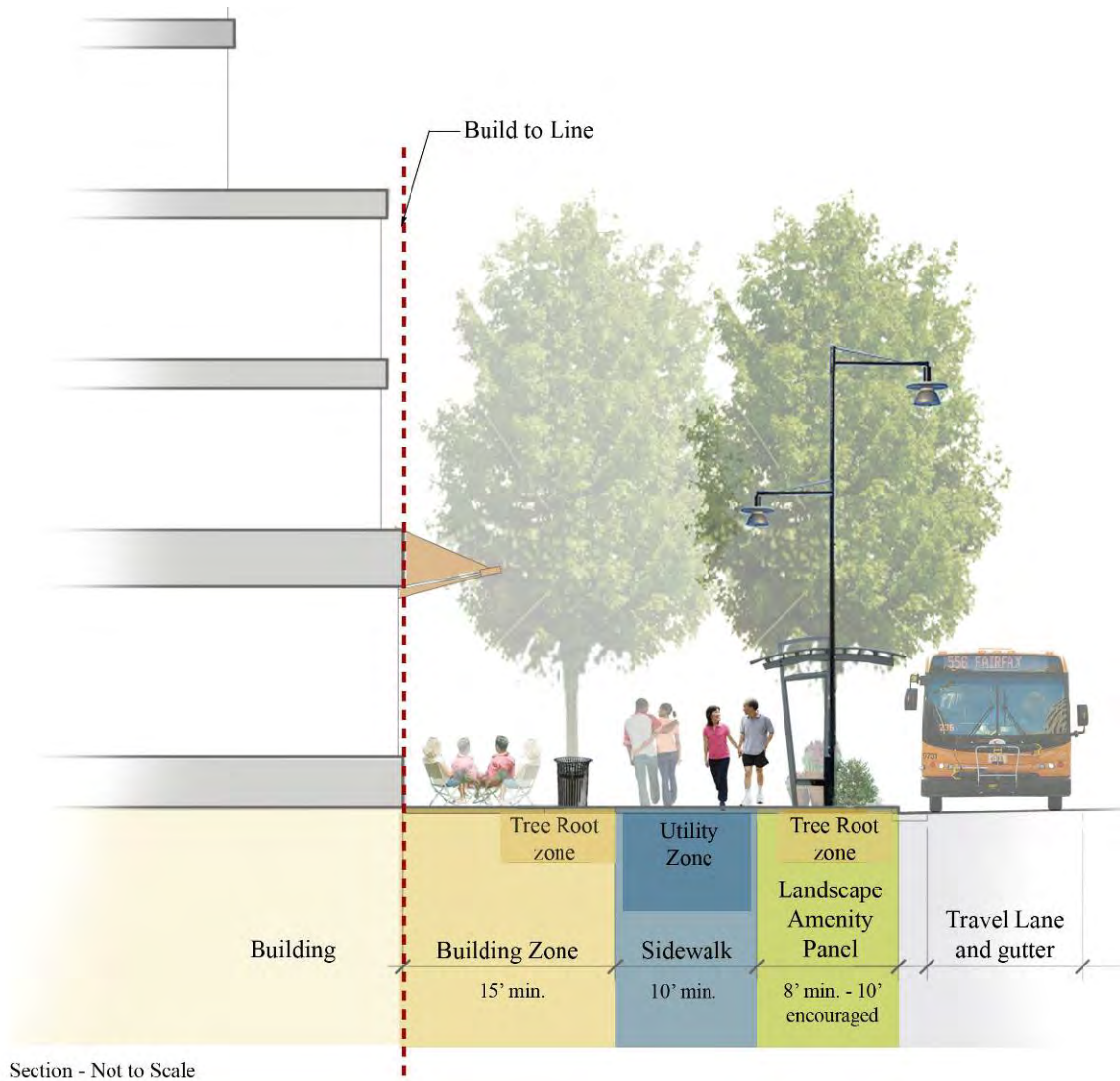
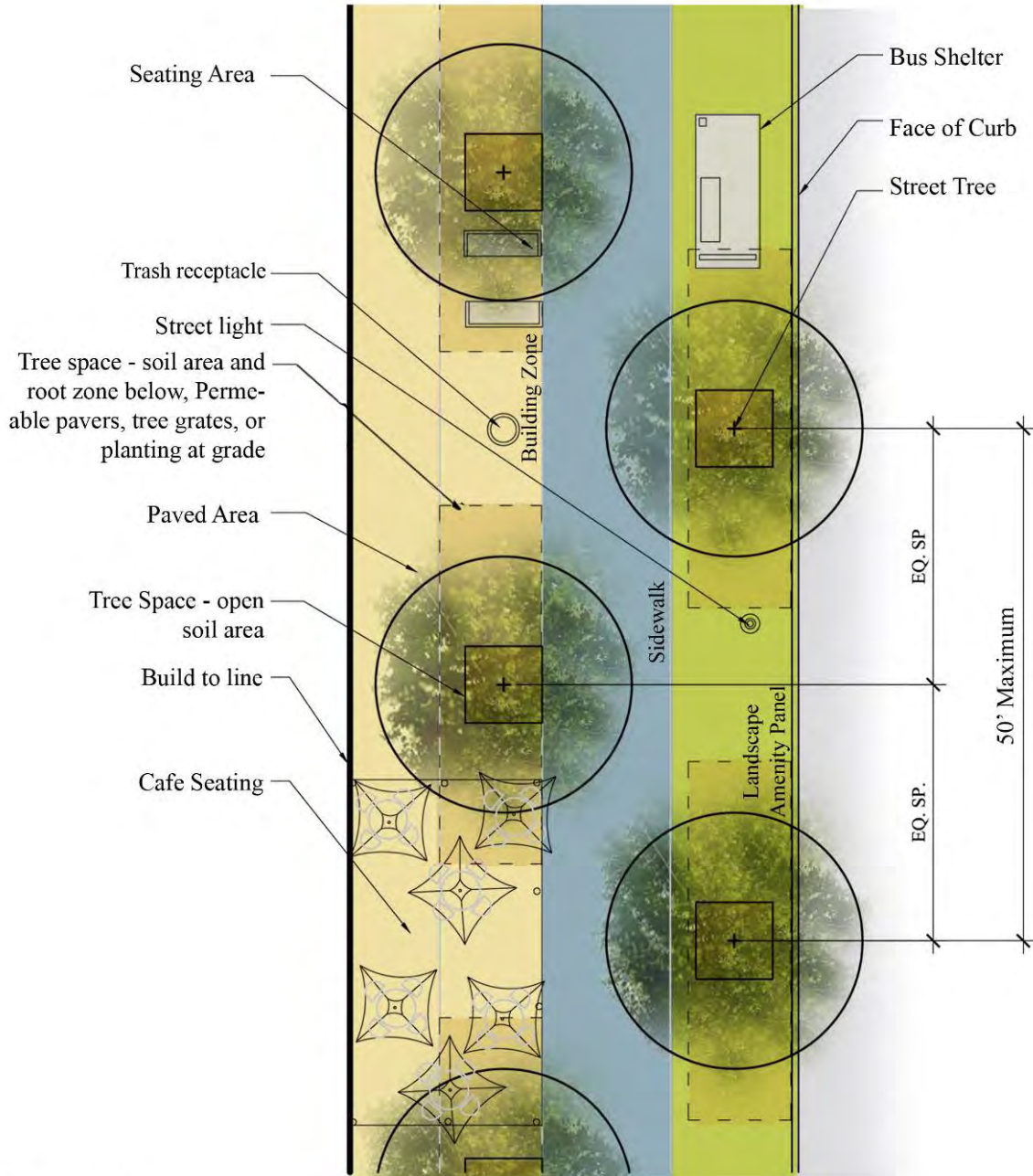


Figure 9b
Boulevard Streetscape with Outdoor Dining, Plan



Plan - Not to Scale

Figure 10a
Avenue/Collector/Local Street Streetscape with Residential Building, Section

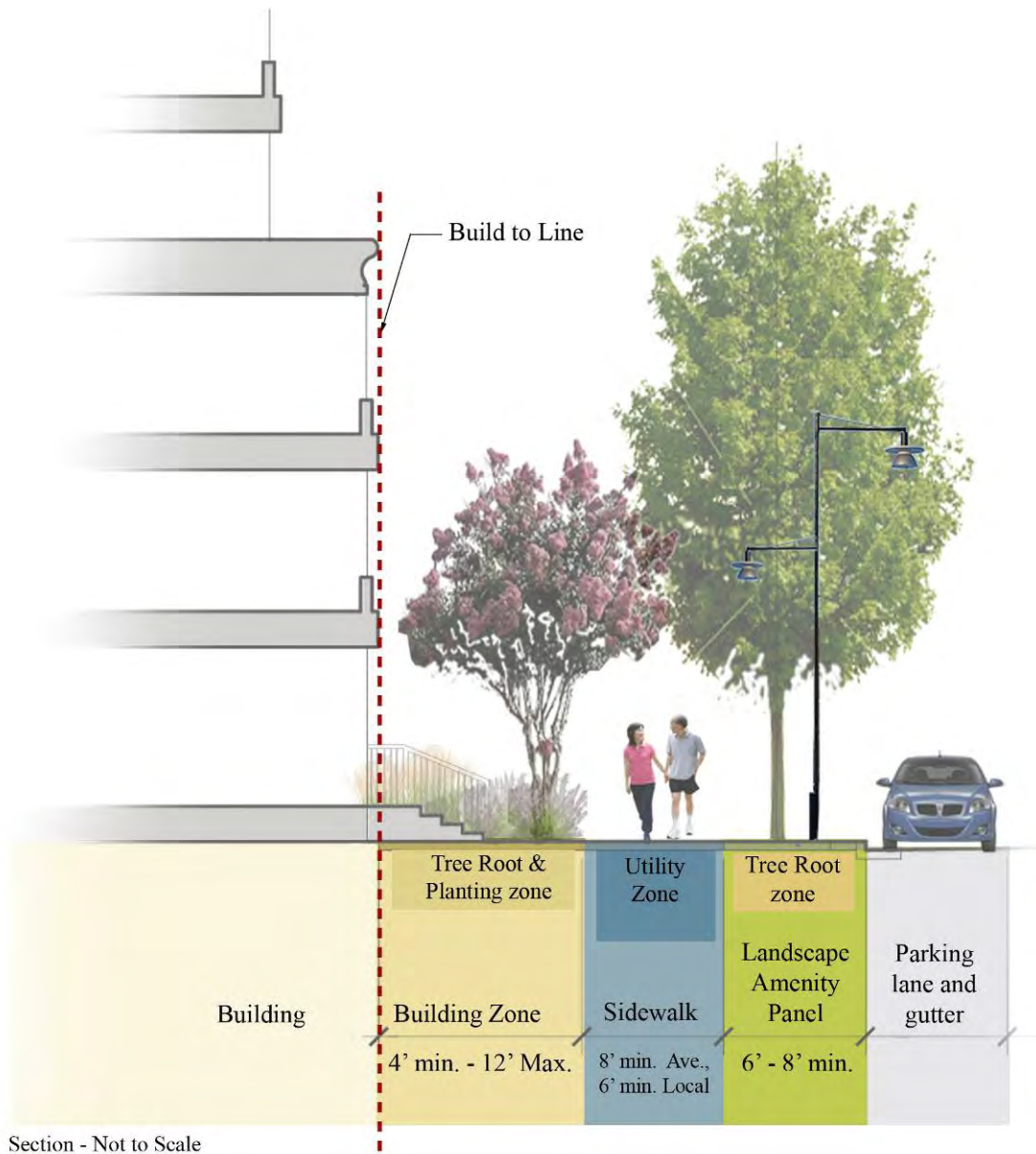
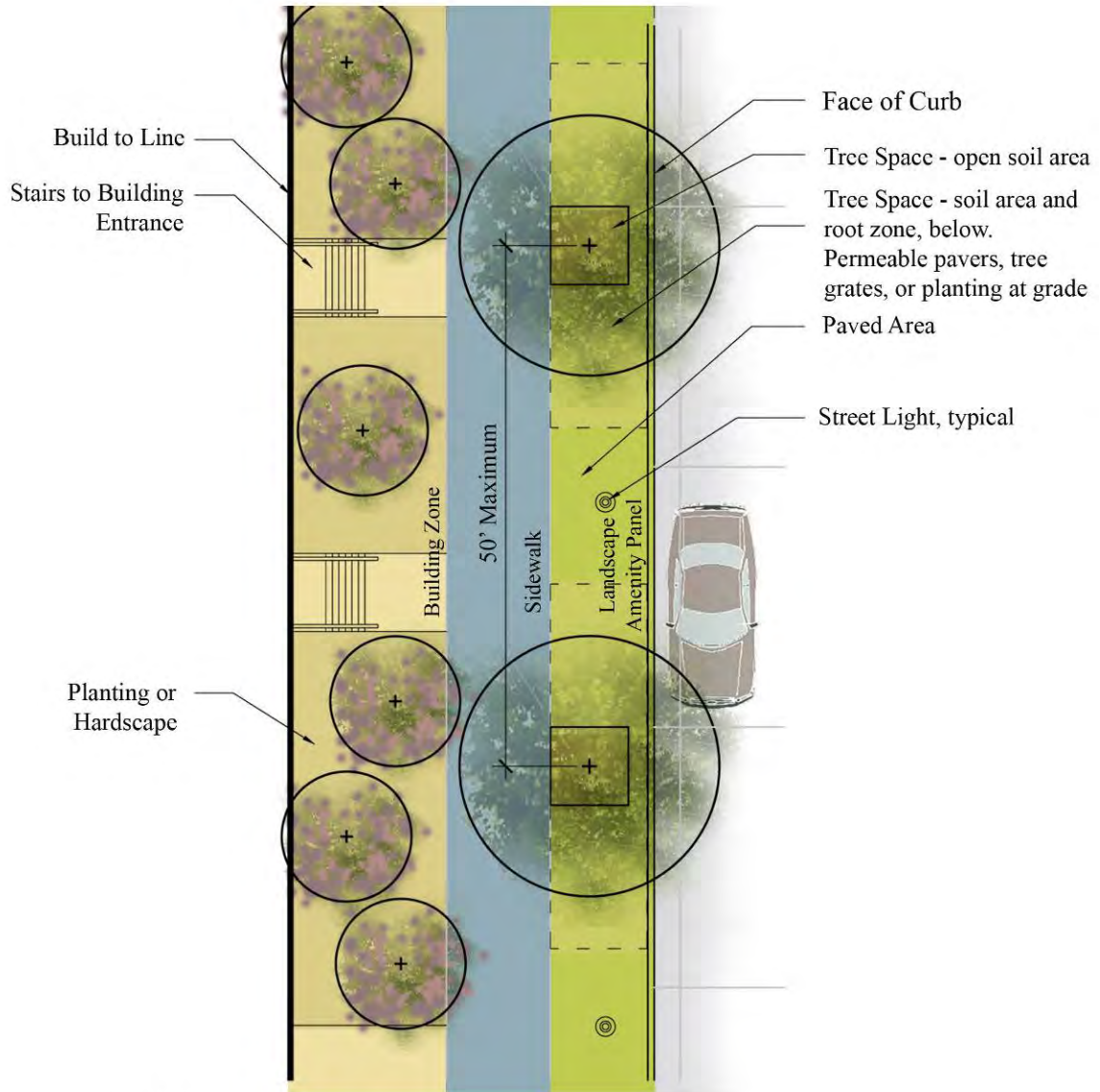


Figure 10b
Avenue/Collector/Local Street Streetscape with Residential Building, Plan



Plan - Not to Scale

Figure 11a
Avenue/Collector/Local Street Streetscape with Commercial Building, Section

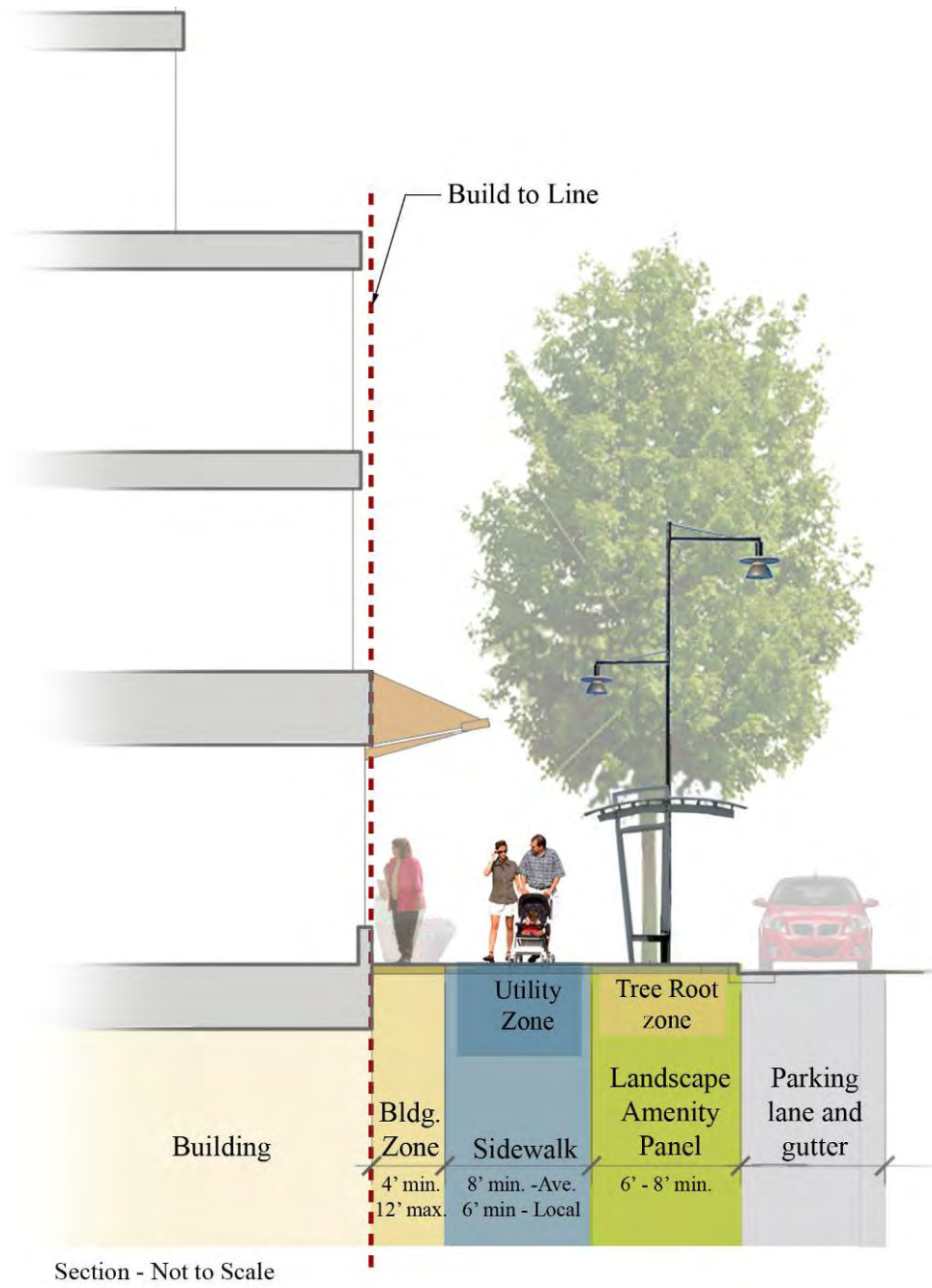


Figure 11b
Avenue/Collector/Local Street Streetscape with Commercial Building, Plan

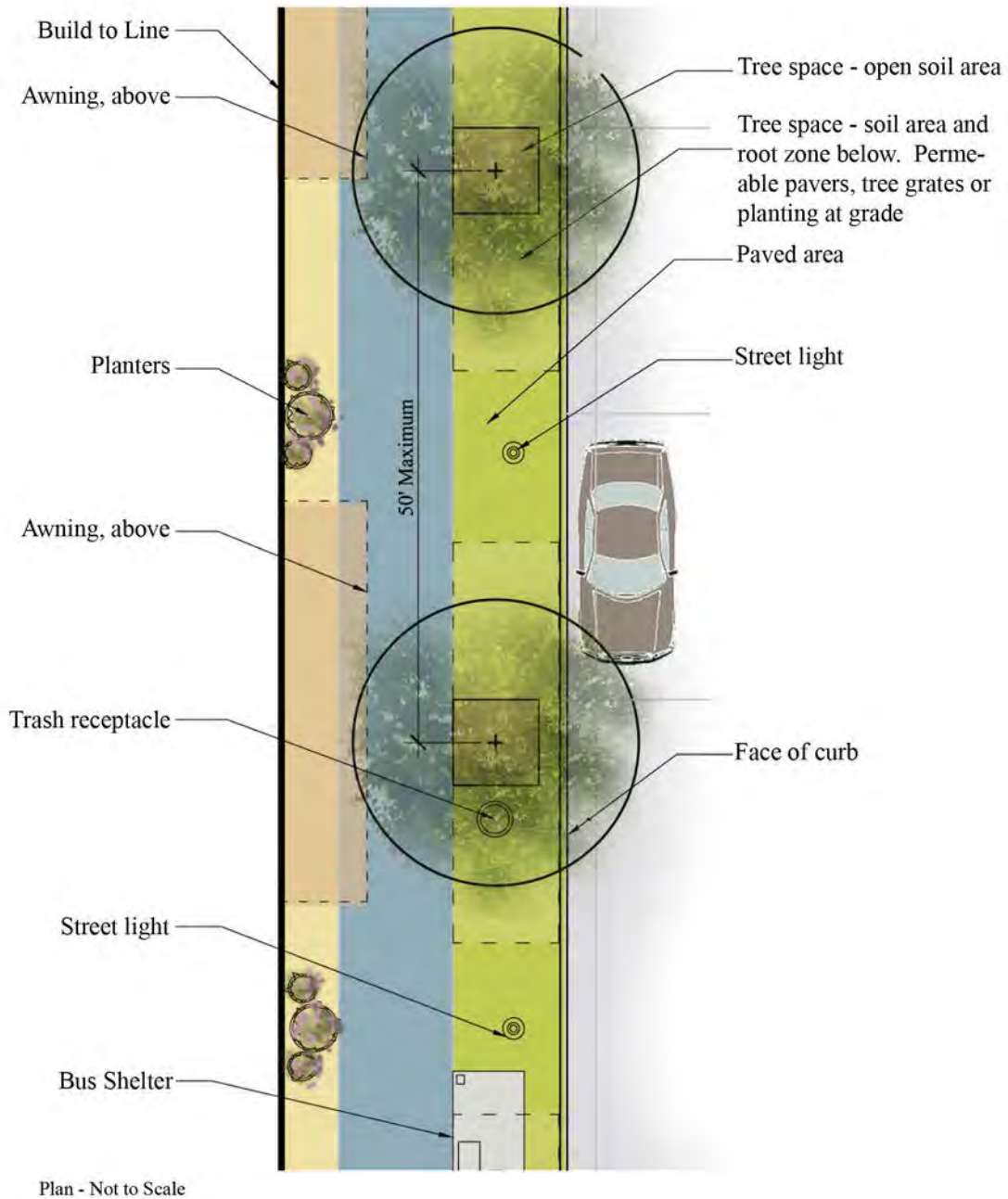
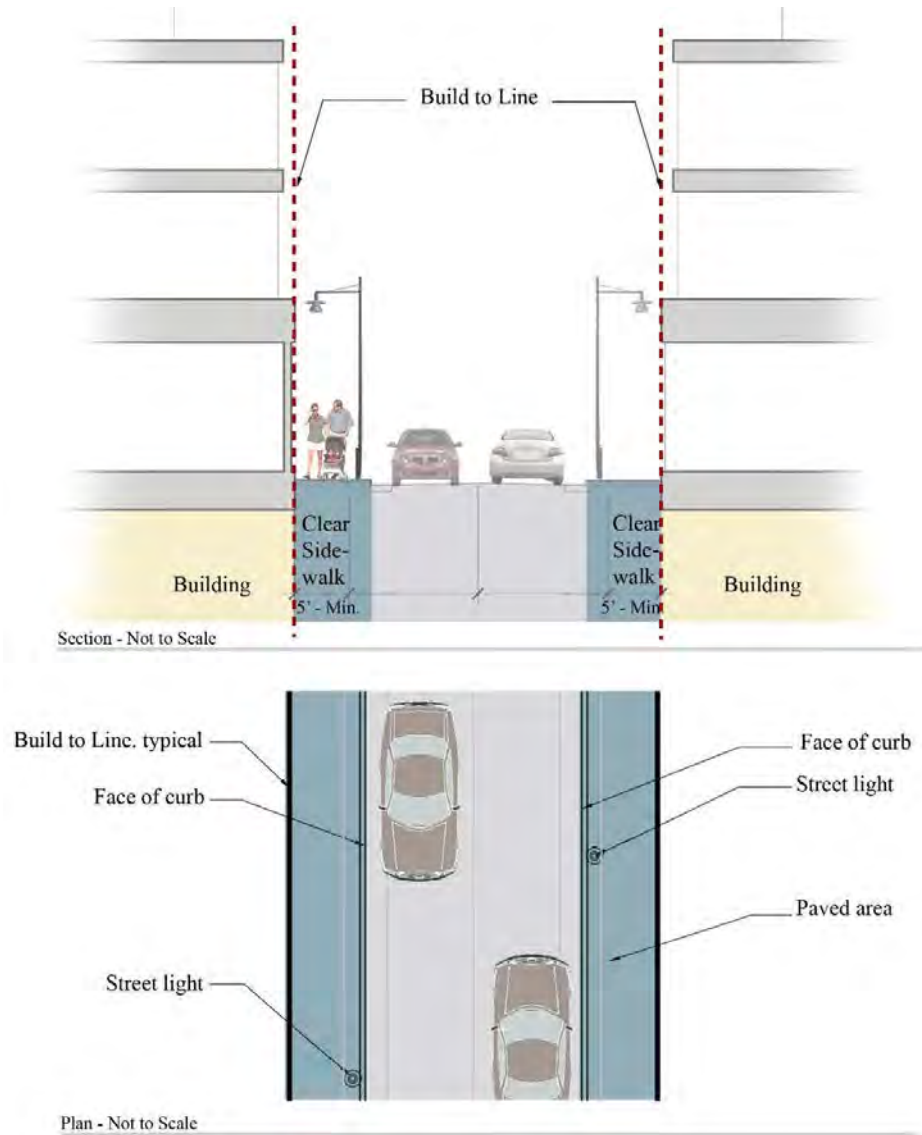


Figure 12
Service Street Streetscape, Section and Plan



oriented away from boulevards, avenues, and local streets. These uses should be located facing service streets or placed internally to the building envelope to minimize negative impacts. Where garage and/or loading access must be provided on a non-service street, widths should be minimized and architectural treatments should be provided. If utility vaults or mechanical rooms must be placed along non-service streets, they should be treated so that they do not negatively impact the activation of the pedestrian space. Access panels should conform to the recommendations of the Design Guidelines.

The scale of buildings in relationship to streets and sidewalks should also be considered. Tall, continuous buildings create canyon-like conditions. Proposed developments should create building facades and frontages which are appropriate to pedestrians in scale and level of detail. In the same manner that excessive height along the sidewalk can feel uncomfortable to pedestrians, long expanses of blank walls or uniform materials can detract from the pedestrian experience.

If designed well, the combination of public and private spaces creates attractive and functional places to live, work, and shop. High standards for innovative architecture and landscape architecture will create a unique aesthetic and identity for the urban form within Tysons.

The following recommendations address Build-to Lines and Building Frontages; Bulk and Massing; Step Backs; Building Articulation; Fenestration and Transparency; Parking Design; and Building Height.

Build-to Lines and Building Frontages

The build-to line is a theoretical line on the ground indicating where the façade of a building should be located, at the back of the building zone. The building façade should align with the build-to line, and generally serve as a physical and visual edge to the pedestrian realm. Limited exceptions to the build-to line may occur where plazas, pocket parks, or spaces for public art are located. The build-to line ensures that the ground floors of all buildings on a block generally align with each other at the edge of the streetscape, providing a frame for the public realm but allowing architectural variety and interest. The build-to line generally applies to the podium the base of the building structure and excludes building towers, which may be set back further to allow for light and air to reach the street.

Proposed developments in Tysons should adhere to a consistently established build-to line for each block. The location of the build-to lines will relate to the streetscape guidance, the intensity and activity of the land uses, and the desired relationship of pedestrians to these uses. The location of the build-to line may vary depending on the character of the street and any specific urban design guidelines developed for the District.

Existing or interim uses and buildings that do not conform to the build-to line established by new development should investigate opportunities to create visual and physical linkages to new buildings that define the new build-to line and the pedestrian realm. These may include the use of walls, landscaping, or other architectural features aligned with the new build-to line.

Bulk and Massing

Redevelopment in Tysons will be urban in nature, and new buildings will generally occupy a majority of the block and be multiple stories in height. Sites should be designed with care to achieve the desired density goals, while remaining sensitive to the impact of development on the surrounding areas. Guidance regarding building massing includes:

- Towers should be designed with height variations to protect access to light and views, and to allow for privacy.
- Towers should be sited and spaced from one another in a manner that allows for light at the street level and minimizes long periods of shadow on the street, adjacent buildings, or public open space.

- Generally, towers should be located towards the wider rights-of-way, where the street section can absorb the additional building height better than narrower streets.
- Buildings should be at least two stories tall along the street, and should step back above the podium as a transition to the building tower. Floor plate area reductions at the upper stories, and tower articulation should also be considered.
- Where towers are set back from the edge of a building podium, podium heights should be varied between buildings along the block to provide architectural interest.

In general, ground-floor commercial uses should be accessed directly from the adjacent public sidewalk or building zone. Therefore, in the absence of significant existing elevation changes, storefronts should be at the same grade as the sidewalk and building zone.

Ground-floor residential uses, however, should be grade-separated from the public sidewalk to distinguish the units and to provide some privacy. This creates the opportunity for stoops, bays, porches or entries that establish a distinct transition between private residential developments and the pedestrian street.

If accessed directly from the public sidewalks, stairs should not impinge upon the public, but be located wholly on private. In lower density areas, front yards should be shallow and characterized by entry gardens and terraces that encourage a direct relationship between the building and the public.

Step Backs

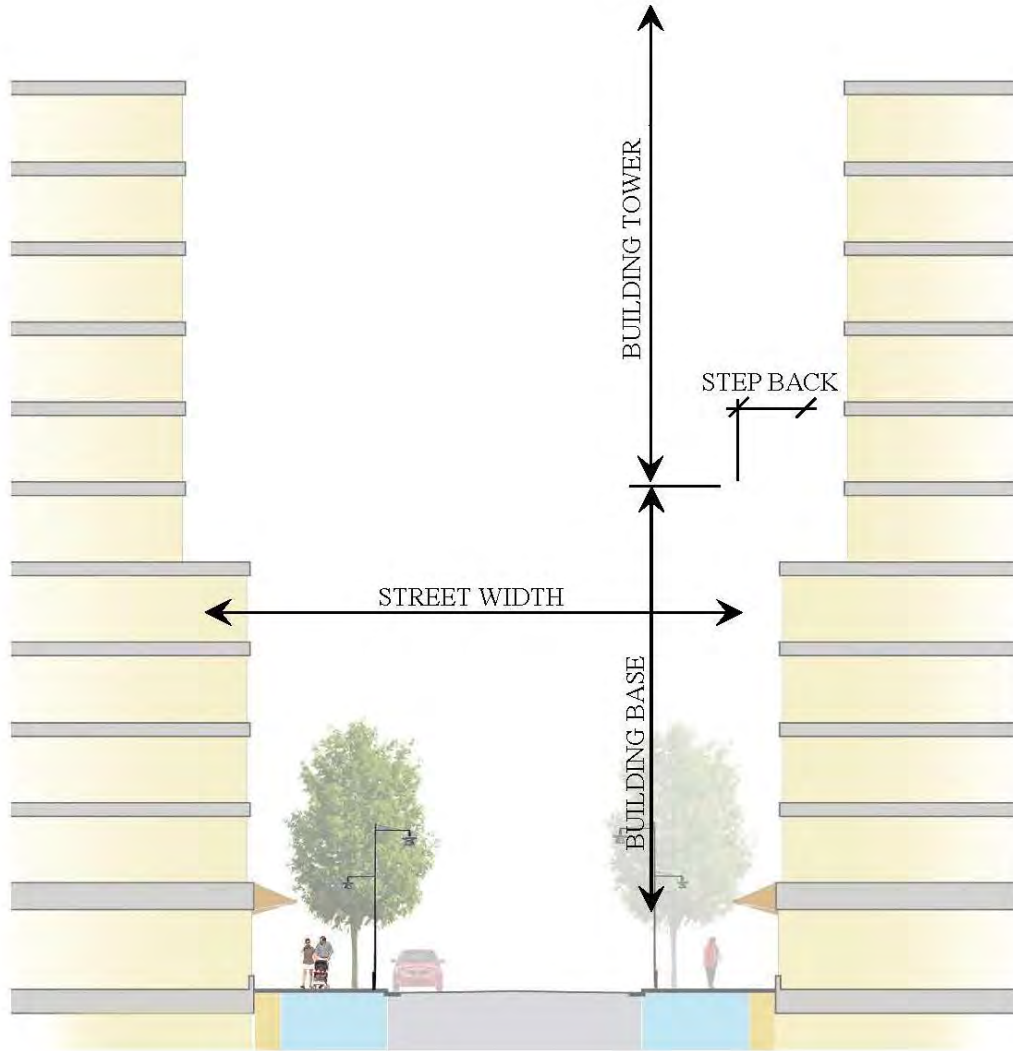
The pedestrian experience is greatly influenced by the height of the building along the sidewalk. As a result, great care must be taken to preserve the proportion and scale of the street section so that it does not result in an overwhelming, dark, and windy pedestrian corridor. Step backs are one tool that can be used to create an appropriate proportion of street width to building height.

Step backs result in building towers which are recessed from a building's base. As a result, pedestrians only see the first few floors of the building. Step backs can be used to reduce the impacts of shadows and increase sunlight for pedestrians. Step backs also reduce the "tunnel" effect.

Step backs occur above the building base and vary by location and context. They can be used to add a measure of depth and complexity to the building bulk. Step backs may be necessary to ensure sunlight in certain locations, particularly as related to public open spaces. Solar shading analyses (also called sunlight or shadow studies) may be necessary to ensure that adjacent buildings will have adequate light and air.

In higher density areas, building bases will tend to be taller, and thus the step back may be located anywhere from four to eight stories above sidewalk level. In lower density areas, the step back may occur from two to four stories above sidewalk level. Step backs should be reviewed in proposed developments to confirm the scale and proportion of the street section and its relationship to adjacent building heights and scale. Additional guidance on step back ratios may be found in the Building Massing section of the Design Guidelines (see Figure 13).

Figure 13
Step Back Illustration



Note: An appropriate ratio of street width to building base height should be preserved throughout the introduction of a step back above the building base or podium.

Building Articulation

In addition to building massing and setbacks, the treatment of building facades contributes to the quality and character of the pedestrian realm. Building articulation, including bays, planar breaks, material changes, window systems, entries, balconies or stoops, can be used to break down the scale of building facades and avoid long, monotonous walls along the pedestrian realm.

Building articulation may also address changes vertically by varying material, color, and/or texture to express the ground floor, building base, and building tower. Articulation may also include cornices, different roof forms, and parapet modulation to provide visual interest.

Both vertical and horizontal articulation provide details that make a building interesting. Further, articulation elements may serve a dual purpose by providing shade, defining entries, or acting as gateway features.

Blank walls are solid walls without fenestration, entries or portals. When located at the ground floor, they are detrimental to the pedestrian experience. Such conditions should not be permitted on any street that faces the public realm. Active uses should be provided at the ground floor as much as possible. If blank facades cannot be avoided, designers may use applied architectural elements, material changes, or other similar features to provide additional building detail and visual interest.

Fenestration and Transparency

Where ground floor retail, commercial, community or other non-residential uses occur, the facade should provide transparency. As laid out in the Design Guidelines, the pedestrian hierarchy will guide the appropriate level of transparency (see Pedestrian Hierarchy Plan Designations found in the Pedestrian Hierarchy section of the Design Guidelines.) Transparency is measured by comparing the total glazed area for each building frontage to the total elevation area. Transparency should permit visibility from the sidewalk into a building. Opaque, mirrored and translucent glass should be avoided and should not be considered “transparent.”

In residential buildings, the level of ground floor transparency may be lower for private uses, such as living areas. Residential lobbies and other common spaces should exhibit higher transparency and should provide a visual connection to the public. To ensure adequate privacy in residential buildings, the sill of ground floor windows should be placed above the eye level of the pedestrians on adjacent sidewalks. This could be partially achieved through raising the finished grade of the ground floor residential units.

Parking Design

General Parking Design Recommendations

The following parking design recommendations are applicable to all areas of Tysons:

- Parking access should be designed to minimize conflicts between vehicles and pedestrians and ensure pedestrian safety. This may be done by reducing the number of parking access points and minimizing the widths of ramps and curb cuts where they intersect with the sidewalk.

Figure 14
Example of Structured Parking Behind Active Uses



- Vehicular access to parking lots and parking garages should be limited to local streets or service streets when feasible.
- Parking access should always be designed to be attractive and coordinated with the site plan and architecture.
- Certain uses, such as retail, civic or entertainment, may require highly visible parking. In these cases, the design of the parking and its access should reflect the activity that will occur within the building.
- Exterior and interior parking structure lighting design should provide adequate lighting levels to ensure safety without creating glare and light spillage into adjacent structures, roads, and the pedestrian area. All parking lot lighting should confirm to current LEED light pollution standards and county ordinances.

Structured Parking

Underground parking is the least intrusive form of parking on the urban landscape and is the preferred method for providing parking in Tysons. Above-grade structured parking, or podium parking, may also be appropriate under some circumstances. When above-grade parking structures occur, it should be located within the building mass and hidden from pedestrian view.

If a parking level is not wrapped with an active use, the façade should be designed so that it appears as an active use. This is especially recommended if the façade of the building tower is at the same plane as the façade of the building podium, so that the building appears to be occupied space all the way to the ground floor.

In some locations, exposed parking structures may be unavoidable. In such cases, careful architectural detailing, lighting, and landscaping should be employed along the building frontage to mitigate the negative impacts of exposed parking levels. Generally, architecturally-treated garages should be designed to be consistent or coordinated with surrounding buildings. Efforts should be taken to place these structures facing service streets. Stand-alone above-grade parking structures are discouraged.

Surface Parking

Surface parking should be avoided. The exception to this guidance occurs in portions of the Non-TOD Districts near the edge of Tysons, where structured parking may not be economically feasible. Surface parking may be considered for short term parking or for passenger drop-off and pick-up areas. When provided, surface parking lots should be located to the side or rear of the primary use and should contain pedestrian connections that lead to the front door of the associated building. They should be intensively landscaped, well-lit, and publicly visible for safety. Surface parking lots should provide low walls or fences at the back of the sidewalk or parallel to the adjacent build-to line to enclose and define the pedestrian realm. They also should be designed to contribute to site stormwater management by using elements such as planter areas and permeable paving.

On-Street Parking

On-street parking makes sidewalks safer and provides necessary and sometimes more accessible short-term residential and retail parking. All avenues, collectors, and local streets within Tysons should provide on-street parking (see Transportation section for additional guidance). Where on-street parking is provided, curb cuts for vehicular access should be minimized in order to increase pedestrian safety and maximize the number of on-street parking spaces.

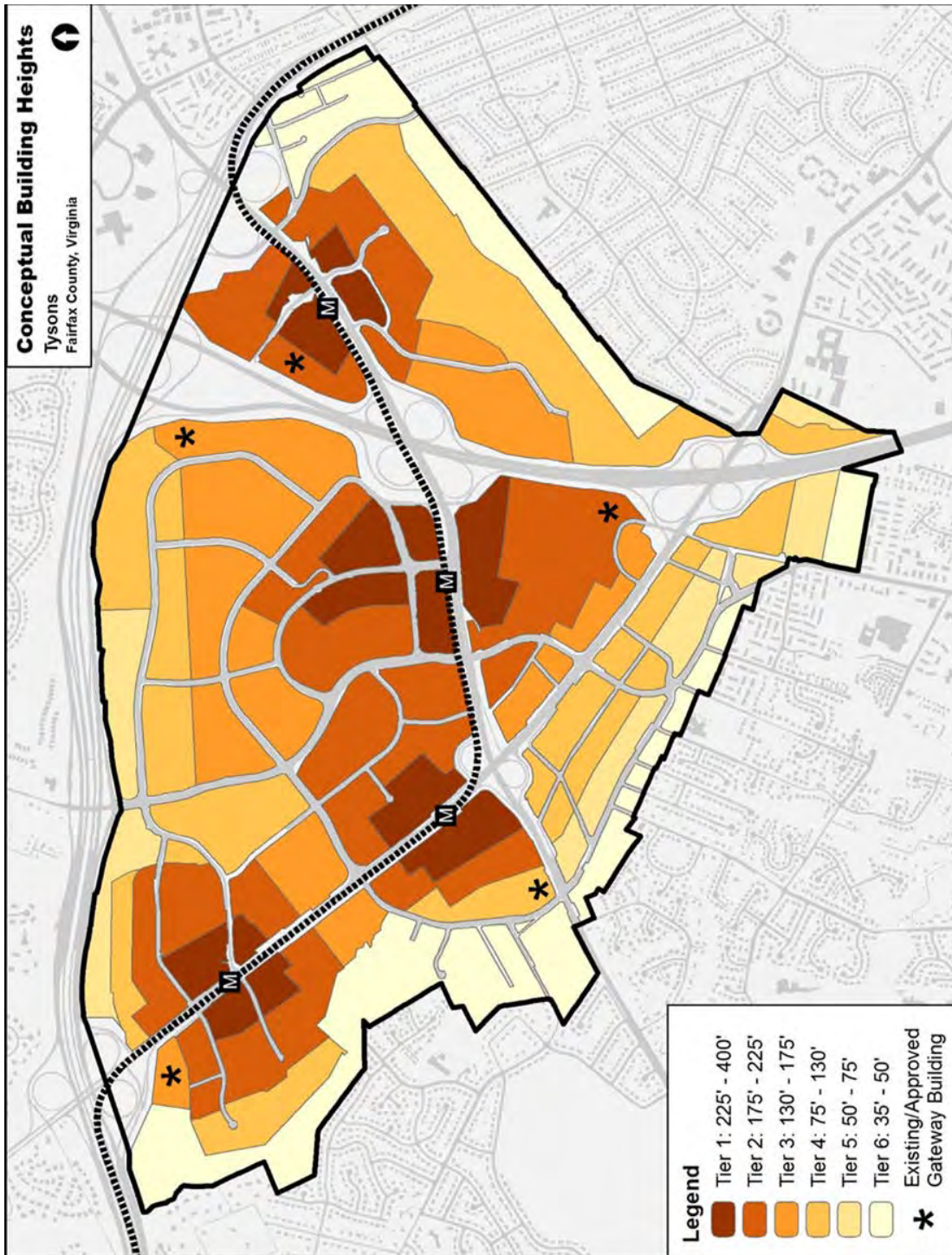
Building Height

Building heights in Tysons will reflect the proposed intensity pattern. The tallest buildings will be located within 1/8 mile of the Metro stations, with heights stepping down gradually as the distance from the stations increases. Building heights will be lowest in locations adjacent to existing single-family residential neighborhoods outside of Tysons. Careful design will protect view corridors and maintain access to sunlight at these sensitive locations. The concept for building heights in Tysons is shown in the Conceptual Building Heights Map (Map 11). The Building Heights Tier Table (see Table 10) provides a range of maximum heights for each tier. Detailed guidance on maximum heights can be found in the District Recommendations.

The following are general recommendations regarding building height:

- Maximum building height includes any above grade parking structures.
- The tallest buildings of any development, particularly those that incorporate a tower, should be located along wider streets where they will be less likely to overwhelm the pedestrian realm.
- Parcels that are split by two height designations should have the flexibility to utilize the range of heights permitted by the taller designation when development proposals provide height transitions similar to those on the Building Height Concept Map and provide a site design that is supportive of other urban design objectives.

MAP 11



- Building heights and massing should respond to context, proximity to Metro or other neighborhood features, intended uses, and the Plan’s vision for specific locations. Buildings may be oriented to maximize their view potential, but their location and orientation should take into consideration uses in the immediate vicinity.
- The tallest buildings (Tiers 1 and 2) should be iconic in design and serve as identifying features that contribute to the quality of the skyline. Iconic architecture can be defined as buildings that are well-crafted, unique, distinguishable within their context, and complementary to the urban fabric. Iconic architecture should also advance the overall quality of design within the district.
- Height limits do not include mechanical penthouses, architectural features, or elements affixed to buildings which are part of innovative energy technology such as wind turbines or solar panels. However, these features should not excessively increase the building height.
- Height flexibility will be provided to facilitate the provision of affordable/workforce housing, as well as public and quasi-public uses such as a conference center or arts center.
- During the development review process, solar shading analyses (also called shadow studies) for all buildings should be provided to ensure that adjacent buildings and public spaces will have adequate access to light and air.

Table 10
Building Height Tiers

Tier	Building Height	Tier	Building Height
1	225 ft to 400 ft	4	75 ft to 130 ft
2	175 ft to 225 ft	5	50 ft to 75 ft
3	130 ft to 175 ft	6	35 ft to 50 ft

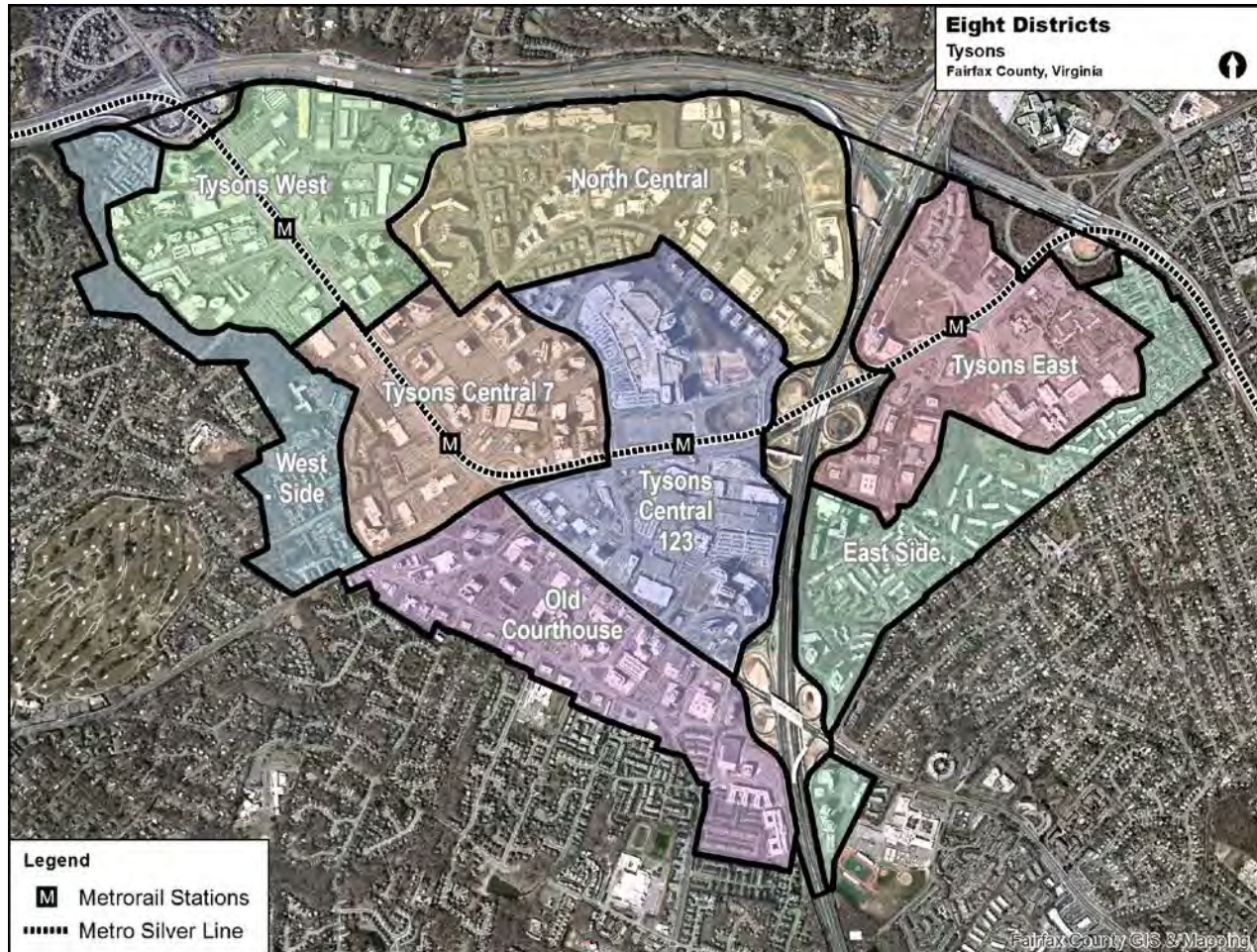
Interim Conditions

In many cases developments will be phased over time. In addition to demonstrating how projects will ultimately adhere to the Urban Design Principles contained in the Plan and the Design Guidelines, phased developments should prepare plans and supporting graphics that demonstrate how interim conditions will meet Plan objectives, including those related to urban design. Among other design considerations, these plans should:

- Provide Pedestrian circulation that meets the connectivity goals of the Plan.
- Show how any interim parking facilities will adhere to parking design and phasing goals.
- Show how landscape and sustainable hardscape improvements will improve the aesthetic character of any existing or proposed interim uses.
- Show how interim stormwater facilities can be creatively incorporated into a high quality landscape design.
- Provide streetscape improvements that conform to Plan guidelines and that result in enhanced continuity of the streetscape design.
- Show how proposed public amenities, such as Urban Parks, will be integrated into the site.

5: DISTRICT RECOMMENDATIONS

This section of the Plan contains specific recommendations for the eight districts in Tysons. Four of these districts surround the future Metrorail stations and are referred to as Transit Oriented Development areas (TODs). The other four Non-TOD Districts provide a transition between the adjacent communities and the higher intensity development in the TOD areas. Map 12 shows the locations of the eight districts in Tysons.



MAP 12

The discussion of each district begins with a description of the overall vision for its transformation. Each district is then divided into subdistricts, and some subdistricts are further divided into subareas. Within each subdistrict or subarea, there is a brief discussion of its location followed by a paragraph entitled Base Plan, which generally recognizes the existing and/or approved uses and intensities for the subdistrict or subarea. Most subdistricts or subareas, except for the edges, also have sections entitled Redevelopment Option. These sections provide guidance on achieving the vision for transforming Tysons described in the Vision for Tysons section of the Areawide Recommendations.

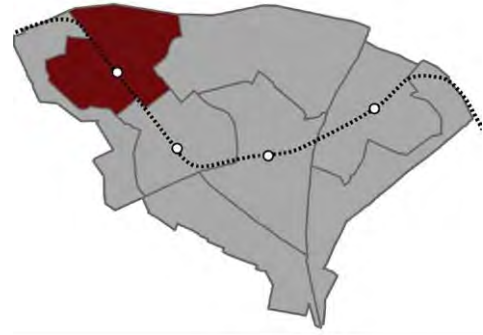
For the TOD areas, the primary guidance on land use mix and intensities for the Redevelopment Option is provided in the Land Use section of the Areawide Recommendations. For the four Non-TOD Districts, primary guidance on land use mix and intensities is provided in the District Recommendations.

All development proposals in Tysons which involve new development or redevelopment that increase intensity, increase height, or substantially change the design of a previously approved development should be in general conformance with the Areawide Recommendations as well as the District Recommendations. Following are issues that most redevelopment proposals will need to address:

- Logical and substantial parcel consolidation and/or coordinated proffered development plans, as specified in the District text and in conformance with the Areawide Land Use Recommendations;
- The provision of housing, including affordable and workforce housing, as described in the Areawide Land Use Recommendations;
- Significant improvement to vehicular and pedestrian access and circulation, as discussed in the Areawide Transportation Recommendations;
- Integration with other planned redevelopment on adjacent property, facilitating the redevelopment of other parcels in conformance with the Plan;
- The provision of publicly accessible open space, stormwater management facilities, and urban design amenities consistent with the Areawide Environmental Stewardship and Areawide Urban Design Recommendations; and
- The phasing of planned development with necessary public facility, transportation and infrastructure improvements and appropriate mitigation measures, consistent with the guidance in the Areawide Recommendations.

The order of the District text is as follows. The four TOD Districts are discussed moving from west to east: Tysons West, Tysons Central 7, Tysons Central 123, and Tysons East. The four Non-TOD Districts are also discussed moving from west to east: West Side, Old Courthouse, North Central and East Side.

Tysons West



Tysons West is a gateway to Tysons from Leesburg Pike (Route 7) and the Dulles Airport Access Road and Dulles Toll Road (DAAR, Route 267). This area of industrial uses, car dealerships and offices is envisioned to transform into a new transit-oriented, mixed use destination with special emphasis as an arts and entertainment center.

To become this vibrant urban destination, Tysons West will need a diversity in land use, including office, residential, hotel and retail uses, as well as a concentration of arts and entertainment uses of the type often found in more established downtown areas. Taking advantage of the Metro station, the majority of land uses closest to the station are designated for employment uses.

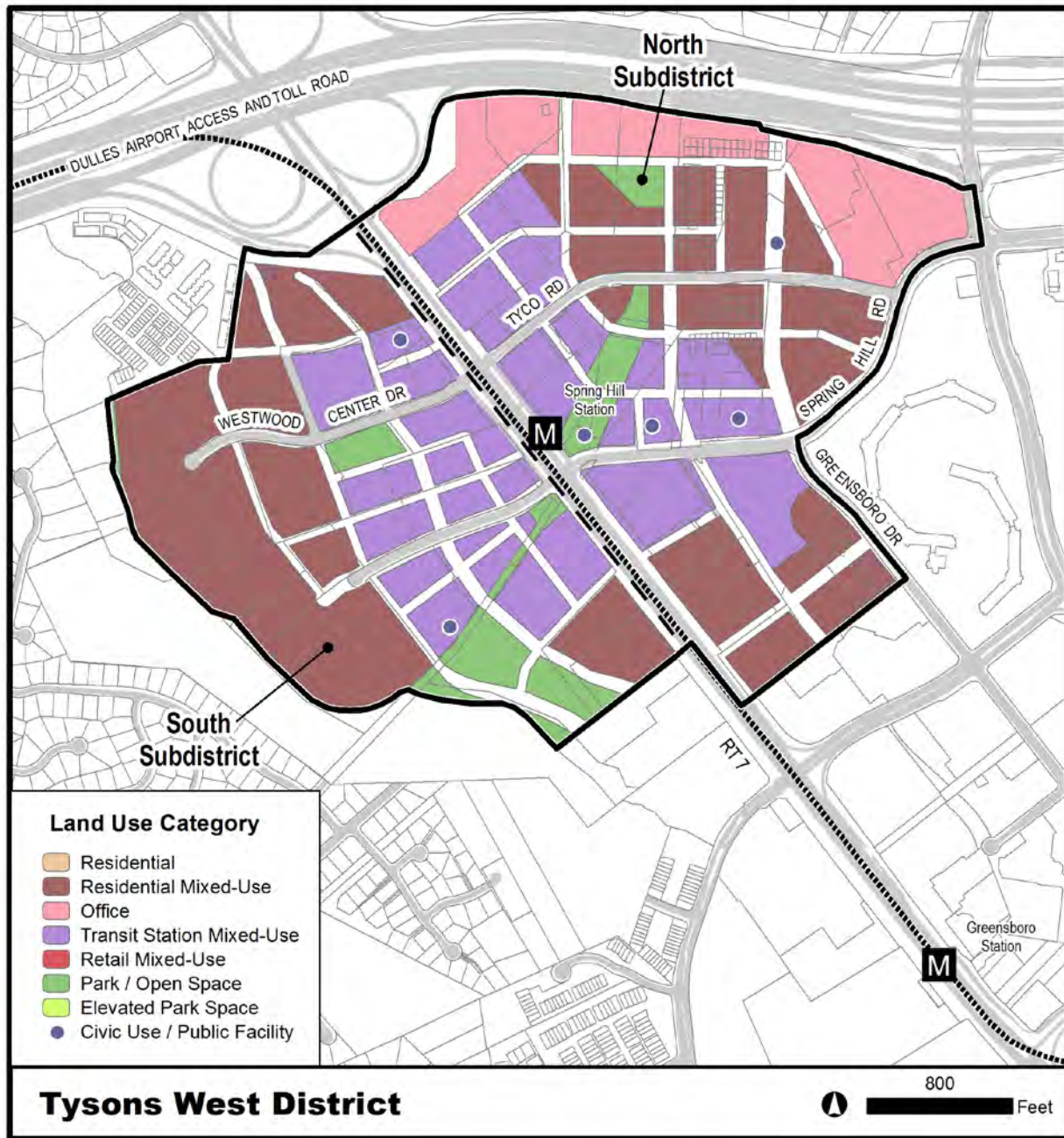
Retail uses should include restaurants and cafes, art galleries, small theaters, specialty and general retail that form the basis of an arts and entertainment center and stay open after the workday ends. Streets immediately adjacent to the Tysons West transit station are envisioned as retail streets, drawing people off Metrorail and into new residential neighborhoods. Residential buildings should front on tree-lined streets and be designed with inviting street level facades. A series of urban park spaces linked by the area's urban street grid will provide attractive places for walking and places for informal neighborhood gatherings. Live/work and loft housing should integrate with or be in close proximity to arts and entertainment uses.

Along Leesburg Pike, a transformed streetscape will create a wide tree-lined boulevard with inviting street level facades below high-rise buildings. This redesign should result in a calming of traffic through the area while maintaining the roadway capacity of Leesburg Pike.

Moving out from the station, planned intensities will provide transitions in scale, mass and height to the surrounding areas, such as on the west to the Old Courthouse Spring Branch Stream Valley Park and on the east to planned and existing residential areas in the North Central District.

On the southeast end of the district, office buildings along Leesburg Pike create a strong business environment. People should be able to move easily back and forth between the Tysons Central 7 and Tysons West TOD Districts to take advantage of both transit stations and the supporting services planned for the ground floor of the office buildings and future residential buildings in this area.

The land use concept for the Tysons West District is shown in the map below.



Note: Planned park spaces are shown conceptually on Map 9.

MAP 13

Adjacent to the DAAR, office uses are planned to take advantage of the visibility from the Toll Road and to continue the planned and existing office focus found in the North Central District located to the east.

The land use concept for the Tysons West district is shown in the map below. The district is composed of two subdistricts separated by Leesburg Pike: South and North Subdistricts.

Guidance for evaluating development proposals in each subdistrict is contained in the Areawide Recommendations and the following subdistrict recommendations. Redevelopment options are dependent on the degree to which necessary public infrastructure can be provided and Plan objectives and development conditions set forth in the Areawide and subdistrict guidance can be satisfied by development proposals.

SOUTH SUBDISTRICT

The South Subdistrict is comprised of about 104 acres and is bounded by the DAAR and Toll Road/Leesburg Pike interchange on the north, Leesburg Pike on the east, the North Central 7 Subdistrict on the south and the West Side District on the west.

Base Plan

Auto sales use is the predominant land use along Leesburg Pike; the frontage properties also include two high-rise hotels and several office buildings. This area is planned for and developed with auto sales and office use with support retail and service uses at existing intensities ranging between 0.7 FAR and 1.0 FAR.

Office use is the predominant land use on Westwood Center Drive and Spring Hill Road; this area away from Leesburg Pike also includes several auto sales uses as well as two low-rise hotels. This area is planned for and developed with these existing uses. The hotels and office uses have existing intensities between 0.5 FAR and 0.7 FAR.

Redevelopment Option

This subdistrict is envisioned for substantial redevelopment to create a mixed use TOD with significant office, residential and retail components, as well as arts and entertainment uses. Retail should include such uses as restaurants and cafes, art galleries, small theaters, specialty and general retail that can help form the foundation for an arts and entertainment center. Residential development is an important component of this subdistrict; live/work and loft housing, if provided, should be integrated with or be in close proximity to arts and entertainment uses. A series of urban parks should be provided and be linked by the street grid; this green network will provide places for people of all ages to walk and enjoy parks and open space.

To achieve this vision, development proposals should address the Areawide Recommendations, and provide for the following.

- The vision for this subdistrict is to redevelop with significantly higher intensity near the Metro station as well as to become more diverse in land uses and incorporate an arts and entertainment focus. The intensities and land use mix should be consistent with the Areawide Land Use Recommendations.

- Logical and substantial parcel consolidation should be provided that results in well-designed projects that function efficiently on their own, should include a grid of streets and public open space system, and integrate with and facilitate the redevelopment of other parcels in conformance with the Plan. In most cases, consolidation should be sufficient in size to permit redevelopment in several phases that are linked to the provision of public facilities and infrastructure and demonstrate attainment of critical Plan objectives such as TDM mode splits, green buildings and affordable/workforce housing. If consolidation cannot be achieved, as an alternative, coordinated proffered development plans may be provided as indicated in the Areawide Land Use Recommendations.
 - In this subdistrict, the goal for assembling parcels for consolidation or coordinated proffered development plans is at least 20 acres. A consolidation of less than 20 acres should be considered if the performance objectives for consolidation in the Land Use section of the Areawide Recommendations are met.
 - When a consolidation includes land located in the first intensity tier (within 1/8 mile of a Metro station), it should also include land in the second intensity tier (between 1/8 and 1/4 mile of a station), in order to ensure connectivity to the Metro station.
- Redevelopment should occur in a manner that fosters vehicular and pedestrian access and circulation. Development proposals should show how the proposed development will be integrated within the subdistrict as well as the abutting districts/subdistricts through the provision of the grid of streets. The major vehicular circulation and access improvements in this subdistrict are the extension of Boone Boulevard and planned new ramps from the DAAR connecting to Boone Boulevard.
- Redevelopment along planned street alignments should provide right-of-way, construct portions of the street integral to the development, and further the implementation of streets serving the development. Other streets should create urban blocks, and pedestrian and bike circulation improvements should be provided, including multi-use trails along the adjacent stream valley park land. The ability to realize planned intensities will depend on the degree to which access and circulation improvements are implemented consistent with guidance in the Areawide Urban Design and Transportation Recommendations.
- Urban design amenities, such as streetscapes, plazas, courtyards, landscaping, public art, lighting and seating should be provided consistent with the Areawide Urban Design Recommendations.
- The green network planned for this subdistrict illustrates how the existing Dominion Power easement could be used as a pedestrian and open space amenity that links the Old Courthouse Spring Branch Stream Valley Park to the Tysons West Metro station, as well as to several urban parks; alternatives that provide open spaces linking this subdistrict to the area's Metro station in a similar manner should be considered.
- This area should also include one planned civic plaza (urban park), at least one acre in size and located within 1/4 mile of the Metro station. This plaza should be large enough for open-air activities such as farmers' markets and musical performances by small groups for residents and workers in this area. A common green urban park of at least one acre should also be located in the subdistrict to provide active and passive recreation and leisure opportunities for residents and workers.

- For active recreation, about four to six acres of new park land to support two athletic fields should be established in the area between existing park land and the Boone Boulevard extension. The land for these athletic fields may also be located in part in the abutting Tysons Central 7 District. Publicly accessible open space and recreational facilities should be provided consistent with the guidance in the Areawide Environmental Stewardship Recommendations.
- When redevelopment includes a residential component, it should include recreational facilities and other amenities for the residents, as well as affordable/workforce housing as indicated under the Areawide Land Use Recommendations
- Public facility, transportation and infrastructure analyses should be performed in conjunction with any development application. The results of these analyses should identify needed improvements, the phasing of these improvements with new development, and appropriate measures to mitigate other impacts. Also, commitments should be provided for needed improvements and for the mitigation of impacts identified in the public facility, transportation and infrastructure analyses, as well as improvements and mitigation measures identified in the Areawide Recommendations.
- In addition, a second electrical power substation will need to be constructed near the Dominion Power easement which contains a high voltage line. This improvement will need to be located either in the Tysons West District or in the abutting Tysons Central 7 District. From the second substation to the existing substation on Tyco Road, the high voltage line should be placed underground, in order to ensure a pedestrian friendly environment. However, if undergrounding proves infeasible, redevelopment should relocate the line or accommodate it in place.
- Under this option, building heights may range from 105 feet to 400 feet, depending upon location, as conceptually shown on the Building Height Map in the Areawide Urban Design Recommendations. The tallest buildings should be closest to the Metro station where building height is planned up to 400 feet. Building heights (generally between one-eighth and one-quarter mile from the Metro station) should be between 150 and 225 feet. Beyond one-quarter mile, buildings should have lower heights, with areas along Leesburg Pike to the south at 175 feet and areas at the western edge of the subdistrict having heights up to 105 feet. The exception is the Tysons Sheraton Hotel, which is a gateway landmark at 215 feet in height; property abutting to the east and south should not have buildings exceeding 150 feet in order to maintain this building as an existing gateway to Tysons. Building heights should be consistent with the guidelines in the Areawide Urban Design Recommendations.
- Exposed parking structures adjacent to the DAAR should not be visible to the residential neighborhoods north of the DAAR.

NORTH SUBDISTRICT

The North Subdistrict is comprised of about 125 acres and is bounded by the DAAR on the north, Leesburg Pike on the southwest, and the Tysons Central 7 and North Central Districts on the southeast.



View looking toward Metro Station from an urban park in Tysons West's North Subdistrict

Base Plan

Auto sales and retail uses are the predominant land uses along Leesburg Pike, along with one high-rise office building. This area is developed and planned for auto sales and retail uses, as well as portions developed and planned for office use with support retail and service uses at existing intensities between 0.7 FAR and 1.3 FAR.

In the area away from Leesburg Pike, industrial and industrial flex uses are the predominant land uses. On the eastern end of Tyco Road, there is an electrical substation and a three building office complex. On Spring Hill Road, there is a fire station, post office and two office buildings. This area is planned for low intensity industrial and industrial flex uses and office use with support retail and service uses at existing intensities between 0.5 FAR and 0.7 FAR.

Since the easternmost property (Tax Map 29-1((1))67A, 68 and 69) provides a transition to the North Central District, this property should be similar in character and intensity to the North Central District properties fronting the DAAR. The property is planned for office use up to .85 FAR provided that the following conditions are met:

- Any additional structures on the subject property should be designed to be architecturally compatible with the existing office park;
- A transportation analysis should be performed in conjunction with any development application and commitments for any improvements identified as needed to mitigate transportation impacts directly related to site generated traffic should be provided; and
- The maximum building height is 75 feet.

Redevelopment Option

The subdistrict is envisioned for substantial redevelopment to mixed use with office being focused along Leesburg Pike and adjacent to the DAAR and Toll Road. Urban residential neighborhoods should be provided and will enliven the vibrancy of this mixed use district. Other land uses should include hotels, arts and entertainment, retail and support services. A series of urban parks should be provided and be linked by the street grid; this green network will provide places for people of all ages to walk and enjoy parks and open space.

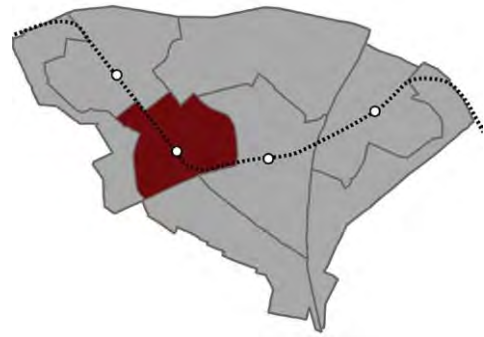
To achieve this vision, development proposals should address the Areawide Recommendations, and provide for the following.

- The vision for this subdistrict is to redevelop with office buildings with significantly higher intensity near the Metro station as well as to become more diverse in land uses, including hotels, residential dwellings, arts and entertainment uses, as well as retail and support services. Sites within 1/8 mile of the Metro station should be redeveloped predominantly with office use. Beyond 1/8 mile it is envisioned that the area will transition to urban residential neighborhoods. The intensities and land use mix should be consistent with the Areawide Land Use Recommendations.
- Logical and substantial parcel consolidation should be provided that results in well-designed projects that function efficiently on their own, include a grid of streets and public open space system, and integrate with and facilitate the redevelopment of other parcels in conformance with the Plan. In most cases, consolidation should be sufficient in size to permit redevelopment in several phases that are linked to the provision of public facilities and infrastructure and demonstrate attainment of critical Plan objectives such as TDM mode splits, green buildings and affordable/workforce housing. If consolidation cannot be achieved, as an alternative, coordinated proffered development plans may be provided as indicated in the Areawide Land Use Recommendations.
 - Throughout this subdistrict, the goal for assembling parcels for consolidation or coordinated proffered development plans is at least 20 acres. A consolidation of less than 20 acres should be considered if the performance objectives for consolidation in the Land Use section of the Areawide Recommendations are met.

- When a consolidation includes land located in the first intensity tier (within 1/8 mile of a Metro station), it should also include land in the second intensity tier (between 1/8 and 1/4 mile of a station), in order to ensure connectivity to the Metro station.
- For property along Spring Hill Road, redevelopment proposals should address the redevelopment and relocation of the existing fire station and/or post office.
- Redevelopment should occur in a manner that fosters vehicular and pedestrian access and circulation. Development proposals should show how the proposed development will be integrated within the subdistrict as well as the abutting districts/subdistricts through the provision of the grid of streets. The major vehicular circulation and access improvements in this subdistrict are the extension of Greensboro Drive and the planned new ramps from the DAAR and Toll Road connecting to Greensboro Drive.
- Redevelopment along planned street alignments should provide right-of-way, construct portions of the street integral to the development, and further the implementation of streets serving the development. Other streets should create urban blocks and pedestrian and bike circulation improvements should be provided. The ability to realize planned intensities will depend on the degree to which access and circulation improvements are implemented consistent with guidance in the Areawide Urban Design and Transportation recommendations.
- Urban design amenities, such as streetscapes, plazas, courtyards, landscaping, public art, lighting and seating should be provided consistent with the Areawide Urban Design Recommendations.
- As discussed above under the South Subdistrict, a second electrical power substation will need to be constructed near the Dominion Power easement which contains a high voltage line. This improvement will need to be located either in the Tysons West District or in the abutting Tysons Central 7 District. From the second substation to the existing substation on Tyco Road, the high voltage line should be placed underground, in order to ensure a pedestrian friendly environment. However, if undergrounding proves infeasible, redevelopment should relocate the line or accommodate it in place.
- The green network planned for this subdistrict illustrates how the existing Dominion Power easement could be used as a pedestrian and open space amenity that links the Tysons West Metro station to the rest of the subdistrict. Along the power line easement, a series of urban parks are envisioned which link to other urban parks by the street grid. Alternatives that provide open spaces linking this subdistrict to the area's Metro station in a similar manner should be considered.
- Additional urban parks are to be located throughout the subdistrict. All urban parks in this subdistrict should be large enough for open-air activities such as farmers' markets and musical performances by small groups for residents and workers in the area. The sizes of these parks should be between 1/2 to over one acre. At least one two acre recreation-focused park should be provided in the subdistrict to serve the recreation and leisure needs of future residents and workers. Facilities could include sport courts, playground features, skate parks, splash pads, or other small-footprint facilities. Publicly accessible open space and recreational facilities should be provided in this subdistrict consistent with the Areawide Environmental Stewardship Recommendations.

- When redevelopment includes a residential component, it should include recreational facilities and other amenities for the residents, as well as affordable/workforce housing as indicated under the Areawide Land Use Recommendations.
- Public facility, transportation and infrastructure analyses should be performed in conjunction with any development application. The results of these analyses should identify needed improvements, the phasing of these improvements with new development, and appropriate measures to mitigate other impacts. Also, commitments should be provided for needed improvements and for the mitigation of impacts identified in the public facility, transportation and infrastructure analyses, as well as improvements and mitigation measures identified in the Areawide Recommendations. It is anticipated that existing Fire Station 29 and the U.S. Post Office on Spring Hill Road will be relocated as redevelopment occurs.
- Building heights will vary depending upon location, as conceptually shown on the Building Height Map in the Areawide Urban Design Recommendations. The tallest buildings should be closest to the Metro station where building height is planned up to 400 feet. Building heights (generally between one-eighth and one-quarter mile from the Metro station) should be between 175 and 225 feet. Beyond one-quarter mile, buildings should have lower heights, as conceptually shown on the Building Height Map in the Areawide Urban Design Recommendations. Building heights should be consistent with the above guidance as well as the guidelines in the Areawide Urban Design Recommendations.
- Exposed parking structures adjacent to the DAAR should not be visible to the residential neighborhoods north of the DAAR.
- A potential circulator alignment extends through this subdistrict as described in the Areawide Transportation Recommendations. In addition to the above guidance for this area, redevelopment proposals along the circulator route should provide right-of-way or otherwise accommodate the circulator and should make appropriate contributions toward its construction cost. See the Intensity section of the Areawide Land Use Recommendations.

Tysons Central 7

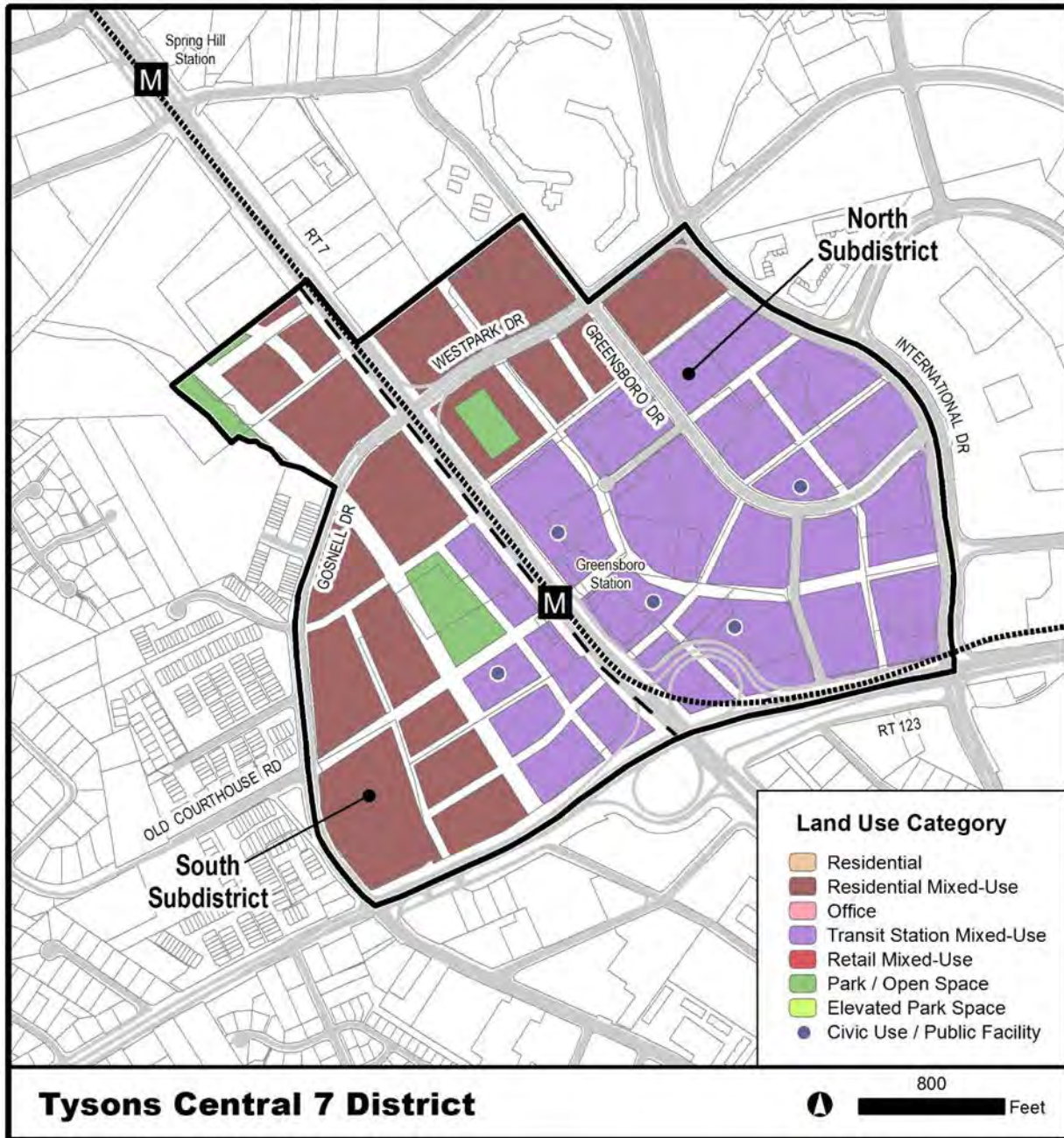


Tysons Central 7 District has two subdistricts, separated by Leesburg Pike. The North Subdistrict is envisioned to be a vibrant 24-hour mixed use center with residential, retail, and hospitality uses, as well as a high concentration of office space. The South Subdistrict is envisioned as a civic center with a great public space and a significant new public building or buildings. The South Subdistrict will also include a mix of public, residential and commercial uses. The transformation in the South Subdistrict will be influenced by redevelopment that comes with the extension of Boone Boulevard. The northwestern portions of both subdistricts provide connectivity to the Tysons West District by means of the grid of streets, which provides streets parallel to Leesburg Pike.

Along Leesburg Pike, a transformed streetscape will create a wide tree-lined boulevard on either side of the at-grade Metro station. This redesign will result in a calming of traffic through this office area while maintaining the capacity of Leesburg Pike. The streets leading to and from Tysons Central 7 will be pedestrian-friendly, encouraging people to walk and bike and leading people to the civic center and the business areas of the district.

Guidance for evaluating development proposals in each subdistrict is contained in the Areawide Recommendations and the following subdistrict recommendations. Redevelopment options are dependent on the degree to which necessary public infrastructure can be provided and Plan objectives and development conditions set forth in the Areawide and subdistrict guidance can be satisfied by development proposals.

The map below shows the land use concept for the Tysons Central 7 District.



Note: Planned park spaces are shown conceptually on Map 9.

SOUTH TYSONS CENTRAL 7 SUBDISTRICT (CIVIC CENTER)

The South Subdistrict is comprised of about 76 acres, and is generally bounded by Leesburg Pike on the east, Chain Bridge Road (Route 123) on the south, and Gosnell Road and Old Courthouse Spring Branch Stream Valley Park on the west. Existing land use is a mix of retail, auto dealerships, office and multifamily residential uses.



Base Plan

The multifamily and office uses located along Gosnell Road are planned and developed as a transition in scale and building mass to the townhouse uses in the West Side District. Along Leesburg Pike, the area is planned for and developed with auto sales and retail uses.

Redevelopment Option

The vision for the area is to redevelop into a mixed use area with mid-rise and high-rise buildings. Office uses should be concentrated closest to the Metro station, and the area should transition to more residential use away from the Metro station as illustrated on the Land Use Concept Map. The signature focal point of the Tysons Central 7 District is the civic center's great public space, the "Civic Commons" which should be about three to four acres. This public space will be a critical element for creating the area's new identity and will provide the setting for community events and celebrations within this portion of Tysons. The space should consist of both hardscape and open lawn areas and should feature urban park amenities that will draw people in, such as interactive artwork or a unique water feature. As the signature civic open

space in Tysons, the Civic Commons should include elements that interpret the history of Tysons from country crossroads to suburban office park to vibrant urban center. With easy access to transit, the Civic Commons could be the primary location within Tysons for staging major public events such as outdoor concerts or public markets.

Abutting the Civic Commons should be a new public building or buildings, which have a significant architectural design and provide government services, such as a public library, community center, and/or arts center. These public uses will bring a civic presence, and shape positive urban spaces brought to life by the interaction of employment, residential and retail uses, and outdoor events and street life.

As the subdistrict extends west to the West Side District, urban residential neighborhoods should be developed and be distinguished by calm, dignified blocks linked together by tree-lined streets with cycling, promenades and sitting spaces. Residential blocks should provide for public, semi-public, and private open space amenities.

To achieve this vision, development proposals should address the Areawide Recommendations and provide for the following.

- The vision for this subdistrict is to concentrate high intensity office uses closest to the Metro station, with the area transitioning to a higher proportion of residential use away from the Metro station. Other land uses may include hotel, retail and public uses which should be provided at intensities and land use mixes consistent with the guidance in the Areawide Land Use Recommendations.
- Logical and substantial parcel consolidation should be provided that results in well-designed projects that function efficiently on their own, include a grid of streets and public open space system, and integrate with and facilitate the redevelopment of other parcels in conformance with the Plan. In most cases, consolidation should be sufficient in size to permit redevelopment in several phases that are linked to the provision of public facilities and infrastructure and demonstrate attainment of critical Plan objectives such as TDM mode splits, green buildings and affordable/workforce housing. If consolidation cannot be achieved, as an alternative, coordinated proffered development plans may be provided as indicated in the Areawide Land Use Recommendations.
 - For the area between Gosnell Road and Chain Bridge Road, which includes five properties, the goal for assembling parcels for consolidation or coordinated proffered development plans is at least 20 acres. A consolidation of less than 20 acres should be considered if the performance objectives for consolidation in the Land Use section of the Areawide Recommendations are met. A key component of any redevelopment proposal should be the provision of a significant portion of or all of the three to four acre Civic Commons as well as land for the civic building(s).
 - For the area northwest of Gosnell Road (fronting on Leesburg Pike), which includes three properties, full consolidation should be provided. If full consolidation cannot be achieved, as an alternative, coordinated proffered development plans may be provided as indicated in the Areawide Land Use Recommendations.
- Redevelopment should occur in a manner that fosters vehicular and pedestrian access and circulation. Development proposals should show how the proposed development will be

integrated within the subdistrict as well as the abutting districts through the provision of the grid of streets.

- The major circulation improvement in this subdistrict is the Boone Boulevard extension. Development proposals should accommodate the eventual construction of this street. Redevelopment along this street's planned alignment should dedicate and construct this street, in phases if necessary.
- In addition, other streets (creating urban blocks) as well as other pedestrian and bike circulation improvements should be provided to improve connectivity. The ability to realize planned intensities will depend on the degree to which access and circulation improvements are implemented consistent with guidance in the Areawide Urban Design and Transportation Recommendations.
- As mentioned under the subdistrict's vision, the signature piece of the subdistrict is the three to four acre Civic Commons. In addition, other urban design and open space amenities, such as streetscapes, plazas, courtyards, landscaping, public art, lighting and seating should be provided according to the Urban Design guidelines, as well as consistent in quantity with the urban park and open space standards under the Areawide Environmental Stewardship Recommendations.
- For active recreation, about four to six acres of new park land to support two athletic fields should be established in the area between existing park land and the Boone Boulevard extension. The land for these athletic fields may also be located in part in the abutting Tysons West District.
- When redevelopment includes a residential component, it should include recreational facilities and other amenities for the residents, as well as affordable/workforce housing as indicated in the Areawide Land Use Recommendations. In addition, if the subdistrict's existing residential use is redeveloped, the development proposal should have as an objective increased affordable housing opportunities and positive impacts on the environment, public facilities and transportation systems (See Objective 11 in the Land Use section of the Policy Plan).
- Public facility, transportation and infrastructure analyses should be performed in conjunction with any development application. The results of these analyses should identify necessary improvements, the phasing of these improvements with new development, and appropriate measures to mitigate other impacts. Also, commitments should be provided for needed improvements and for the mitigation of impacts identified in the public facility, transportation and infrastructure analyses, as well as improvements and mitigation measures identified in the Areawide Recommendations.
- In addition, specific public facility improvements identified are: 1) civic building(s) that contain public uses, such as a library, community center, and/or arts center; and 2) an electrical power substation northwest of Gosnell Road, which is to be located either in this subdistrict or in the Tysons West District. From this new substation to the existing substation on Tyco Road, the high voltage line should be placed underground, in order to ensure a pedestrian friendly environment.
- Building heights in this subdistrict range from 75 feet to 400 feet, depending upon location, as conceptually shown on the Building Height Map and discussed in the

Areawide Urban Design Recommendations. The lowest building height is adjacent to Gosnell Road which has a maximum height of 75 feet; in this area buildings need to provide a compatible transition in building scale and mass to the adjacent West Side District across Gosnell Road. Height increases with distance from Gosnell Road, with the maximum height of 400 feet limited to the area nearest the Metro station.

- A potential circulator alignment extends across this subdistrict, as described in the Areawide Transportation Recommendations. In addition to the above guidance for this area, redevelopment proposals along the circulator route should provide right-of-way or otherwise accommodate the circulator and should make appropriate contributions toward its construction cost. See the discussion of Intensity in the Areawide Land Use Recommendations.

NORTH TYSONS CENTRAL 7 SUBDISTRICT

The North Subdistrict is comprised of about 102 acres, and is generally bounded by Leesburg Pike on the west, International Drive on the north and east, and Chain Bridge Road on the south. This area contains the highest natural elevation in the county, which make its skyline visible from great distances. Office use is the predominant land use in the subdistrict. Two hotels are situated at opposite ends of the area, one on the east side and one on the west. In addition, a small number of freestanding retail uses are concentrated in the area adjacent to the Leesburg Pike/Chain Bridge Road interchange, which is also the location of a water tower and a U.S. Army Communications Tower. Since the tower has a strategic location near the highest point in Fairfax County, the communications tower function is expected to remain, although it is desirable that the tower itself be removed and its functions incorporated onto the top of a new building or buildings.

Base Plan

This area is planned for office with support retail and service uses at intensities up to 1.65 FAR. The exception is the area adjacent to the Leesburg Pike/Chain Bridge Road interchange, which is planned for and developed with retail uses and two existing public facilities (a communication tower and water tower).

Redevelopment Option

The area will continue to have one of the highest concentrations of office space in Tysons, which has made this cluster of business activity a desired address for businesses seeking signature headquarters buildings. However, the subdistrict is envisioned to become a vibrant 24-hour mixed use area with an increased intensity and diversity of land use including more office and hotel use and the addition of residential and retail uses.

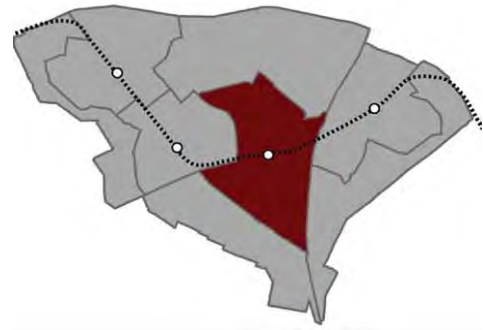
A Common Green type urban park of at least one acre in size should be provided in the area between Leesburg Pike and Greensboro Drive as generally shown on the Land Use Concept Map. It should be large enough for open-air activities. Public art and water features are encouraged to make the space appealing and attractive. The Land Use Concept Map also shows that other open space amenities should be provided throughout the area.

To achieve this vision, development proposals should address the Areawide Recommendations and provide for the following.

- The vision for this subdistrict is to remain one of Tysons' greatest concentrations of office space, with the provision of more office buildings with highest intensities near the Metro station. However, to become a vibrant 24-hour area, the area's diversity of land use including hotel, residential and retail uses should be provided at intensities and land use mixes consistent with the Areawide Land Use Recommendations.
- Logical and substantial parcel consolidation should be provided that results in well-designed projects that function efficiently on their own, include a grid of streets and public open space system, and integrate with and facilitate the redevelopment of other parcels in conformance with the Plan. In most cases, consolidation should be sufficient in size to permit redevelopment in several phases that are linked to the provision of public facilities and infrastructure and demonstrate attainment of critical Plan objectives such as TDM mode splits, green buildings, and affordable/workforce housing. If consolidation cannot be achieved, as an alternative, coordinated proffered development plans may be provided as indicated in the Areawide Land Use Recommendations.
 - For the area developed with freestanding retail uses that is east of the station (adjacent to the Leesburg Pike/Chain Bridge Road interchange) and west of the existing water tower, full consolidation should be provided in order to address circulation and access needs associated with a significant increase in intensity for this area. If full consolidation cannot be achieved, coordinated proffered development plans encompassing most of this area may be an appropriate alternative if critical vehicular circulation improvements which connect Pinnacle Drive to both Solutions Drive and Route 7 can be provided and if it can be demonstrated that any unconsolidated property can be developed in accordance with the Plan. Under both circumstances, this area will also need to coordinate access and circulation with the abutting portion of this subdistrict.
 - For the area fronting Leesburg Pike abutting the station to the west and north, the goal for assembling parcels for consolidation or coordinated proffered development plans is at least 20 acres and should include adequately phased circulation and access improvements, as well as providing the area's envisioned mix of uses. In addition, this area will need to provide a Common Green type urban park of about one acre in size to provide active and passive recreation and leisure opportunities for residents and workers as shown on the land use concept map. A consolidation of less than 20 acres should be considered if the performance objectives for consolidation in the Land Use section of the Areawide Recommendations are met.
 - For the area north of Greensboro Drive, consolidation should include two or three properties as needed to provide open space and street grid improvements as shown on the land use concept map.
 - For the area north and west of Westpark Drive, consolidation should occur with property in the abutting Tysons West District.
- Redevelopment should occur in a manner that fosters vehicular and pedestrian access and circulation. Development proposals should show how the proposed development will be integrated within the subdistrict as well as the abutting districts through the provision of the grid of streets.

- The major circulation improvement for this subdistrict is a new street connecting Westpark Drive to Pinnacle Drive and potentially extending to International Drive, where the new street would align with Tysons Boulevard. Redevelopment along the planned new street alignment should provide the right-of-way and construct the street, in phases if necessary. In addition, other streets (creating urban blocks) as well as other pedestrian and bike circulation improvements should be provided to improve connectivity. The ability to realize planned intensities will depend on the degree to which access and circulation improvements are implemented consistent with the Areawide Urban Design and Transportation Recommendations.
- Publicly accessible open space and urban design amenities should be provided consistent with the Areawide Urban Design Recommendations and the urban park and open space standards in the Environmental Stewardship recommendations.
- When redevelopment includes a residential component, it should include recreational facilities and other amenities for the residents, as well as affordable/workforce housing as indicated under the Land Use guidelines.
- Public facility, transportation and infrastructure analyses should be performed in conjunction with any development application. The results of these analyses should identify necessary improvements, the phasing of these improvements with new development, and appropriate measures to mitigate other impacts. Also, commitments should be provided for needed improvements and for the mitigation of impacts identified in the public facility, transportation and infrastructure analyses, as well as improvements and mitigation measures identified in the Areawide Recommendations.
- This subdistrict contains the highest natural elevation in the county, and its skyline is visible from great distances. This subdistrict has some of the tallest buildings in Tysons, and new buildings are expected to contribute to its distinctive skyline. Maximum building heights range from 175 feet to 400 feet, depending upon location, as conceptually shown on the building height map and discussed in the Areawide Urban Design Recommendations. The tallest buildings should be closest to the Metro station with a maximum height of 400 feet.
- A potential circulator alignment extends across this subdistrict, as described in the Areawide Transportation Recommendations. In addition to the above guidance for this area, redevelopment proposals along the circulator route should provide right-of-way or otherwise accommodate the circulator and should make appropriate contributions toward its construction cost. See the discussion of Intensity in the Areawide Land Use Recommendations.

Tysons Central 123



Tysons Central 123 is home to over half of Tysons' entire retail floor area. Building upon this strength by providing street-front, ground floor retail and more entertainment uses, this district is envisioned to remain the region's signature shopping destination. The vision for this district, however, goes beyond its current retail emphasis to create a vibrant mixed use area.

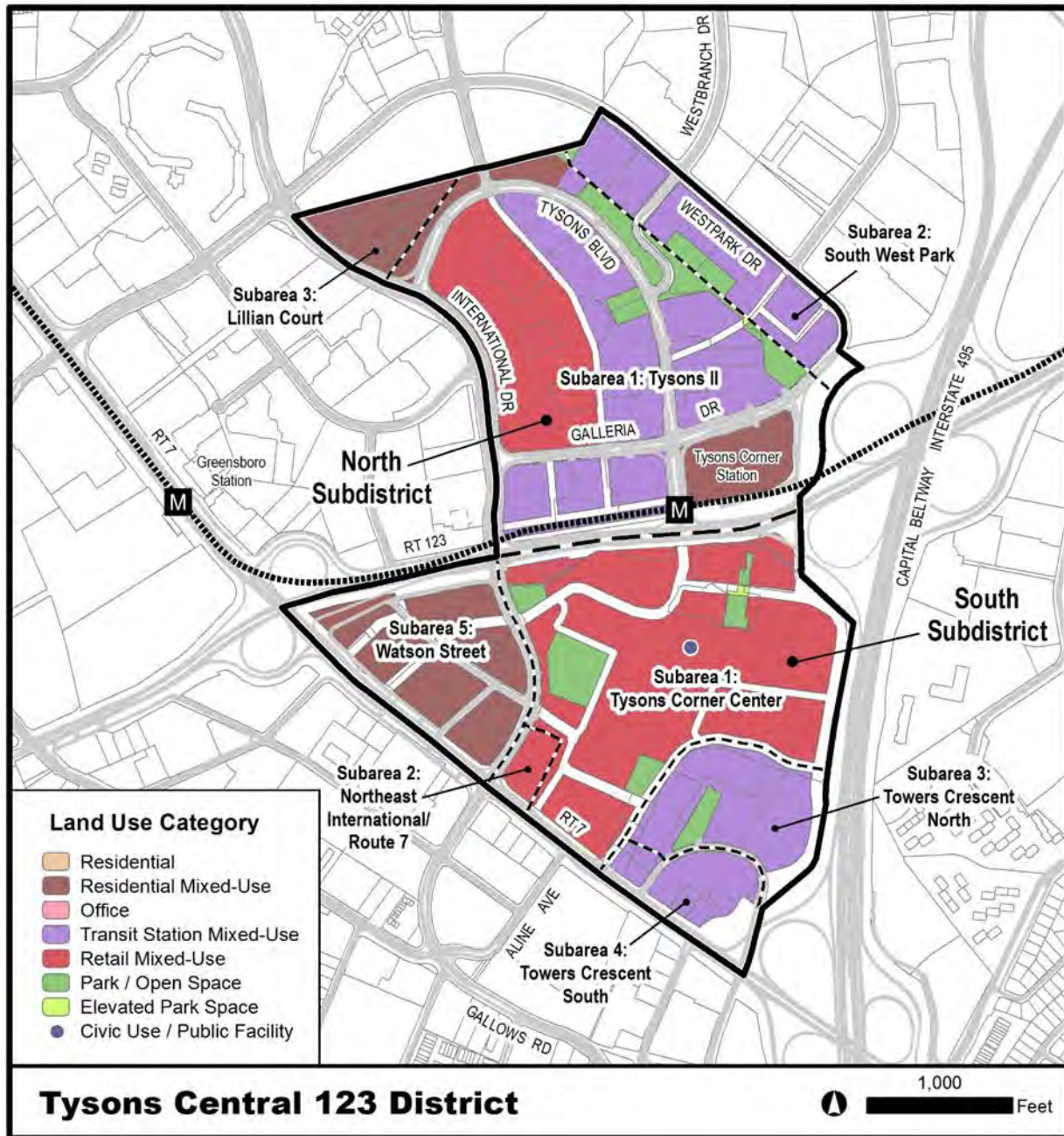
The vision for this district includes mixed use high-rise hotel and a conference or convention center within walking distance of the district's regional retail space and the office concentration in the Tysons Central 7 District. To encourage the establishment of a conference or convention center, a density bonus may be considered.

Residents of the district's high-rise residential buildings will benefit from the available hotel services as well as the convenience of retail and entertainment uses. To allow the district to function as an urban area, on-street parking, where appropriate, will be a key ingredient as will centrally located parking structures shared by numerous businesses and residents.

Enhanced connectivity and safety improvements will also be needed to facilitate walkability around the Metro station and throughout the district. A significant challenge to pedestrian connectivity is the steep grade change along the northeastern side of this district. However, this topographical change may be an opportunity to integrate the district with the adjacent North Central District. As an example, pedestrian terraces and plazas could be built into the side of the hill between Tysons Boulevard and West Park Drive to improve pedestrian connectivity.

Running through the heart of Tysons Central 123 will be improved Chain Bridge Road and Leesburg Pike. Both will be redesigned as pedestrian friendly, tree lined boulevards, with greater connectivity between Tysons 123 and Old Courthouse South.

The land use concept for Tysons Central 123 is shown in the map below.



Note: Planned park spaces are shown conceptually on Map 9.

MAP 15

This district is composed of two subdistricts: the North Tysons Central 123 subdistrict, which includes the Tysons II mixed use development; and the South Tysons Central 123 Subdistrict, which is dominated by Tysons Corner Center. The district also includes two urban neighborhoods along Watson Street and Towers Crescent Drive.

Guidance for evaluating development proposals in each subdistrict is contained in the Areawide Recommendations and the following subdistrict recommendations. Redevelopment options are dependent on the degree to which necessary public infrastructure can be provided and Plan objectives and development conditions set forth in the Areawide and subdistrict guidance can be satisfied by development proposals.

NORTH TYSONS CENTRAL 123 SUBDISTRICT

The North Tysons Central 123 subdistrict is comprised of about 115 acres and is generally bounded by Westpark Drive on the northeast, Chain Bridge Road on the south, and International Drive on the west. Existing development includes a regional shopping mall, office buildings, a hotel and a multifamily development. The vision for this subdistrict is to transform into a significantly more intense mixed use area transit-oriented area. The subdistrict contains three subareas.

Subarea 1: Tysons II

Subarea 1 is comprised of about 87 acres, bounded by International Drive on the west, Chain Bridge Road on the south, Subarea 2 on the northeast, and Subarea 3 on the north. Existing development includes the Galleria at Tysons II shopping mall, office buildings and a hotel.

Base Plan

Prior to Metrorail, the area was planned and approved for a mix of offices, hotels and retail mall with an intensity of 1.0 FAR (or approximately 4,700,000 square feet).

Planned and Approved Development

The area is planned and approved for transit-related mixed use development with approximately 6,800,000 square feet. Land uses include office, hotel, and residential development. The existing mall is to be retained and may be reconfigured. In approved office, hotel and residential buildings ground level retail and service uses are to be provided. With the addition of a conference or convention center, a density bonus may be considered.

The vision of this intensification is to create urban spaces that people can walk through easily, as well as to and from the adjacent Metro rail station. The approved urban design amenities include extensive streetscape features, plazas, and an amphitheater. Some plazas are large enough for open-air activities such as musical performances by small groups. A variety and an abundance of seating and public art are to be provided and are to make these spaces appealing and attractive.

While the mall and other existing developments do not readily accommodate a grid of streets, efforts should be made to provide a connected network of streets and to provide new pedestrian and bicycle connections where streets are not possible. In addition, redevelopment or

reconfiguration of the mall should seek, where possible, to reduce views of parking garages, wrapping such structures with other uses and/or providing attractive façade treatments and screening.

Redevelopment Option

Development above the approved level of 6,800,000 square feet may occur if it is consistent with the guidance on intensity and land use mix in the Areawide Land Use Recommendations, and if it meets the following conditions:

- Changes to the mix of uses may be necessary to address traffic impacts during peak periods, such as converting approved office to residential uses.
- If additional residential uses are provided, they should include recreational facilities and other amenities for the residents, as well as affordable/workforce housing as discussed in the Areawide Land Use Recommendations.
- Public facility, transportation and infrastructure analyses should be performed in conjunction with any development application. The results of these analyses should identify necessary improvements, the phasing of these improvements with new development, and appropriate measures to mitigate other impacts. Also, commitments should be provided for needed improvements and for the mitigation of impacts identified in the public facility, transportation and infrastructure analyses, as well as improvements and mitigation measures identified in the Areawide Recommendations.
- Additional publicly accessible open space amenities within the subarea and/or in conjunction with Subarea 2 should be provided. To address this issue, innovative solutions should be explored to provide additional open space amenities, coordinating development with the adjacent South West Park Subarea. For example, the “pooling” of land between the two subareas could result in a major open space amenity for this portion of Tysons. Open space should be consistent with the urban park and open space standards in the Areawide Environmental Stewardship Recommendations.
- Improvements to pedestrian and vehicular accessibility within Subareas 1 and 2 of this subdistrict will be necessary to address the envisioned urban character. To enhance connectivity, pedestrian terraces and plazas could be built into the side of the hill between Tysons Boulevard and West Park Drive. To improve vehicular circulation, the Jones Branch extension should be provided as shown in the Areawide Transportation Recommendations.
- Existing and approved building heights range from The Galleria at Tysons II at approximately 65 feet, to high-rise buildings approved at almost 350 feet. Changes in approved building heights should be consistent with the conceptual Building Height Map and Guidelines in the Urban Design section. This guidance indicates that the tallest buildings are planned up to 400 feet and are located near the Metro station, south of Galleria Drive. North of Galleria Drive and along either side of Tysons Boulevard, buildings are planned and approved up to 300 feet, and the northern portion of the mall site is planned for building heights up to 225 feet. As indicated under the building height guidelines in the Urban Design section, building heights should vary within the subarea.

- Potential circulator routes, as described in the Areawide Transportation Recommendations, extend through or abut portions of this subarea. In addition to the above guidance for this area, redevelopment proposals along the circulator routes should provide right-of-way or otherwise accommodate these circulators and should make appropriate contributions toward their construction cost. See the Intensity section of the Areawide Land Use Recommendations.

Subarea 2: South West Park

This portion of West Park forms the northeastern boundary of the subdistrict and is comprised of about 20 acres. Existing development is suburban office buildings with surface parking. The area's existing intensity is about 0.40 FAR.

Base Plan

This area is planned for office with support retail and service uses at an intensity averaging about 0.6 FAR. As an option, it is planned for a mix of office and residential uses averaging about 0.80 FAR (if the mix of uses has less traffic impact than office redevelopment at 0.6 FAR).

Redevelopment Option

With the advent of Metrorail, the vision for this area is to redevelop primarily with mixed use with an urban character at a substantially higher intensity than the Base Plan. The mix of uses should include ground level retail. However, the degree of intensification is contingent on how well development integrates with Tysons II through pedestrian and vehicular linkages. Any redevelopment that is not within 1/2 mile distance of the Metro station should not exceed an intensity of 1.0 FAR for office use or should not exceed 1.5 FAR for mixed use including residential use (the mix of uses should have less traffic impact than office redevelopment at 1.0 FAR).

The successful redevelopment of this area is closely linked to the redevelopment of the adjacent West Park Urban Neighborhood Subarea in the North Central District. South West Park is planned for a mix of uses with a concentration of office uses. West Park Urban Neighborhood is planned to redevelop from a suburban office park to a primarily residential area with supporting uses, including ground level retail and public facilities. To ensure that the redevelopment of each of these areas is consistent with the overall land use goals for Tysons, the total amount of office development in the two subareas combined should be no more than 3 million square feet.

To achieve this vision, development proposals should address the Areawide Recommendations and provide for the following.

- The vision is to redevelop the subarea with more intense mixed use buildings for portions within 1/2 mile distance of the Metro station. Redevelopment should be diverse in land uses, including additional office use as well as potential hotel, retail and/or residential uses. All redevelopment should provide support retail and service uses. The intensities and land use mix should be consistent with the Areawide Land Use Recommendations.
- Logical and substantial parcel consolidation should be provided that results in well-designed projects that function efficiently on their own, include a grid of streets and

public open space system, and integrate with and facilitate the redevelopment of other parcels in conformance with the Plan. To ensure the provision of public facilities, a street grid, and the desired land use pattern, redevelopment proposals in this subarea should consolidate with a significant portion of the West Park Urban Neighborhood Subarea in the North Central District. This level of consolidation would be sufficient in size to permit redevelopment in several phases that are linked to the provision of public facilities and infrastructure and demonstrate attainment of critical Plan objectives such as TDM mode splits, green buildings and affordable/workforce housing. If consolidation cannot be achieved, as an alternative, coordinated proffered development plans may be provided as indicated in the Areawide Land Use Recommendations.

- In this subarea, coordinated proffered development plans with Tysons II will be essential to create the envisioned urban environment. Coordinated proffered development plans will help overcome the significant grade change between the two subareas. To address the issue of improving pedestrian connectivity, pedestrian terraces and plazas should be built into the side of the hill between Tysons Boulevard and West Park Drive.
- Redevelopment should occur in a manner that fosters vehicular and pedestrian access and circulation. Development proposals should show how the proposed development will be integrated within the subdistrict as well as the abutting districts/subdistricts through the provision of the grid of streets. To improve vehicular circulation, redevelopment should accommodate the Jones Branch extension as shown in the Areawide Transportation Recommendations.
- To improve connectivity, other streets creating urban blocks and other pedestrian and bike circulation improvements may need to be provided. The ability to realize planned intensities will depend on the degree to which access and circulation improvements are implemented consistent with guidance in the Areawide Urban Design and Transportation Recommendations.
- Publicly accessible open space and urban design amenities should be provided consistent with the Areawide Urban Design recommendations and the urban park and open space standards in the Areawide Environmental Stewardship Recommendations.
- If redevelopment includes a residential component, it should include recreational facilities and other amenities for the residents, as well as affordable/workforce housing as indicated under the Areawide Land Use Recommendations.
- Public facility, transportation and infrastructure analyses should be performed in conjunction with any development application. The results of these analyses should identify necessary improvements, the phasing of these improvements with new development, and appropriate measures to mitigate other impacts. Also, commitments should be provided for needed improvements and for the mitigation of impacts identified in the public facility, transportation and infrastructure analyses, as well as improvements and mitigation measures identified in the Areawide Recommendations.
- The maximum building height in this subarea is 225 feet, as conceptually shown on the Building Height Map in the Areawide Urban Design Recommendations. As indicated under the Building Height guidelines in the Urban Design Recommendations, building heights should vary within the subarea.

- Potential circulator routes, as described in the Areawide Transportation recommendations, extend through or abut portions of this subarea. In addition to the above guidance for this area, redevelopment proposals along the circulator routes should provide rights-of-way or otherwise accommodate these circulators and should make appropriate contributions toward their construction cost. See the Intensity section of the Areawide Land Use Recommendations.

Subarea 3: Lillian Court

Lillian Court is comprised of about 8 acres. It is the northernmost part of this subdistrict and is bounded on the south by Tysons Boulevard and on the west by International Drive.

Base Plan

This subarea is planned for and developed with multifamily residential use at 30 dwelling units per acre.

Redevelopment Option

Redevelopment to higher density residential use may be considered for portions of the property within 1/2 mile distance of a Metro station, as described in the Areawide Land Use Recommendations. Potential circulator routes, as described in the Areawide Transportation Recommendations, extend through or abut portions of this subarea. Redevelopment proposals along the circulator routes should provide rights-of-way or otherwise accommodate these circulators and should make appropriate contributions toward their construction cost. See the Intensity section of the Areawide Land Use Recommendations.

If redevelopment is to be considered, the maximum building height should not exceed 175 feet, and any increase in height above existing development is conditioned upon achieving compatibility with other surrounding or nearby residential development, such as the Rotonda. A variety of building heights should be provided in the subarea with maximum heights used to help establish a focal point. (See the Building Heights Map and Building Height Guidelines in the Areawide Urban Design Recommendations).

The minimum affordable/workforce housing commitment should be provided as indicated in the Areawide Land Use Recommendations. In addition, the development proposal should have as an objective increased affordable housing opportunities and positive impacts on the environment, public facilities and transportation systems (See Objective 11 in the Land Use section of the Policy Plan).

In addition, publicly accessible open space and urban design amenities should be provided consistent with the Areawide Urban Design Recommendations and the urban park and open space standards in the Areawide Environmental Stewardship Recommendations.

SOUTH TYSONS CENTRAL 123 SUBDISTRICT

The South Tysons Central 123 Subdistrict is comprised of about 130 acres and is bounded by Chain Bridge Road on the north, the Capital Beltway/Interstate 495 (I-495) on the east and Leesburg Pike on the southwest. The subdistrict contains five subareas: Tysons Corner Center, Northeast International/Leesburg Pike, Towers Crescent North, Tower Crescent South and Watson Street subareas.

Existing development is predominantly retail and office use, including Tysons Corner Center, the region's first super-regional mall which draws millions of shoppers from the metropolitan area and beyond. The subdistrict also contains a hotel and Tycon Tower, currently the largest office building in Tysons. The vision for this subdistrict is to transform it into a significantly more intense mixed use area on the south side of the Tysons Central 123 Metro station.

Subarea 1: Tysons Corner Center

Tysons Corner Center is comprised of about 77 acres, bounded by International Drive on the west, Chain Bridge Road on the north, I-495 on the east, Tower Crescent on the southeast and Leesburg Pike on the south. Existing development is the Tysons Corner Center regional mall which contains approximately 2.5 million square feet of development and has an intensity of 0.74 FAR.



View looking toward Tysons Central 123 Metrostation from the urban park and pavilion at Tysons Corner Center

Base Plan

Prior to Metrorail, this subarea was planned for retail, office, hotel uses up to 0.80 FAR, with regional retail being the predominant use.

Planned and Approved Development

With the funding of Metrorail, the area is planned and approved for transit-related mixed use development with approximately 6,000,000 square feet. Planned and approved land uses include office, hotel, and residential development. The existing mall is to be retained and reconfigured. The approved office, hotel, residential buildings, ground level retail, and service uses are to be provided. With the addition of a conference or convention center, a density bonus may be considered.

The vision of this intensification is to create urban spaces that people can walk through easily, as well as to and from the adjacent Metrorail station and surrounding areas. The area is planned for many urban design amenities including extensive streetscape features, plazas, a mini dog park, “Sky Terrace” rooftop recreation and leisure amenity, one-acre Common Green, and a multi-use pavilion. Many of the open spaces will be large enough for open-air activities such as fashion shows, seasonal markets, and musical performances by small groups. Abundant seating and public art will make the space appealing and attractive.

While the mall and other existing development do not readily accommodate a grid of streets, efforts should be made to provide a connected network of streets and to provide new pedestrian and bicycle connections where streets are not possible. In addition, redevelopment or reconfiguration of the mall should seek, where possible, to reduce views of parking garages, wrapping such structures with other uses and/or providing attractive façade treatments and screening.

Redevelopment Option

Development above the approved level of 6,000,000 square feet may occur if it is consistent with the guidance on intensity and land use mix in the Areawide Land Use Recommendations, and if it meets the following conditions:

- Changes to the mix of uses will need to address traffic impacts during peak periods, such as converting approved office to residential or hotel use.
- If additional residential uses are provided, they should include recreational facilities and other amenities for the residents, as well as affordable/workforce housing as indicated in the Areawide Land Use Recommendations.
- Public facility, transportation and infrastructure analyses should be performed in conjunction with any development application. The results of these analyses should identify necessary improvements, the phasing of these improvements with new development, and appropriate measures to mitigate other impacts. Also, commitments should be provided for needed improvements and for the mitigation of impacts identified in the public facility, transportation and infrastructure analyses, as well as improvements and mitigation measures identified in the Areawide Recommendations.
- Publicly accessible open space and urban design amenities should be provided consistent with the Areawide Urban Design Recommendations and the urban park and open space standards in the Areawide Environmental Stewardship Recommendations.

- The approved development made significant commitments to improve pedestrian and vehicular accessibility within the subarea and between the subarea and adjacent areas. With consideration of additional intensification, however, a grid of streets may be necessary. Intensification will depend on the degree to which access and circulation improvements are provided consistent with guidance in the Areawide Urban Design and Transportation Recommendations.
- Existing and approved building heights range from 65 feet for Tysons Corner Center to high-rise buildings approved at about 350 feet near the Metro station. Changes in approved building heights should continue to focus the tallest buildings within one-eighth mile of the Metro station; height in this area could be up to 400 feet. Building heights generally beyond one-eighth mile from the Metro station should be between 175 and 225 feet.
- On the east side of the mall, buildings facing across I-495 to the Regency or Encore multifamily developments should be oriented so that the longest dimensions of the buildings are not parallel to I-495. A variety of building heights should be provided. Changes in approved building heights should be consistent with the above guidance as well as with the Areawide Urban Design Recommendations.
- Potential circulator routes, as described in the Areawide Transportation Recommendations, extend through or abut portions of this subarea. Redevelopment proposals along the circulator routes should provide rights-of-way or otherwise accommodate these circulators and should make appropriate contributions toward their construction cost. See the discussion of Intensity section in the Areawide Land Use Recommendations.

Subarea 2: Northeast International/Route 7

This subarea is comprised of 2.4 acres and is located at the northeast corner of the intersection of Leesburg Pike and International Drive.

Base Plan

- It is planned for and developed with an office building with support retail and service uses up to 1.5 FAR. The existing development resulted from implementing a Plan option which provided the following:
- Sidewalks or other appropriate pedestrian facilities to create a strong linkage from this property to the Tysons Corner Center's nearest entrances and provide visible access for pedestrians coming into Subarea 2 from other areas.
- Building(s) oriented to International Drive or to a major circulation feature, with parking provided primarily underground or in a structure.

Redevelopment Option

Redevelopment to higher intensity office or mixed use building may be considered if the property is within 1/2 mile distance of a Metro station. See the Intensity section of the Areawide Land Use Recommendations. In addition, if redevelopment is to be considered:

- The maximum building height should not exceed 175 feet (See the Building Heights Map and Building Height Guidelines in the Areawide Urban Design Recommendations).
- If additional residential uses are provided, they should include recreational facilities and other amenities for the residents and provide for affordable/workforce housing as indicated under the Land Use guidelines.
- Publicly accessible open space and urban design amenities should be provided consistent with the Areawide Urban Design recommendations and the urban park and open space standards in the Areawide Environmental Stewardship Recommendations.
- A potential circulator route, as described in the Areawide Transportation recommendations, extends through or abuts portions of this subarea. In addition to the above guidance for this area, redevelopment proposals along the circulator route should provide right-of-way or otherwise accommodate the circulator and should make appropriate contributions toward its construction cost. See the Intensity section of the Areawide Land Use Recommendations.

Subarea 3: Towers Crescent North

Towers Crescent North is comprised of about 21 acres and is located along the north and west sides of Towers Crescent Drive, abutting Tysons Corner Center.

Base Plan

This area is planned for office use up to 1.65 FAR.

Redevelopment Option

The subarea is planned and approved for mixed use with office, residential and support retail and service uses at 2.5 FAR. The approved development resulted from implementing a Plan option which encouraged converting office use to residential use. The approved development provides many pedestrian and open space amenities, such as a large urban green and a pedestrian bridge connection to Tysons Corner Center. The residential component provides recreational facilities and affordable and workforce housing. Building heights are planned and approved with Tycon Tower having the subarea's maximum height of 205 feet, which retains its prominence as one of four existing gateway buildings. In general, heights of other buildings decrease with their distances from Tycon Tower.

A potential circulator alignment extends along Old Meadow Road across I-495 to this subarea, as described in the Areawide Transportation Recommendations. If this alignment is implemented, this subarea may need modifications to the area's streets. Redevelopment proposals along the circulator route should provide right-of-way or otherwise accommodate the circulator and should make appropriate contributions toward its construction cost. See the Intensity section of the Areawide Land Use Recommendations.

Subarea 4: Towers Crescent South

This subarea is comprised of about 8 acres and is located south of Towers Crescent Drive and north of Leesburg Pike.

Base Plan

This subarea is planned for and developed with retail uses for all parcels except Tax Map 39-2((4))A. Parcel A is planned for and developed with hotel and support retail uses up to 1.4 FAR.

Redevelopment Option

As an option, mixed use development with office, hotel and/or retail uses up to 1.4 FAR is appropriate if all parcels within the subarea are consolidated. Development proposals should show how these parcels are integrated to function as a single development. Improved pedestrian walkways should be provided that make the pedestrian experience pleasant and safe, particularly to connect with Subarea 3 (Towers Crescent North). The maximum building height should not exceed 175 feet (See the Building Heights Map and Building Height Guidelines in the Urban Design section).

Redevelopment to higher intensity mixed use building may be considered if the property is within 1/2 mile distance of a Metro station. A potential circulator alignment extends through this subarea, as described in the Areawide Transportation Recommendations. Redevelopment proposals along the circulator route should provide right-of-way or otherwise accommodate the circulator and should make appropriate contributions toward its construction cost. See the Intensity section of the Areawide Land Use Recommendations.

If additional residential uses are provided, they should include recreational facilities and other amenities for the residents and provide for affordable/workforce housing as indicated in the Areawide Land Use Recommendations.

Redevelopment should provide publicly accessible open space and urban design amenities that are consistent with the Areawide Urban Design Recommendations and the urban park and open space standards in the Areawide Environmental Stewardship Recommendations.

Subarea 5: Watson Street

This area is comprised of about 20 acres, and is bounded by Chain Bridge Road on the north, International Drive on the east, Leesburg Pike on the south, and the Leesburg Pike/Chain Bridge Road interchange on the west.

Base Plan

The area is planned for and mostly developed with retail uses except for three office buildings which front on Leesburg Pike. The existing office buildings are planned and developed up to 1.65 FAR.

Redevelopment Option

The vision for this subarea is to redevelop into an urban neighborhood with a mix of uses, including office, residential, hotel and retail uses. Residential uses should be on the order of 50% to 75% of the total development in the subarea. Watson and Fletcher Streets may provide good locations for ground level retail and service uses, while Leesburg Pike may be developed primarily with office uses.

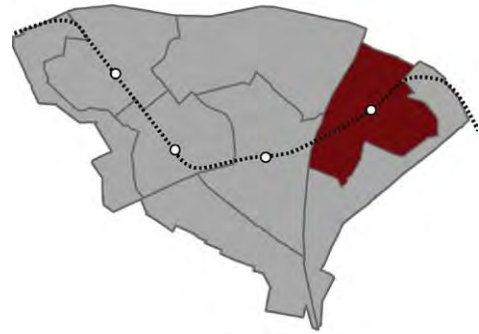
To achieve this vision, development proposals should address the Areawide Recommendations and provide for the following.

- The vision for this subarea is to redevelop into an urban mixed use neighborhood, with a focus on residential development but which also includes ground level retail and service uses as well as some hotel and office uses. The intensities and land use mix should be consistent with the Areawide Land Use Recommendations.
- Logical and substantial parcel consolidation should be provided that results in well-designed projects that function efficiently on their own, include a grid of streets and public open space system, and integrate with and facilitate the redevelopment of other parcels in conformance with the Plan. In most cases, consolidation should be sufficient in size to permit redevelopment in several phases that are linked to the provision of public facilities and infrastructure and demonstrate attainment of critical Plan objectives such as TDM mode splits, green buildings and affordable/workforce housing. If consolidation cannot be achieved as indicated above, as an alternative, coordinated proffered development plans may be provided as indicated in the Areawide Land Use Recommendations.
- Redevelopment should occur in a manner that fosters vehicular and pedestrian access and circulation. Development proposals should show how the proposed development will be integrated within the subdistrict as well as the abutting areas through the provision of the grid of streets. In addition, other pedestrian and bike circulation improvements should be provided that improve connectivity. The ability to realize planned intensities will depend on the degree to which access and circulation improvements are provided consistent with guidance in the Areawide Urban Design and Transportation Recommendations.
- Urban design and open space amenities, such as streetscapes, plazas, courtyards, landscaping, lighting and seating should be provided consistent with the Areawide Urban Design Recommendations and the urban park and open space standards in the Areawide Environmental Stewardship Recommendations. Several urban greens or plazas are shown on the Land Use Concept Map for this area. A Common Green type urban park of about one acre should be located in the subarea to provide active and passive recreation and leisure opportunities for residents and workers.
- Residential developments in this subarea should include recreational facilities and other amenities for the residents, and provide for affordable/workforce housing as indicated under the Areawide Land Use Recommendations.
- Public facility, transportation and infrastructure analyses should be performed in conjunction with any development application. The results of these analyses should identify necessary improvements, phasing of these improvements with new development, and appropriate measures to mitigate other impacts. Also, commitments should be provided for needed improvements and for the mitigation of impacts identified in the public facility, transportation and infrastructure analyses, as well as improvements and mitigation measures identified in the Areawide Recommendations.
- In addition, a specific public facility need identified is the provision of a fire station; this facility could be accommodated in this area's redevelopment.
- Maximum building heights in this area range from 175 feet to 225 feet, depending upon location. In general, the northern half of the subarea is shown to have maximum building

heights of 225 feet and the southern half is shown to have maximum heights of 175 feet. A variety of building heights should be provided. Refer to the conceptual Building Height Map and Building Height Guidelines in the Areawide Urban Design recommendations.

- Potential circulator routes, as described in the Areawide Transportation recommendations, extend through or abut portions of this subarea. Redevelopment proposals along the circulator routes should provide rights-of-way or otherwise accommodate these circulators and should make appropriate contributions to their construction cost. See the Intensity section of the Areawide Land Use Recommendations.

Tysons East



Tysons East serves as a signature gateway for those coming to Tysons from the east. The defining focus of Tysons East will be Scotts Run Stream Valley Park, which is envisioned to be a great urban park and natural resource amenity surrounded by a mix of uses including office, residential, hotel, support retail and services. In addition, the area is a good location for institutional and public uses, such as educational and recreational facilities.

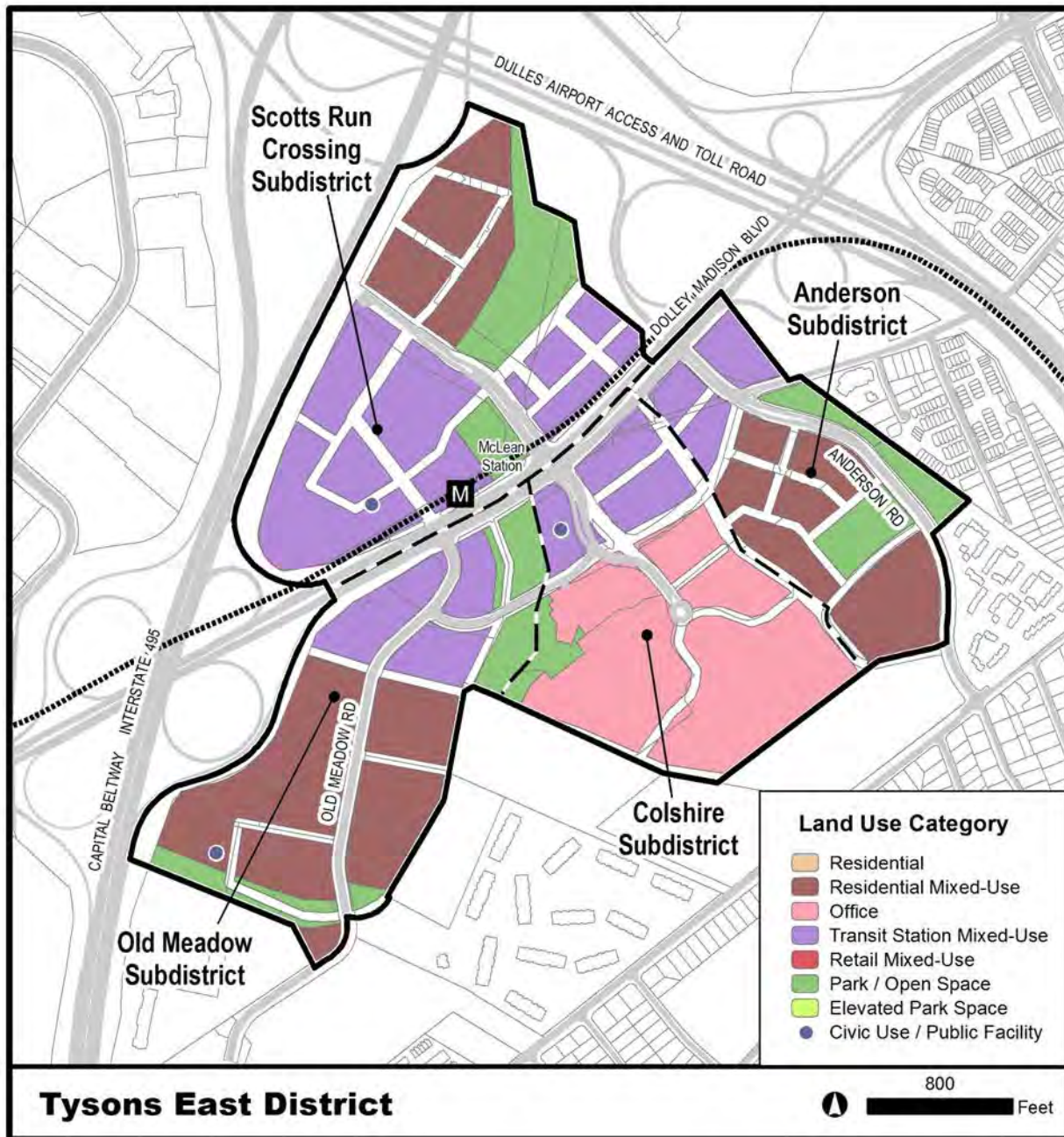
Scotts Run Stream Valley Park will be expanded through the stream valley and in adjacent areas to provide better access and connectivity throughout the Tysons East District. The park will become a major linear urban park and trail system with a variety of landscapes including wooded hills, meadows and ponds. It will provide a range of experiences, such as enjoying the outdoors and scenery, arts, performances and programs or participating in recreation. Intimate gardens with shady places of retreat could provide relief and gathering places for families, visitors and workers in Tysons.

Public and institutional facilities such as professional education, recreational, health and sports amenities should be located in this district. These amenities will be essential for attracting “creative class” households whose jobs could be located in Tysons.

The district is composed of four interconnected subdistricts, with all but one having direct access to Scotts Run. There are two office mixed use subdistricts and two urban residential subdistricts. One of the office mixed use subdistricts is Scotts Run Crossing, which is north of Dolley Madison Boulevard (Route 123) abutting the Tysons East Metro station; the other is the Colshire Subdistrict south of Dolley Madison Boulevard. The two residential mixed use subdistricts are Old Meadow and Anderson.

Guidance for evaluating development proposals in each subdistrict is contained in the Areawide Recommendations and the following subdistrict recommendations. Redevelopment options are dependent on the degree to which necessary public infrastructure can be provided and Plan objectives and development conditions set forth in the areawide and subdistrict guidance can be satisfied by development proposals.

The land use concept for the Tysons East District is shown in the map below.



Note: Planned park spaces are shown conceptually on Map 9.

MAP 16

SCOTTS RUN CROSSING AND COLSHIRE SUBDISTRICTS

The Scotts Run Crossing Subdistrict is comprised of about 58 acres and is bounded by the DAAR on the north, Dolley Madison Boulevard on the east and south, and I-495 on the west. The Colshire Subdistrict is comprised of about 50 acres and is bounded by Dolley Madison Boulevard on the north, Scotts Run on the west, the Anderson Subdistrict on the east and the East Side District on the south.

Base Plan

The two subdistricts are planned for and developed with office use at varying intensities up to 1.0 FAR. The multifamily development in the Scotts Run Crossing Subdistrict (Gates of McLean) is developed and planned for 30 dwelling units per acre.

Redevelopment Option

Both subdistricts are planned to substantially redevelop with a mix of uses, with office as the predominant use. Each subdistrict is envisioned to become a mixed use area with an increased intensity and diversity of land use including more office and the addition of hotel, residential, support retail, and public and institutional uses. Because a key feature in both subdistricts is Scotts Run, redevelopment proposals should be designed in a manner that ensure this open space will become a more accessible resource-based urban park and areawide amenity. Redevelopment in these subdistricts should also contribute to stream and riparian buffer restoration efforts along Scotts Run.

To achieve this vision, development proposals should address the Areawide Recommendations and provide for the following.

- As indicated above, the vision for these subdistricts is to redevelop with significantly more intense office development, with the highest intensities near the Metro station. These subdistricts are also envisioned to become more diverse in land uses, to include hotel, residential and support retail uses. The intensities and land use mix should be consistent with the Areawide Land Use Recommendations.
- Logical and substantial parcel consolidation should be provided that results in well-designed projects that function efficiently on their own, include a grid of streets and public open space system, and integrate with and facilitate the redevelopment of other parcels in conformance with the Plan. In most cases, consolidation should be sufficient in size to permit redevelopment in several phases that are linked to the provision of public facilities and infrastructure and demonstrate attainment of critical Plan objectives such as TDM mode splits, green buildings and affordable/workforce housing. If consolidation cannot be achieved, as an alternative, coordinated proffered development plans may be provided as indicated in the Areawide Land Use Recommendations.
 - In these subdistricts, the goal for assembling parcels for consolidation or coordinated proffered development plans is at least 20 acres. A consolidation of less than 20 acres should be considered if the performance objectives for consolidation in the Land Use section of the Areawide Recommendations are met.
 - When a consolidation includes land located in the first intensity tier (within 1/8 mile of a Metro station), it should also include land in the second intensity tier (between 1/8 and 1/4 mile of a station), in order to ensure connectivity to the Metro station.

- Redevelopment should occur in a manner that fosters vehicular and pedestrian access and circulation. Development proposals should show how the proposed development will be integrated within the subdistrict as well as the abutting districts/subdistricts through the provision of the grid of streets.
 - In the Scotts Run Crossing Subdistrict, two circulation improvements are planned -- a new ramp from the DAAR and the extension of Scotts Run Road over I-495. The location and configuration of Scotts Run Road may be adjusted at the time of development approval so as to preserve and make use of the existing right-of-way. Redevelopment along these alignments should provide right-of-way or otherwise accommodate these improvements, and should make appropriate contributions toward their construction costs.
 - In the Colshire Subdistrict, a major circulation improvement is the extension of Colshire Meadow Drive to Chain Bridge Road, the location and configuration of which may be adjusted at the time of development approval. Redevelopment along this alignment should provide the necessary right-of-way.
- For both subdistricts, other streets (creating urban blocks) as well as other pedestrian and bike circulation improvements should be provided to improve connectivity. The ability to realize planned intensities will depend on the degree to which access and circulation improvements are provided consistent with guidance in the Areawide Urban Design and Transportation Recommendations.
- Publicly accessible open space and urban design amenities should be provided consistent with the Areawide Urban Design Recommendations and the urban park and open space standards in the Areawide Environmental Stewardship Recommendations.
- When redevelopment includes a residential component, it should include recreational facilities and other amenities for the residents, as well as affordable/workforce housing as indicated in the Areawide Land Use Recommendations.
- Public facility, transportation and infrastructure analyses should be performed in conjunction with any development application. The results of these analyses should identify necessary improvements, the phasing of these improvements with new development, and appropriate measures to mitigate other impacts. Also, commitments should be provided for needed improvements and for the mitigation of impacts identified in the public facility, transportation and infrastructure analyses, as well as improvements and mitigation measures identified in the Areawide Recommendations.
- In addition, a specific public facility need is the provision of a fire station; this facility should be accommodated in this area's redevelopment.
- Building heights in these subdistricts range from 105 feet to 400 feet, depending upon location, as described below and conceptually shown on the Building Height Map in the Areawide Urban Design Recommendations.
 - The lowest building heights in the Colshire Subdistrict are adjacent to the East Side District, where buildings need to provide a compatible transition in scale and mass. Directly abutting the East Side District, the maximum height is 105 feet; however, buildings may be designed with step backs allowing height to increase with distance

- from the East Side District and through this design approach height may increase up to 130 feet. The areas closest to the Metro station building heights may be allowed up to 400 feet.
- The Scotts Run Crossing Subdistrict is separated from suburban neighborhoods by the extensive right-of-way of the DAAR and Dolley Madison Boulevard. It is positioned along I-495, and has an average grade 25 to 35 feet below I-495, the planned extension of Scotts Run Road over the Beltway, and the elevated Metro station. As a result, this subdistrict's building heights are between 175 and 400 feet. Building heights should be highest closest to the Metro station or along I-495.
 - A potential circulator alignment extends through these subdistricts, as described in the Areawide Transportation Recommendations. In addition to the above guidance for this area, redevelopment proposals along the alignment should provide right-of-way or otherwise accommodate this circulator and should make appropriate contributions toward its construction cost. See the Intensity section of the Areawide Land Use Recommendations.



OLD MEADOW AND ANDERSON SUBDISTRICTS

The Old Meadow Subdistrict is comprised of about 50 acres and is bounded by Dolley Madison Boulevard on the north, the I-495 on the west, Scotts Run on the east and the East Side District on the south. The Anderson Subdistrict is comprised of about 30 acres and is bounded by Dolley Madison Boulevard on the north, DAAR on the east, the Colshire Subdistrict on the west and the East Side District on the south.

Base Plan

The Old Meadow Subdistrict is developed and planned for office and light industrial uses up to an average .65 FAR. Most of the Anderson Subdistrict is planned for and developed with residential use up to 20 dwelling units per acre. The exceptions are the shopping center located on Anderson Road south of Colshire Drive, which is planned for and developed with retail use, and the northernmost parcels (Tax Map 30-3((28))A, 6A and 6B), which are developed and planned for office uses up to an average .65 FAR.

Redevelopment Option

Both subdistricts are envisioned to redevelop into urban residential neighborhoods. One or more lively neighborhood shopping streets will provide local-serving goods and services such as groceries, bookstores, music stores, art studios, and restaurants. Each subdistrict should provide a diversity of housing choices on calm tree-lined streets, some of which have views terminating in open spaces and parks. Farther from the Tysons East station, the housing density should step down gradually to provide a transition to the planned residential development in the East Side District.

To achieve this vision, development proposals should address the Areawide Recommendations, conform to the Land Use Concept Map, and provide for the following:

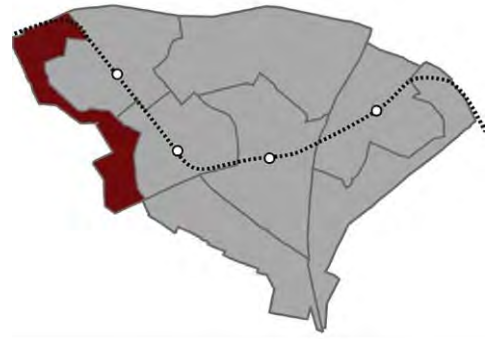
- The vision for these subdistricts is to redevelop into urban residential neighborhoods with the highest intensity oriented to the Metro station. Also, the portions of each subdistrict closest to the Metro station should have more diversity in land uses, which may include hotel, office and support retail uses in addition to high intensity residential use. The intensities and land use mix should be consistent with the Areawide Land Use Recommendations.
- Logical and substantial parcel consolidation should be provided that results in well-designed projects that function efficiently on their own, include a grid of streets and public open space system, and integrate with and facilitate the redevelopment of other parcels in conformance with the Plan. In most cases, consolidation should be sufficient in size to permit redevelopment in several phases that are linked to the provision of public facilities and infrastructure and demonstrate attainment of critical Plan objectives such as TDM mode splits, green buildings and affordable/workforce housing. If consolidation cannot be achieved, as an alternative, coordinated proffered development plans may be provided as indicated in the Areawide Land Use Recommendations.
 - In these subdistricts, the goal for assembling parcels for consolidation or coordinated proffered development plans is at least 20 acres. A consolidation of less than 20 acres should be considered if the performance objectives for consolidation in the Land Use section of the Areawide Recommendations are met.
 - When a consolidation includes land located in the first intensity tier (within 1/8 mile of a Metro station), it should also include land in the second intensity tier (between 1/8 and 1/4 mile of a station), in order to ensure connectivity to the Metro station.
- Redevelopment should occur in a manner that fosters vehicular and pedestrian access and circulation. Development proposals should show how the proposed development will be integrated within the subdistrict and how it will connect to the abutting districts/subdistricts through the provision of the grid of streets.

- In the Old Meadow Subdistrict, one circulation improvement is a new street adjacent to Scotts Run. This new road should be located to avoid impacting significant natural and cultural resources on park land. New park land should be established between the new street and the stream valley to further buffer and protect the floodplain. Redevelopment along this and other planned street alignments should provide right-of-way and contribute toward street construction.
- In the Anderson Subdistrict, a major circulation improvement is the extension of Colshire Meadow Drive to Chain Bridge Road. Redevelopment along this planned alignment should provide right-of-way and contribute toward street construction.
- For both subdistricts, other connecting local streets (creating urban blocks) as well as other pedestrian and bike circulation improvements should be provided. The ability to realize planned intensities will depend on the degree to which access and circulation improvements are implemented consistent with guidance in the Urban Design and Transportation recommendations.
- Publicly accessible open space and urban design amenities should be provided consistent with the Areawide Urban Design Recommendations and the urban park and open space standards in the Areawide Environmental Stewardship Recommendations.
 - Since Scotts Run is a key feature abutting the Old Meadow Subdistrict, redevelopment proposals should be designed in a manner that ensures this open space will become a more accessible resource-based active urban park. Redevelopment in these subdistricts should also contribute to stream and riparian buffer restoration efforts along Scotts Run.
 - In the Anderson Subdistrict, there are several opportunities to provide notable open space amenities. Redevelopment proposals should be designed in a manner to provide these open space amenities and/or contribute to improvements to open space elsewhere within the District or the abutting East Side District. A four acre recreation-focused urban park should be provided between Anderson Road and the Hunting Ridge neighborhood to serve the recreation and leisure needs of future residents and workers. Facilities should include one or two athletic fields as well as consideration of providing relatively small-footprint facilities such as sport courts, playground features, skate parks or splash pads.
- When redevelopment includes a residential component, it should include recreational facilities and other amenities for the residents, and provide for affordable/workforce housing as indicated under the Land Use guidelines. However, if the portion of the McLean Commons within the Anderson Subdistrict is to redevelop, the development proposal should have as an objective increased affordable housing opportunities and positive impacts on the environment, public facilities and transportation systems (See Objective 11 in the Land Use section of the Policy Plan).
- Public facility, transportation and infrastructure analyses should be performed in conjunction with any development application. The results of these analyses should identify necessary improvements, the phasing of these improvements with new development, and appropriate measures to mitigate other impacts. Also, commitments should be provided for needed improvements and for the mitigation of impacts identified

in the public facility, transportation and infrastructure analyses, as well as improvements and mitigation measures identified in the Areawide Recommendations.

- Building heights in these subdistricts range from 75 feet to 400 feet, depending upon location as described below, and conceptually shown on the building height map in the Urban Design chapter.
 - The lowest building heights in the Old Meadow Subdistrict are adjacent to the Regency and Encore multifamily buildings in the abutting East Side District, where the maximum building height is 105 feet to provide a compatible transition in scale and mass and to retain the viewshed of these buildings. Building heights increase with distance from the southern end of this subdistrict (abutting a portion of the East Side District), with the areas closest to the Metro station having building heights up to 400 feet.
 - The lowest building heights in the Anderson Subdistrict are adjacent to the East Side District, where buildings need to provide a compatible transition in scale and mass. Abutting the Hunting Ridge neighborhood, the maximum height is 75 feet. Abutting the remainder of the East Side District, the maximum height is 105 feet, with height increasing with distance from the East Side District. The areas closest to the Metro station have building heights up to 400 feet.
- A potential circulator alignment extends through the Old Meadow Subdistrict, as described in the Areawide Transportation Recommendations. In addition to the above guidance for this area, redevelopment proposals along the alignment should provide right-of-way or otherwise accommodate this circulator and should make appropriate contributions toward its construction cost. See the Intensity section of the Areawide Land Use Recommendations.

West Side

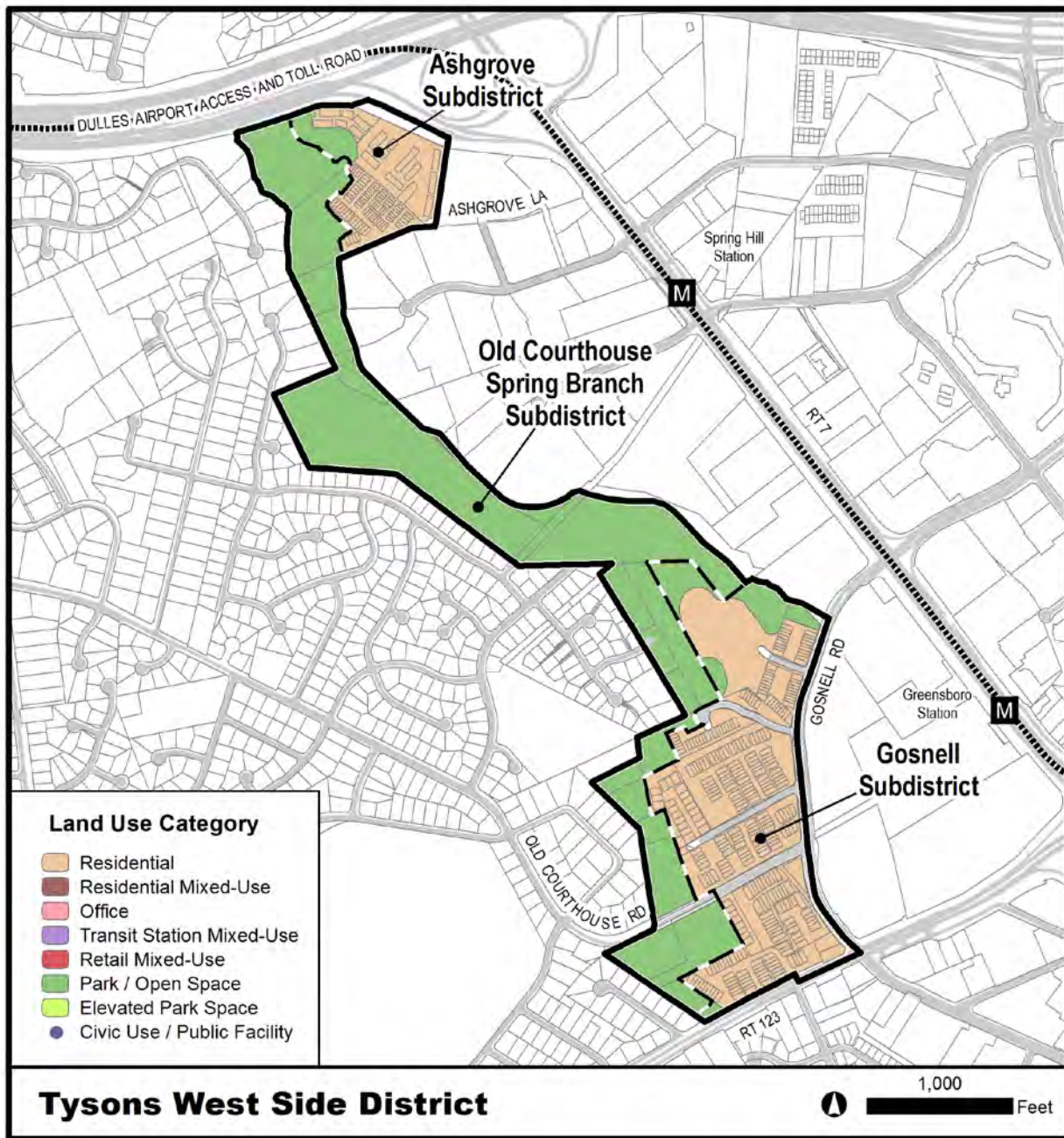


The West Side District is developed with two residential neighborhoods and includes the Old Courthouse Spring Branch Stream Valley Park as a key feature. This stream valley park, along with Freedom Hill Park and Raglan Road Park, result in about half of the land in this district being park land.

Because of its location on the edge of Tysons, the West Side District serves as a transition from planned high intensity mixed use in the Tysons West and Tysons Central 7 TOD Districts to the single-family neighborhoods just outside of Tysons. The residential development in the West Side District is mostly single-family townhouses with some multifamily use, including housing for seniors. The Old Courthouse Spring Branch Stream Valley Park should be developed with multi-use trail and other passive recreational facilities. Planned “green” street connections will tie the Tysons West Metro station to the West Side District, drawing people to the public amenity provided by Old Courthouse Spring Branch Stream Valley Park. Sidewalk and trail connections will provide enhanced access to Metro and other transit from surrounding neighborhoods.

Specific guidance for uses and intensities as envisioned in the Plan are provided in the subdistrict text that follows. However, most land within these subdistricts has already developed in a manner consistent with the vision and has incorporated the recommendations and guidelines into approved development plans.

The land use concept for the West Side District is shown in the map below.



Note: Planned park spaces are shown conceptually on Map 9.

MAP 17

OLD COURTHOUSE SPRING BRANCH SUBDISTRICT

The Old Courthouse Spring Branch Environmental Quality Corridor (EQC), Raglan Road Park, Freedom Hill Park and other publicly owned land form the western boundary of the West Side District. This portion of the district provides a visual and physical separation between Tysons and the adjacent neighborhoods. The Old Courthouse Spring Branch EQC, which has been preserved with its dense vegetation, provides a substantial barrier from the DAAR southward toward Gosnell Road.

There should be a trail along the Old Courthouse Spring Branch Stream Valley Park from Gosnell Road on the south to Old Ashgrove Lane on the north. In addition, two or three short trails should cross the stream valley and connect the adjacent residential communities to Tysons. These short trails include Old Ashgrove Lane, where the existing bridge should be used for pedestrian and bicycle access and remain closed to automobiles; the Dominion Power line easement, which could be connected to Vesper Street on the west; and a possible trail through Raglan Road Park.

This area is also planned for and developed with other public parks and public facilities, which include the Town of Vienna water tower, Raglan Road Park, and Freedom Hill Park. The City of Falls Church owns Tax Map 29-3((1))28. Subject to the approval of a park master plan for Raglan Road Park, provision of athletic fields and/or other local-serving recreational uses should be considered. Any public uses, including recreational facilities at Raglan Road Park, should provide open space buffer areas that retain as much mature tree cover as possible and provide supplemental plantings to adequately screen public uses from the adjacent single-family neighborhoods. Any improvement to Raglan Road Park should not allow cut-through vehicular traffic between Raglan Road and Key West Lane.

ASHGROVE SUBDISTRICT

The focal point of the neighborhood is Ash Grove, a dwelling with two outbuildings, which is listed in the county's Inventory of Historic Sites. The area is planned and developed with approximately 12 dwelling units per acre, providing a transition to the abutting single-family neighborhoods. The area's development was based on the following specific conditions.

- The area was fully consolidated.
- The mix of housing is approximately 60% multifamily and 40% townhouse units.
- Ash Grove, and a minimum of two acres of associated non-EQC property, was dedicated to the Fairfax County Park Authority to be used as a public park site. In addition, the specimen trees near the house were preserved.
- Public vehicular access from the Ashgrove neighborhood is limited to Leesburg Pike via Sheraton Tysons Drive and Ash Grove Lane.
- Ashgrove House Lane was designed to preserve the vista to Ash Grove.
- Residential development was designed in a manner that provides adequate buffering and screening from nonresidential development to the east and south.
- On-site recreation facilities have been provided to serve the residential community.

- The EQC located on both sides of Old Courthouse Spring Branch has been preserved as public open space through dedication to the Fairfax County Park Authority and is developed with a pedestrian trail system that is designed to connect the Ash Grove House to portions of this residential development and the office area to the south.
- Appropriate noise mitigation measures have been provided to buffer noise from the DAAR.

Building heights in this subdistrict range from up to 50 feet adjacent to the Tysons Sheraton Hotel and up to 35 feet on the remaining area east of the Old Courthouse Spring Branch EQC. See the Building Heights Map in the Areawide Urban Design Recommendations.

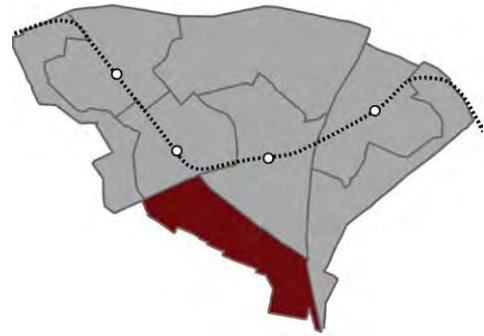
GOSNELL SUBDISTRICT

The Gosnell Neighborhood is comprised of about 50 acres and generally bounded by Old Courthouse Spring Branch EQC on the north, Gosnell Road on the east, Chain Bridge Road on the south and the Town of Vienna on the west. Existing land use is mostly residential with townhouses being the predominant housing type; the area includes a multifamily development providing housing for the elderly and a retail use at the corner of Gosnell and Chain Bridge Road.

The vision for this area is to retain the established development pattern which forms a strong boundary and transitional area on this edge of Tysons. Residential use is planned and developed at 5 to 8 dwelling units per acre. Development above the low end of the range has occurred when logical and substantial parcel consolidation was provided in a manner ensuring well-designed projects functioning efficiently and facilitating the redevelopment of adjacent parcels in conformance with the Plan. Additional guidance is provided in the Vienna Planning District, Spring Lake Community Planning Sector (V3), Land Use recommendations.

Building heights in this subdistrict are up to 35 feet as shown in the lowest height tier on the Building Height Map in the Areawide Urban Design Recommendations.

Old Courthouse



Located between Leesburg Pike and the edge of Tysons (south of Old Courthouse Road), the Old Courthouse District will have smaller scale office buildings and residential developments than TOD districts and will serve as a transition area between the Tysons Central 123 District and the neighboring communities.

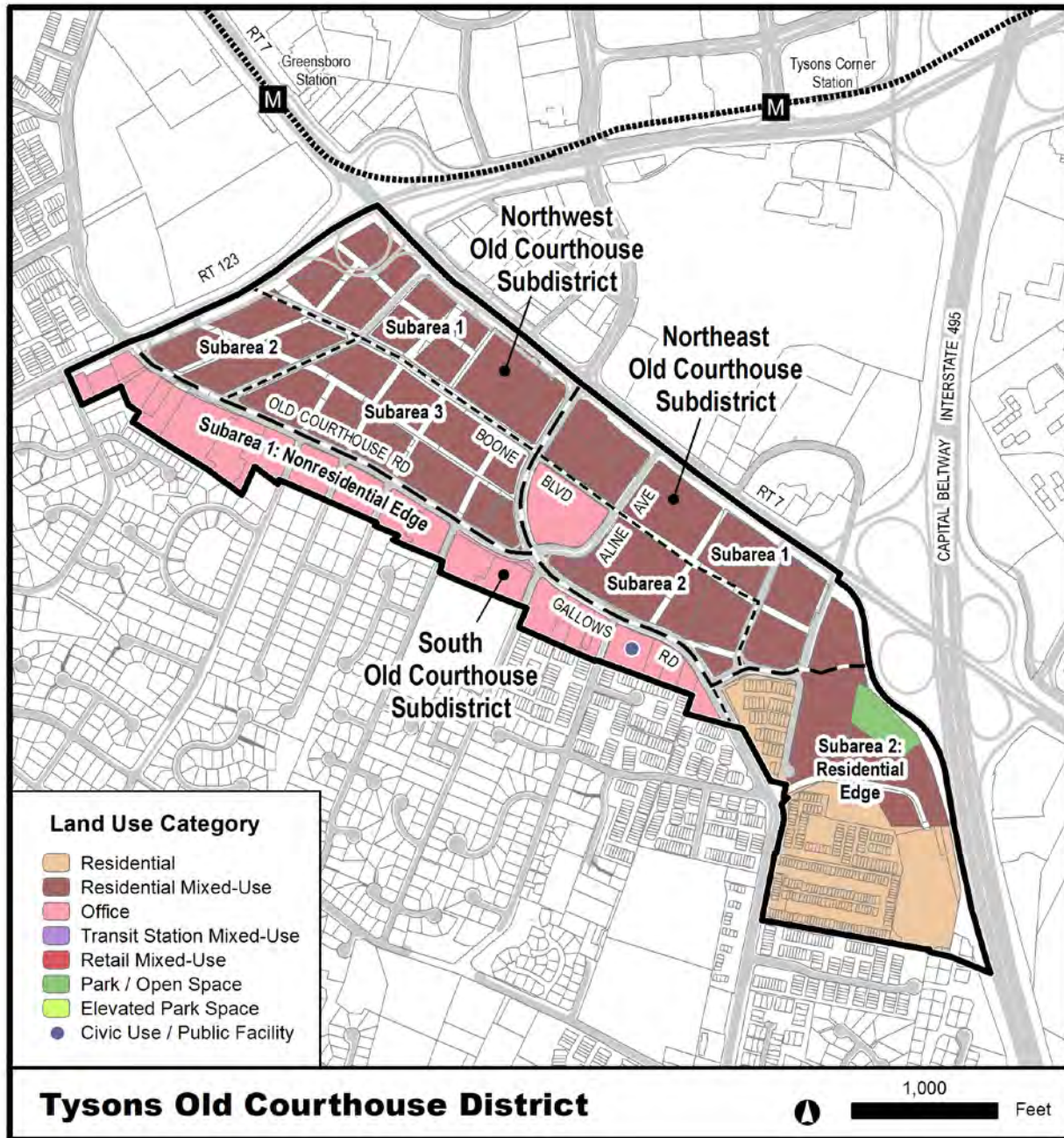
With additional infill and redevelopment, portions of the Old Courthouse District will evolve into a neighborhood that supports an active 24-hour environment where people go to restaurants or shopping after work. Residential development will become a dominant use in most subdistricts, which will create the sense of community throughout this district.

As Leesburg Pike runs through the Old Courthouse District, street treatments will calm traffic and soften its negative visual impact from the businesses and residents fronting the arterial. Active storefronts, street furniture and other pedestrian amenities will provide for a pleasant walking experience.

Pocket parks, common greens and other recreational facilities will provide gathering places within the mixed use area. These parks and open spaces would be essential to create a buffer between the adjacent communities and Tysons.

The district is composed of three subdistricts. One subdistrict forms an edge of Tysons: the South Old Courthouse Subdistrict. The other two subdistricts continue the transition to the higher intensity associated with TOD districts to the north and northwest: the Northwest Old Courthouse and Northeast Old Courthouse Subdistricts.

The land use concept for the Old Courthouse District is shown in the map below.



Note: Planned park spaces are shown conceptually on Map 9.

MAP 18

Guidance for evaluating development proposals in each subdistrict is contained in the Areawide Recommendations and the following subdistrict recommendations. Redevelopment options are dependent on the degree to which necessary public infrastructure can be provided and Plan objectives and development conditions set forth in the Areawide and subdistrict guidance can be satisfied by development proposals.

SOUTH OLD COURTHOUSE SUBDISTRICT

The South Old Courthouse Subdistrict is comprised of about 80 acres and forms an edge for this part of Tysons' southern boundary. The vision for this edge is to retain the existing low-rise and low intensity character, which provides a transition in scale and intensity from the mid-rise and high-rise commercial development along Leesburg Pike to adjacent single-family neighborhoods. The subdistrict is composed of two parts. Subarea 1 is a long narrow strip of nonresidential development on the south side of Old Courthouse Road and Gallows Road. Subarea 2 is a predominantly residential area east of Gallows Road and south of Gallows Branch Road.

Subarea 1 – Nonresidential Edge

The existing land use is predominantly low-rise office use, except for retail uses at the Chain Bridge Road and Old Courthouse Road intersection. The retail area is planned for and developed up to .35 FAR. The office area is planned for and developed at up to .50 FAR. Any future infill or redevelopment should retain the area's low-rise scale and character, in order to be compatible with the adjacent neighborhoods. Building height is limited to 35 feet.

Subarea 2 – Residential Edge

The existing land use is predominantly residential with a mix of townhouse and multifamily uses. The triangular portion surrounded by Kidwell Drive, Gallows Road and Gallows Branch Road is planned and developed with townhouse use at 12 dwelling units per acre as Kidwell Towns. Tysons Oaks is planned for and developed as townhouse use at 16 dwelling units per acre. The existing scale and character of these areas should be retained in order to continue to provide a compatible transition to the adjacent neighborhoods. Building height is limited to 35 feet.

The remainder of this subarea is planned and developed with office and residential use.

- The portion to the south of Science Applications Court is planned and developed with residential use up to 30 dwelling units per acre. Due to its location next to I-495, the residential area is required to provide noise attenuation measures as determined appropriate by the county. Building height is limited to 75 feet, except adjacent to Courts of Tysons which is limited to 45 feet.
- The portion north of Science Applications Court is planned for and developed with office use up to .50 FAR, with an option to redevelop with residential use up to 30 dwelling units per acre, similar to the area to the south. As a second option, redevelopment may be similar to that planned to the north, which is planned for office use up to 1.0 FAR or mixed use with a significant residential component up to 1.5 FAR (if the mix of uses has less traffic impact than office use at 1.0 FAR); under these options:

- Logical and substantial parcel consolidation should be provided to ensure well-designed projects that function efficiently and integrate with abutting parcels.
- Open space amenities that are publicly accessible, such as an athletic field and/or other active recreational facilities should be provided.
- Building height is limited to 130 feet tapering down on the south and west to 75 feet. If a public recreational facility, such an athletic field, is provided at grade, additional building height above 130 feet may be considered in order to accommodate this public use.
- In addition, vehicular circulation should be improved by orienting primary access toward Gallows Branch Drive.

NORTHWEST OLD COURTHOUSE SUBDISTRICT

The Northwest Old Courthouse Subdistrict is comprised of about 60 acres and is bounded by Leesburg Pike on the north, Gallows Road on the east, Old Courthouse Road on the south and Chain Bridge Road on the west. Along Leesburg Pike, development includes a variety of retail uses, and large office buildings with retail uses. Away from Leesburg Pike, to the south, the area is predominantly developed with mid-rise and low-rise office buildings which transition toward the edge of the Old Courthouse District.

The subdistrict is composed of three parts. Subarea 1 is between Leesburg Pike and Boone Boulevard. Subarea 2 is between Chain Bridge Road and Howard Avenue. Subarea 3 is between Boone Boulevard and Old Courthouse Road.

Subarea 1

This area is comprised of almost 20 acres and is located between Route 7 and Boone Boulevard.

Base Plan

This subarea is planned for and developed with office use with support retail and services uses up to 1.2 FAR, except for Tax Map 39-2((2))39, 40 and 41 and Tax Map 39-1((6))33, 35, 37 and 38, which are planned for and developed with auto sales and retail uses.

Redevelopment Options

With logical and substantial parcel consolidation that ensures well-designed projects that function efficiently and integrates with and facilitates the redevelopment of other properties in conformance with the Plan, the auto sales and retail uses are appropriate to redevelop to office use with support retail and service uses up to 1.2 FAR. As an alternative, mixed use with a significant residential component may be appropriate up to 1.8 FAR (if the mix of uses has less traffic impact than office redevelopment at 1.2 FAR). In addition, higher intensity may be allowed for property within 1/2 mile distance of the Tysons Central 7 Metro station.

A potential circulator alignment extends through or abuts this subarea, as described in the Areawide Transportation Recommendations. Redevelopment proposals along the circulator route should provide right-of-way or otherwise accommodate the circulator and should make

appropriate contributions toward its construction cost. See the Intensity section of the Areawide Land Use Recommendations.

This is an area which offers significant opportunities to provide urban design amenities and to better integrate development. The redevelopment of these properties could facilitate the creation of a significant focal point and unify this portion of the subdistrict with the area south of Boone Boulevard. Development proposals under this option should provide for the following:

- For sites with Leesburg Pike frontage, buildings should be oriented to Leesburg Pike; sites with frontage on both Leesburg Pike and Boone Boulevard should provide building entrances that are oriented to both streets.
- Development proposals should provide for better integration of the development in the subarea to adjacent areas through the provision of the planned grid of streets, pedestrian linkages, pocket parks and urban design amenities.
- If additional residential development is provided, it should include recreational facilities and other amenities for the residents and provide for affordable/workforce housing as indicated in the Areawide Land Use and Environmental Stewardship Recommendations.
- Existing building height is up to 105 feet along Leesburg Pike, except at the interchange of Leesburg Pike and Chain Bridge Road, where existing building height is 120 feet. To help ensure that infill development provides the envisioned open space and urban amenities, building height for new development should be up to 130 feet with additional height considered to accommodate housing and public uses as indicated under the Building Height Guidelines in the Areawide Urban Design Recommendations.

Subarea 2

This subarea is comprised of about 10 acres and is located between Chain Bridge Road and Howard Avenue.

Base Plan

This subarea is developed with retail uses, except for Tax Map 39-1((6))18, 24, 25, and 26, which are developed with office and hotel uses.

Redevelopment Options

With logical and substantial parcel consolidation that ensures well-designed projects that function efficiently and integrates with and facilitates the redevelopment of other properties in conformance with the Plan, this subarea is planned to redevelop with office use with support retail and service uses up to 1.0 FAR.

As an alternative, mixed use with a significant residential component may be appropriate up to 1.5 FAR (if the mix of uses has less traffic impact than office use at 1.0 FAR). In addition, higher intensity may be allowed for property within 1/2 mile distance of the Tysons Central 7 Metro station.

A potential circulator alignment extends through or abuts this subarea, as described in the Areawide Transportation Recommendations. Redevelopment proposals along the circulator route should provide right-of-way or otherwise accommodate the circulator and should make

appropriate contributions toward its construction cost. See the Intensity section of the Areawide Land Use Recommendations.

Building height is up to 105 feet on the northern portion of this subarea and 75 feet on the southern portion (see Building Height Map and Building Height Guidelines in the Areawide Urban Design Recommendations).

Subarea 3

This subarea comprises of about 27 acres and is located between Boone Boulevard and Old Courthouse Road.

Base Plan

The area is planned for and developed with office use at existing intensities.

Redevelopment Options

With logical and substantial parcel consolidation that ensures well-designed projects that function efficiently and integrates with and facilitates the redevelopment of other properties in conformance with the Plan, the subarea is planned to redevelop with office use with support retail and service uses, up to 1.0 FAR. Development proposals should be designed in a manner to create a transition between development along Leesburg Pike and the Old Courthouse Road edge. As an alternative, mixed use with a significant residential component may be appropriate up to 1.5 FAR (if the mix of uses has less traffic impact than office use at 1.0 FAR).

In addition, higher intensity may be allowed for property within 1/2 mile distance of the Tysons Central 7 Metro station.

A potential circulator alignment extends through or abuts this subarea, as described in the Areawide Transportation Recommendations. Redevelopment proposals along the circulator route should provide right-of-way or otherwise accommodate the circulator and should make appropriate contributions toward its construction cost. See the Intensity section of the Areawide Land Use Recommendations.

Development proposals should provide a central street between Howard Avenue and Gallows Road (parallel to Boone Boulevard) as well as cross streets consistent with the planned grid of streets. Building height is up to 105 feet on the Boone Boulevard side and up to 75 feet on the Old Courthouse Road side (see Building Height Map and Building Height Guidelines in the Areawide Urban Design Recommendations).

If additional residential development is provided, it should include recreational facilities and other amenities for the residents and provide for affordable/workforce housing as indicated in the Areawide Land Use and Environmental Stewardship Recommendations.

NORTHEAST OLD COURTHOUSE SUBDISTRICT

The Northeast Old Courthouse Subdistrict is comprised of about 44 acres and is bounded by Leesburg Pike on the north, I-495 on the east, Gallows Road on the west, and Gallows Road and Gallows Branch Road on the south. Along Leesburg Pike, development includes a variety of strip retail uses, and large office buildings with retail uses. Away from Leesburg Pike, to the

south, the area is predominantly developed with mid-rise and low-rise office buildings which transition toward the edge of the Old Courthouse District.

The subdistrict is composed of two parts. Subarea 1 is between Leesburg Pike and the planned Boone Boulevard extension to Kidwell Road. Subarea 2 is between the planned extension of Boone Boulevard and Gallows Road.

Subarea 1

Subarea 1 is comprised of about 25 acres and is located between Leesburg Pike and the Boone Boulevard extension.

Base Plan

Subarea 1 is planned for and developed with office and support retail and service uses up to 1.2 FAR. The exception to this is Tax Map 39-2((1))9 and Tax Map 39-2((2))48, 50, 52, 54, 56A and 58, which are planned for and developed with retail uses.

Redevelopment Options

With logical and substantial parcel consolidation that ensures well-designed projects that function efficiently and integrates with and facilitates the redevelopment of other properties in conformance with the Plan, hotel or office uses with support retail and service uses may be appropriate up to 1.2 FAR. As an alternative, mixed use with a significant residential or hotel component may be appropriate up to 1.8 FAR throughout this subarea (if the mix of uses has less traffic impact than office redevelopment at 1.2 FAR). In addition, higher intensity may be allowed for property within 1/2 mile distance of the Tysons Central 123 Metro station.

In addition, a mix of office and hotel uses up to 1.27 FAR may be appropriate for Tax Map 39-2((2))106 - 112 (which is split between Subareas 1 and 2) if the following conditions are met:

- Consolidation with Tax Map 39-2((2))114 - 116 in subarea 2;
- The resulting mix of uses has no more traffic impact than office use at 1.2 FAR on the Subarea 1 portion and office use at 1.0 FAR on the Subarea 2 portion.
- A transportation analysis should be performed in conjunction with any development application which should demonstrate how the area pedestrian and vehicular circulation can be improved. Improvements needed to enhance circulation and mitigate transportation impacts directly related to site generated traffic should be provided; and
- The hotel should provide for community-serving amenities such as meeting spaces.

All the above redevelopment options for this subarea should be designed with the intent of unifying this subarea through creating focal points, providing pedestrian and open space amenities, and interconnecting the area by means of the planned grid of streets. The intensities and land use mix should be consistent with the Areawide Land Use Recommendations.

Existing building height in this subarea is up to 105 feet. To help ensure that infill development provides the envisioned open space and urban amenities, building height for new development should be up to 130 feet with additional height considered to accommodate housing

and public uses as indicated under the Building Height Guidelines in the Areawide Urban Design Recommendations.

Subarea 2

Subarea 2 is comprised of about 19 acres and is located between the Boone Boulevard extension and Gallows Road.

Base Plan

This subarea is planned for and developed with office use with support retail and other services up to 1.0 FAR to create a transition between development along Leesburg Pike and the Old Courthouse Road edge.

Redevelopment Options

As an alternative, mixed use with a significant residential component may be appropriate up to 1.5 FAR (if the mix of uses has less traffic impact than office use at 1.0 FAR). In addition, logical and substantial parcel consolidation should be provided with all redevelopments to ensure well-designed projects that function efficiently and integrate with and facilitate redevelopment of other parcels, in conformance with the Plan.

As an option, a mix of office and hotel uses up to 1.27 FAR may be appropriate for Tax Map 39-2((2))114 - 116 (in Subarea 2) with Tax Map 39-2((2))106 - 113 (which is split between Subareas 1 and 2), if these parcels are consolidated and the conditions under the previous subarea are addressed.

All the above redevelopment options for this subarea should be designed with the intent of unifying this subarea through creating focal points, providing pedestrian and open space amenities, and interconnecting the area by means of the planned grid of streets. The intensities and land use mix should be consistent with the Areawide Land Use Recommendations.

Building height in this subarea can be up to 130 feet west of Aline Avenue and up to 75 feet east of Aline Avenue. However, if parcels are consolidated with the portion of Tax Map 39-2((2))106 - 112 in this sub-unit, building height up to 130 feet should be considered in order to provide design flexibility needed to ensure the provision of envisioned open space and urban amenities and if housing and/or public uses are provided, additional height may be appropriate as indicated under Building Height Guidelines in the Areawide Urban Design Recommendations.

Additional Guidance for Northwest and Northeast Subdistricts

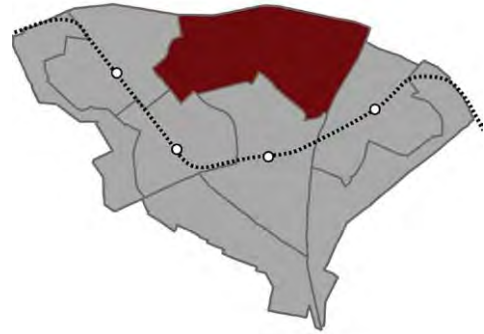
To achieve the redevelopment options envisioned for both the Northwest and Northeast Old Courthouse Subdistricts, development proposals should address the Areawide Recommendations, which include the following.

- Redevelopment should occur in a manner that fosters vehicular and pedestrian access and circulation. Development proposals should show how the proposed development will be integrated within the subdistrict as well as the abutting districts/subdistricts through the provision of the grid of streets.
- The major circulation improvement for this district is the Boone Boulevard extensions to the west across Chain Bridge Road and to the east to Kidwell Drive. Development

should allow for the eventual construction of this roadway. If property or uses are to be expanded, developed or redeveloped along this road's planned alignment, right-of-way should be dedicated and construction of the collector road should be provided, as determined appropriate by the county.

- A potential circulator alignment extends through both subdistricts along Boone Boulevard and its extension to Kidwell Drive, as described in the Areawide Transportation Recommendations. In addition to the above guidance for this area, redevelopment proposals along the alignment should provide right-of-way or otherwise accommodate this circulator and should make appropriate contributions toward its construction cost. See the Intensity section of the Areawide Land Use Recommendations.
- Urban design and open space amenities, such as streetscapes, plazas, courtyards, landscaping, lighting and seating should be provided consistent with the Areawide Urban Design Recommendations, as well as consistent in quantity with the urban park and open space standards under the Areawide Environmental Stewardship Recommendations.

North Central



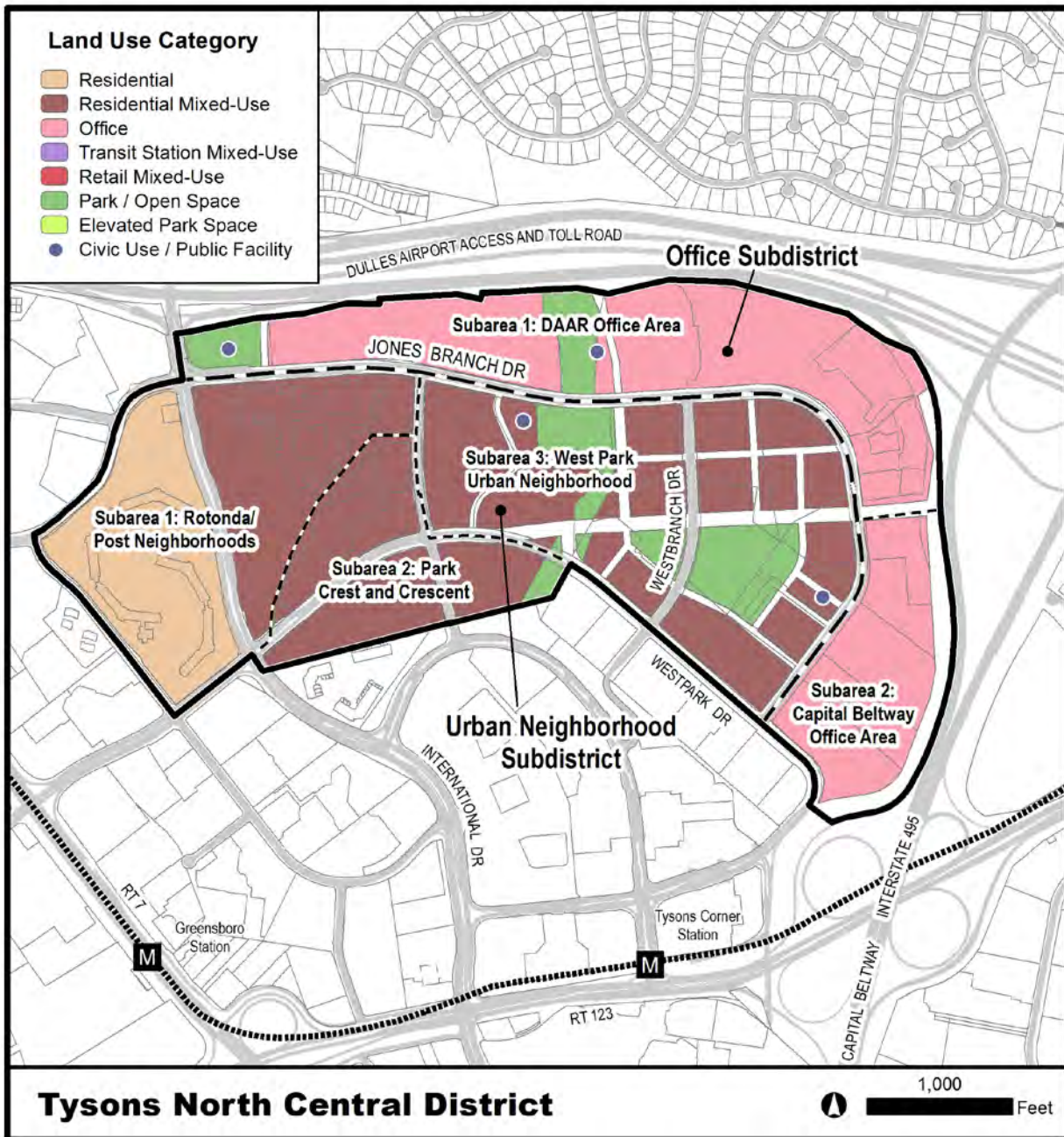
The land use pattern in the North Central District, which is located primarily between West Park Drive and the DAAR, will allow for a transition between Tysons Central 123 and the adjacent community north of Tysons. The DAAR serves as an additional buffering element. Office uses would be mostly located adjacent to the DAAR, providing easy access from the Toll Road and continuing the office focus east in the Tysons West District.

Moving into the heart of the district, residential land uses could be concentrated along a potential circulator route. The district is envisioned to become a vibrant, mixed use residential neighborhood, with local-serving retail, dedicated parks and civic uses, and a pedestrian-friendly street network for residents and workers in the neighborhood.

The local streets, along with a finer grid of streets and a linear park/green network, would lead people to the circulator and encourage them to walk. As the central feature of the district, the circulator could help shape its urban form. Having a mix of uses, portions of the North Central District should develop with a 24-hour environment.

The district's ponds and small streams should be enhanced to add to the amenities of the neighborhoods. Urban parks could include a green network leading from Tysons Central 123 to the employment area adjacent to the DAAR. A new 8 to 10 acre urban park will be a central feature of this district that provides both active and passive recreational facilities and a focus for civic gatherings for residents and employees.

The land use concept for the North Central District is shown in the map below. The district is composed of two subdistricts: an office subdistrict and an urban neighborhood



Note: Planned park spaces are shown conceptually on Map 9.

MAP 19

Guidance for evaluating development proposals in each subdistrict is contained in the Areawide Recommendations and the following subdistrict recommendations. Redevelopment options are dependent on the degree to which necessary public infrastructure can be provided and Plan objectives and development conditions set forth in the Areawide and subdistrict guidance can be satisfied by development proposals.

OFFICE SUBDISTRICT

This subdistrict is north and east of Jones Branch Drive and is developed with office buildings containing corporate headquarters as well as one of Tysons' larger hotels. The vision for this area is to continue to be a focus of corporate headquarters and regional offices. The subdistrict has two subareas: the DAAR Office Subarea and the Capital Beltway Office Subarea.

Subarea 1: DAAR Office Area

This is the northernmost portion of the West Park office development and provides a transition in building height to the single-family neighborhoods to the north. Existing development includes the corporate headquarters of Freddie Mac, USA Today and Gannett.

Base Plan

The area is planned for office up to 1.0 FAR, except for the westernmost property which is developed with the Tysons Spring Hill Transit Center.

Redevelopment Option

With the advent of Metrorail, the transit center may not be needed, which would allow consideration of other public uses to occupy the property, such as a fire station. A new fire station on this property would replace Fire Station 29, which is planned to be demolished and its land area incorporated in redevelopment near the Tysons West Metro station. The transit center property could also be considered for recreational uses, in particular one or two athletic fields, which may be provided at grade or above a structured parking garage.

Tax Map 29-2((15))A6 is planned to redevelop with office use up to a 1.0 FAR, which is consistent with the use and intensity of the other parcels in this subarea. Since this parcel and the abutting parcel to the west is the likely location of the planned ramps from the DAAR to Jones Branch Drive, the redevelopment of parcel A6 as well as additional development on the abutting parcel should be designed to accommodate these ramps.

For most of this subarea, the maximum building height is 75 feet. The exceptions are east of the proposed ramps from the DAAR to Jones Branch Drive where building height limits increase to 100 feet as shown conceptually on the building height map in the Urban Design section. Tax Map 29-2((15))C2 is designated as Tysons' northern gateway building (one of four gateway buildings in Tysons) and has an approved height limit of 300 feet.

Exposed parking structures adjacent to the DAAR should not be visible to the residential neighborhoods north of the Toll Road.

A potential circulator alignment abuts this subarea, as described in the Areawide Transportation Recommendations. Redevelopment proposals along the alignment should

provide right-of-way or accommodate the circulator and make appropriate contributions toward its construction cost. See the Intensity section of the Areawide Land Use Recommendations.

Subarea 2: Capital Beltway Office Area

This subarea between Jones Branch Drive and the I-495 is developed with office buildings and one of Tysons' larger hotels.

Base Plan

The area is planned for and developed with intensities of 1.0 and 1.65 FAR, which recognize the existing development. The building heights range from 130 to 175 feet, as shown conceptually on the Building Height Map in the Areawide Urban Design Recommendations.

Redevelopment Option

Potential circulator alignments about this subarea, as described in the Transportation section. Redevelopment proposals along the alignments should provide right-of-way or otherwise accommodate the circulators and should make appropriate contributions towards their construction costs. Higher intensity may be allowed for property within 1/2 mile distance of the Tysons Central 123 Metro station. See the Intensity section of the Areawide Land Use Recommendations.

Public facility, transportation and infrastructure analyses should be performed in conjunction with any redevelopment application. The results of these analyses should identify necessary improvements, the phasing of improvements with new development, and appropriate measures to mitigate other impacts. Also, commitments should be provided for needed improvements and for the mitigation of impacts identified in the public facility, transportation and infrastructure analyses, as well as improvements and mitigation measures identified in the Areawide Recommendations.

The ability to realize planned intensities will depend on the degree to which access and circulation improvements are implemented consistent with guidance in the Areawide Urban Design and Transportation Recommendations.

URBAN NEIGHBORHOOD SUBDISTRICT

This subdistrict is south and west of Jones Branch Drive and north of the Tysons Central 123 District. The western half of the subdistrict is developed with multifamily use. The eastern half of the subdistrict is developed with suburban office buildings with mostly surface parking. The vision is to have substantial redevelopment (especially in the eastern portion) that will transform the area into urban neighborhoods. The subdistrict has three subareas.

Subarea 1: Rotonda/Post Neighborhoods

This area is comprised of about 65 acres and is bounded by Spring Hill Road and Jones Branch Drive on the north, Subarea 2 on the east, Westpark Drive on the south and Greensboro Drive on the west. Existing development is multifamily residential and contains about 2,000 dwelling units.

Base Plan

The area is planned for and developed with residential use at 30 dwelling units per acre.

Redevelopment Option

The vision for Subarea 1 is to preserve and enhance the residential area on the west side of International Drive (The Rotonda). To preserve and enhance, road improvements should minimize impact on this area. For example the planned widening of Greensboro Drive should be designed in a manner that minimizes impacts on the entrance of the Rotonda and on its existing tree canopy.

Redevelopment of the area east of International Drive should be considered, especially if it provides affordable and workforce housing and is phased with the provision of circulator service. The minimum affordable/workforce housing commitment should be provided as indicated in the Areawide Land Use Recommendations; in addition, the development proposal should have as an objective increased affordable housing opportunities and positive impacts on the environment, public facilities and transportation systems (See Objective 11 in the Land Use section of the Policy Plan).

Prior to operation of circulator service, redevelopment in this subarea could be considered for additional residential use with intensity up to 1.5 FAR. Redevelopment proposals should provide right-of-way and make appropriate contributions toward the construction cost of the circulators which abut this area. See the Intensity section of the Areawide Land Use Recommendations.

Public facility, transportation and infrastructure analyses should be performed in conjunction with any development application. The results of these analyses should identify necessary improvements, the phasing of these improvements with new development, and appropriate measures to mitigate other impacts. Also, commitments should be provided for needed improvements and for the mitigation of impacts identified in the public facility, transportation and infrastructure analyses, as well as improvements and mitigation measures identified in the Areawide Recommendations.

The ability to realize planned intensities will depend on the degree to which access and circulation improvements are implemented consistent with guidance in the Areawide Urban Design and Transportation Recommendations.

The maximum building height in this subarea is 75 to 150 feet, as shown conceptually on the Building Height Map in the Areawide Urban Design Recommendations. As indicated under the Building Height Guidelines in the Areawide Urban Design Recommendations, building heights should vary within the subarea.

Redevelopment of the Post Neighborhood area should retain and enhance on-site recreational amenities.

Subarea 2: Park Crest and Crescent

This area is comprised of about 32 acres, bounded by Subarea 1 on the north and west, Subarea 3 to the east, and the Tysons Central 123 District on the south. This area contains the Park Crest and Crescent residential developments.

Base Plan

The area north of Westpark Drive containing the Park Crest development is planned for high rise, high density residential and retail uses at its currently approved intensity. The area south of Westpark Drive is planned for and developed with multifamily residential at 30 dwelling units per acre.

Redevelopment Option

The vision for Subarea 2 is to remain a residential mixed use area. However, some office uses may also be appropriate for a portion of the area north of Westpark Drive given its close proximity to the DAAR and the existing office focus there. Office uses may be considered when designed in a manner that complements the existing residential and retail uses in this area. Office uses should be limited to the conversion of one of the approved residential buildings and only if the resultant traffic impact is comparable or less than the currently approved residential building.

For the portion of Subarea 2 to the south of Westpark Drive, higher intensity residential mixed use developments are appropriate to replace the existing residential uses. Redevelopment of this area to an urban residential neighborhood should be considered if it will provide affordable and workforce housing and if the redevelopment is phased with the provision of circulator service. Prior to operation of circulator service, the area should be developed in residential use up to 1.5 FAR. Redevelopment proposals should provide right-of-way or otherwise accommodate the circulators and make appropriate contributions toward their construction cost. See the Intensity section of the Areawide Land use Recommendations.

Public facility, transportation and infrastructure analyses should be performed in conjunction with any development application. The results of these analyses will identify necessary improvements, the phasing of these improvements with new development, and appropriate measures to mitigate other impacts. Also, commitments should be provided for needed improvements and for the mitigation of impacts identified in the public facility, transportation and infrastructure analyses, as well as improvements and mitigation measures identified in the Areawide Recommendations.

The ability to realize planned intensities will depend on the degree to which access and circulation improvements are implemented consistent with guidance in the Areawide Urban Design and Transportation Recommendations.

The maximum building height in this subarea is 150 feet, as conceptually shown on the Building Height Map in the Areawide Urban Design Recommendations. As indicated under the building height guidance in the Areawide Urban Design Recommendations, building heights should vary within the subarea. Approved building heights north of Westpark Drive average 150 feet and due to topographic conditions, in some cases, may exceed 150 feet.

Subarea 3: West Park Urban Neighborhood

This area is comprised of about 88 acres, bounded by Jones Branch Drive on the north and east, the Tysons Central 123 District on the south, and the Subarea 2 neighborhood on the west. This area contains the central portion of the West Park office development.

Base Plan

This area is planned for office with support retail and service uses at existing intensities, which average about 0.60 FAR.

Redevelopment Option

With the provision of Metrorail and circulator service linking Subarea 3 to the rest of Tysons, the vision for this area is to redevelop to urban residential neighborhoods at substantially higher intensity. Redevelopment of this area to an urban residential neighborhood should be considered if it will provide affordable and workforce housing and if the redevelopment is phased with the provision of circulator service. Prior to operation of circulator service, the area should be developed in residential use up to 1.5 FAR. Redevelopment proposals should provide right-of-way or otherwise accommodate the circulators and make appropriate contributions toward their construction cost. In addition, higher intensity may be allowed in this subarea for property within 1/2 mile distance of the Tysons Central 123 Metro station. See the Intensity section of the Areawide Land Use Recommendations.

To achieve this vision, development proposals should address the Areawide Recommendations and provide for the following.

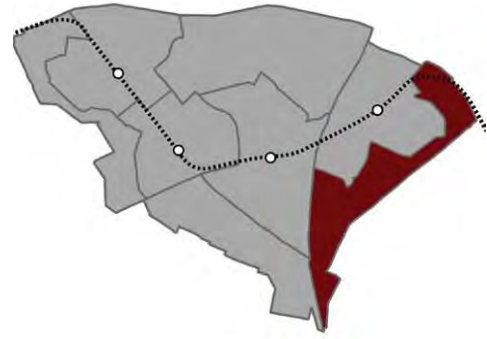
The successful redevelopment of this area is closely linked to the redevelopment of the adjacent South West Park Subarea in the Tysons Central 123 District. West Park Urban Neighborhood is planned to redevelop from a suburban office park to a primarily residential area with supporting uses, including ground level retail and public facilities. South West Park is planned for a mix of uses with a concentration of office uses. To ensure that the redevelopment of each of these areas is consistent with the overall land use goals for Tysons, the total amount of office development in the two subareas combined should be no more than 3 million square feet.

- The vision is to redevelop this subarea into an urban residential neighborhood. In addition to a significant increase in intensity, more diversity in land use is an essential element for creating urban neighborhoods. The mix of uses should include a small office component, hotels, public uses, ground level retail and service uses. The intensities and land use mix should be consistent with the Areawide Land Use Recommendations.
- Logical and substantial parcel consolidation should be provided that results in well-designed projects that function efficiently on their own, include a grid of streets and public open space system, and integrate with and facilitate the redevelopment of other parcels in conformance with the Plan. To ensure the provision of public facilities, a street grid, and the desired land use pattern, redevelopment proposals in this subarea should consolidate with a significant portion of the South West Park Subarea in the Tysons Central 123 District. This level of consolidation would be sufficient in size to permit redevelopment in several phases that are linked to the provision of public facilities and infrastructure and demonstrate attainment of critical Plan objectives such as TDM mode splits, green buildings and affordable/workforce housing. If consolidation cannot be achieved, as an alternative, coordinated proffered development plans may be provided as indicated in the Areawide Land Use Recommendations.
- Redevelopment should occur in a manner that fosters vehicular and pedestrian access and circulation. Development proposals should show how the proposed development will be integrated within the subarea as well as the abutting districts/subdistricts through the provision of the grid of streets. In addition to the grid of streets, pedestrian and bike

circulation improvements should be provided that also improve connectivity. The ability to realize planned intensities will depend on the degree to which access and circulation improvements are provided consistent with the Areawide Urban Design and Transportation Recommendations.

- Urban design and open space amenities, such as streetscapes, plazas, courtyards, landscaping, lighting and seating should be provided according to the Areawide Urban Design Recommendations and consistent in quantity with the urban park and open space standards in the Areawide Environmental Stewardship Recommendations. The area's ponds and small streams should be enhanced and provide a green network that links this subarea to the Tysons Central 123 District and to the employment area adjacent to the DAAR. The major open space feature in this area is an 8 to 10 acre park, which provides an opportunity for both active and passive recreational facilities and a focus for civic gatherings for residents and employees. At this new park or at other locations in this area, there should be at least two new athletic fields to serve the residents of this area.
- Residential developments should include recreational facilities and other amenities for the residents, and provide for affordable/workforce housing as indicated in the Areawide Land Use Recommendations.
- Public facility, transportation and infrastructure analyses should be performed in conjunction with any development application. The results of these analyses should identify necessary improvements, the phasing of these improvements with new development, and appropriate measures to mitigate other impacts. Also, commitments should be provided for needed improvements and for the mitigation of impacts identified in the public facility, transportation and infrastructure analyses, as well as improvements and mitigation measures identified in the Areawide Recommendations.
- In addition, a specific public facility need identified for this area is an elementary school; the school should either be located next to the area's large urban park to utilize this open space amenity or be located elsewhere in this subarea on property which can accommodate its recreational needs. An alternative site on Jones Branch Drive is shown on the Conceptual Land Use Map.
- The maximum building heights in this subarea are between 75 to 175 feet, as shown conceptually on the building height map in the Areawide Urban Design Recommendations. As indicated under the building height guidance in the Areawide Urban Design Recommendations, building heights should vary within the subarea.

East Side



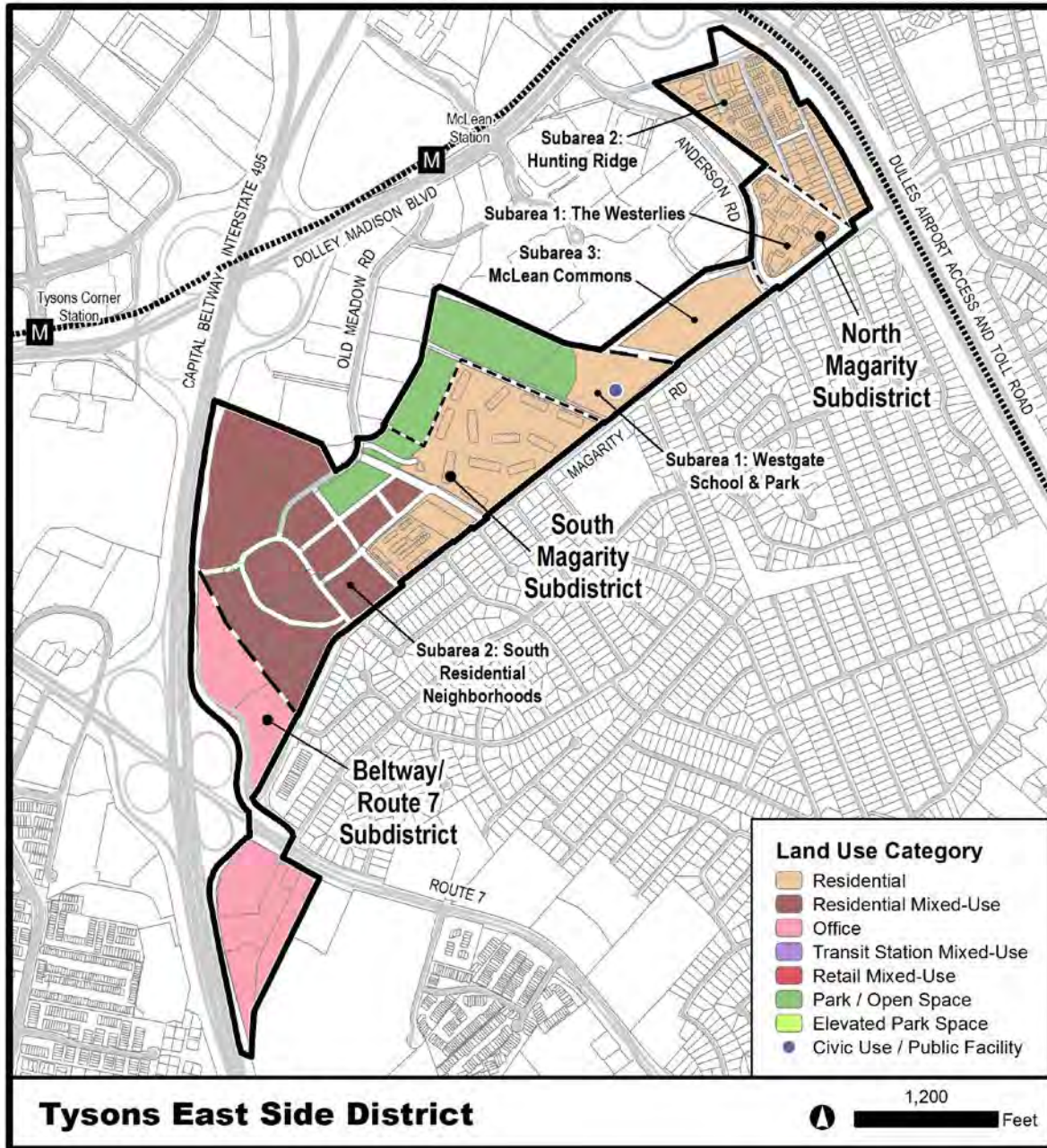
The East Side District is a residential district, which is located on the edge of Tysons, mostly to the east and south of the Tysons East TOD District. As an “edge district,” it will have lower intensities than other parts of Tysons, enabling it to serve as a transition area between higher intensity TOD districts and the adjacent Pimmit Hills neighborhood abutting Tysons.

Portions of the East Side District are envisioned to redevelop into urban residential neighborhoods. These new neighborhoods should include limited retail and office uses intended to support the local residential population and to provide Tysons with some live-work opportunities.

As redevelopment occurs in portions of the district, the street network will become a finely scaled grid of streets, encouraging walking and biking. Connections to Metro stations will be provided by a future transit circulator, walking paths and the new grid of streets. The district will have a distinct residential quality, where neighbors can socialize in one of the many pocket parks that are planned to be located throughout the district. The district provides an opportunity to add recreational facilities to those already provided at the existing Westgate Park and School.

Guidance for evaluating development proposals in each subdistrict is contained in the Areawide Recommendations and the following subdistrict recommendations. Redevelopment options are dependent on the degree to which necessary public infrastructure can be provided and Plan objectives and development conditions set forth in the Areawide and subdistrict guidance can be satisfied by development proposals.

The land use concept for the East Side District is shown on the map below. The East Side has three subdistricts: North Magarity, South Magarity and the Beltway/Route 7 Subdistrict.



Note: Planned park spaces are shown conceptually on Map 9.

MAP 20

NORTH MAGARITY SUBDISTRICT

The subdistrict consists of three residential areas: the Westerlies, Hunting Ridge and a portion of the McLean Commons. The Westerlies and McLean Commons abut Magarity Road. Hunting Ridge abuts the DAAR.

Subarea 1: The Westerlies

This subarea comprises about 12 acres and is located at the north corner of the intersection of Anderson and Magarity Roads. The Westerlies (Tax Map 30-3((26)) all parcels) is planned and developed as a transition to Pimmit Hills with residential use at 12 dwelling units per acre. Building height is limited to a maximum of 45 feet (see Building Height Guidelines in the Areawide Urban Design Recommendations).

Subarea 2: Hunting Ridge

This subarea comprises about 25 acres and is located abutting to the DAAR between Magarity and Chain Bridge Road. The Hunting Ridge neighborhood was developed originally with single-family use at 2 to 3 dwelling units per acre, but is planned for redevelopment with townhouses at 8-12 dwelling units per acre and multifamily use at 20-30 dwelling units per acre. Much of the neighborhood has been redeveloped under this option which is designed to create viable living environments that are compatible with adjacent uses and provide recreational facilities and other amenities for the residents. Development proposals should address the Areawide Recommendations, which includes the provision of affordable/workforce housing and should provide for the following.

- Logical and substantial parcel consolidation that provides for well-designed projects that function efficiently and integrates with and facilitates the redevelopment of other parcels in conformance with the Plan. Redevelopment should occur in a manner that does not impede vehicular circulation to any unconsolidated parcels.
- The site design should ensure that there is a buffer to screen the development from the DAAR and to include noise attenuation measures as may be determined appropriate.
- Improved pedestrian circulation (sidewalks and/or trails) including appropriate urban design and open space amenities. Pedestrian connections to the abutting district (Tysons East), to Chain Bridge Road, and to Magarity Road should be provided.
- Building height is limited to a maximum of 45 feet (also, see Building Height guidance in the Areawide Urban Design Recommendations).

Subarea 3: McLean Commons

This subarea is comprised of about 12 acres and is located at the south corner of Anderson and Magarity Roads.

Base Plan

This portion of the McLean Commons is planned for and developed with residential use up to 20 dwelling units per acre. The existing building height limit is 45 feet.

Redevelopment Option

As an option, existing residential uses are appropriate to redevelop as residential use at 20-30 dwelling units per acre. Redevelopment under this option should be compatible with adjacent uses, and provide recreational facilities and other amenities for the residents. Development proposals should address the Areawide Recommendations, and should provide for the following.

- The minimum affordable/workforce housing commitment should be provided as indicated in the Areawide Land Use Recommendations; in addition, the development proposal should have as an objective increased affordable housing opportunities and positive impacts on the environment, public facilities and transportations (See Objective 11 in the Land Use section of the Policy Plan).
- A compatible transition to the Pimmit Hills single-family neighborhood across Magarity Road, by screening and/or landscape buffering, and/or by designing structures to act as a harmonious transition.
- Publicly accessible open space and recreational uses should be considered on the area between Anderson Road and the Hunting Ridge subarea. This will provide a transition in scale from this area to Hunting Ridge, as well as provide recreational facilities to serve both subareas.
- Improved pedestrian circulation (sidewalks and/or trails) including appropriate urban design amenities such as plazas, courtyards, landscaping, lighting and seating.
- Development proposals should show how the proposed development will be integrated with the abutting Tysons East District through providing the grid of streets and urban design amenities.
- Building height is limited to a maximum of 90 feet, except adjacent to Magarity Road which is limited to 45 feet (also, see the Building Height guidance in the Areawide Urban Design Recommendations).

SOUTH MAGARITY SUBDISTRICT

Magarity South Neighborhoods are developed with residential use, except for the northernmost portion, which is the location of an elementary school and park.

Subarea 1: Westgate School and Park

This is developed and planned for public school and park uses. These facilities are Westgate Elementary School, Westgate Park and a portion of Scotts Run Park. Scotts Run Park is envisioned to become an open space amenity with improved access from the planned grid of streets and the provision of connecting sidewalks and trails (See the discussion of Parks and Open Space in the Areawide Environmental Stewardship Recommendations). Subject to the approval of a park master plan revision for Westgate Park, a redesign of existing facilities should be considered to include an additional athletic field to meet the recreational needs of residents in the East Side District. This subarea could also be the location for one of the new school sites that will be required to serve new residential development in Tysons.

Subarea 2: South Residential Neighborhoods

This subarea is comprised of about 100 acres and is located south of West Park School between Magarity Road and I-495.



View from future urban neighborhood in the South Magarity Subdistrict

Base Plan

This subarea is planned for and developed with low-rise multifamily use up to 20 dwelling units per acre, except for the Regency and Encore high-rise apartments which are planned for and developed with multifamily use up to 30 dwelling units per acre.

Redevelopment Option

As an option, the Dolley Madison Apartments at Tysons (Tax Map 39-2((1))67, 67C, 67E, 67F, 67G and 72) are appropriate for redevelopment with residential mixed use up to 1.5 FAR. A development proposal under this option should address the Areawide Recommendations and should provide for the following:

- Redevelopment should include full parcel consolidation that ensures a well-designed project that functions efficiently and integrates with the surrounding multifamily uses in terms of scale and character.

- This residential project should provide for recreational and other amenities as well as support retail and service uses for the residents. Proposed redevelopment should be accompanied by the dedication of public or publicly accessible park land, and by the construction of recreational facilities, which include the provision of one athletic field. In addition, creative approaches should be used to ensure provision of other recreational facilities. These approaches may include indoor and rooftop facilities or those located above underground stormwater management facilities as well as providing additional building height flexibility when providing at grade public recreation facilities.
- The minimum affordable/workforce housing commitment should be provided as indicated in the Areawide Land Use Recommendations; in addition, the development proposal should have as an objective increased affordable housing opportunities and positive impacts on the environment, public facilities and transportation systems (See Objective 11 in the Land Use section of the Policy Plan).
- A compatible transition to the Pimmit Hills single-family neighborhood across Magarity Road, by screening, landscape buffering and/or through building design.
- For redevelopment near I-495, noise attenuation measures should be provided as determined appropriate by the county.
- Vehicular connections from Old Meadow Road to Magarity Road as well as other streets that create urban blocks consistent with guidance in the Urban Design and Transportation chapters of the Areawide Recommendations.

Building heights in this subarea ranges from 45 feet to 150 feet, depending upon location, as conceptually shown on the building height map in the Areawide Urban Design Recommendations. The lowest building height is adjacent to Magarity Road which has a maximum height of 45 feet. Height increases with distance from Magarity Road, with this area's maximum height of 150 feet limited to the existing Regency and Encore residential buildings, which are adjacent to the I-495. (See also the building height guidelines in the Areawide Urban Design Recommendations.)

A potential circulator alignment is shown on Old Meadow Road and extends across I-495 (as described in the Transportation section of the Areawide Recommendations). In addition to the above guidance for this area, redevelopment proposals along the circulator route should provide right-of-way or otherwise accommodate the circulator and make appropriate contributions toward its construction cost. See the Intensity section of the Areawide Land Use Recommendations.

BELTWAY/ROUTE 7 SUBDISTRICT

The only portion of the East Side District that is developed with commercial use is the North and South quadrants of the Beltway/Route 7 Subdistrict. The North quadrant is entirely developed with office use and the South quadrant is developed with office use and a hotel.

The North quadrant is planned for and developed with office, support retail and service uses up to .85 FAR. As an option, the office building on Tax Map 39-2((1))62B may be appropriate for an expansion up to .90 FAR, if a development proposal provides for the following:

- Any expansion or alteration should maintain the existing buffer area and screening to avoid any visual impacts on the adjacent housing;
- Any additional structures on the subject property should be designed to be architecturally compatible with the existing office buildings;
- A transportation analysis should be performed in conjunction with any development application, and commitments for any improvements identified as needed to mitigate transportation impacts directly related to site generated traffic should be provided;
- Any cellar space included in the expansion will not be used for office space or other peak hour traffic generating purposes.
- Building height does not exceed 130 feet (also, see Building Height Guidelines).

The South quadrant should retain its existing character which provides a transition in scale to the neighborhood east of Tysons. The office buildings and hotel adjacent to I-495 are planned and developed up to 1.0 FAR, and the office uses adjacent to George C. Marshall High School are planned and developed up to .50 FAR. Building heights range from 75 to 105 feet, depending upon location (see Building Heights Map and Building Height Guidelines in the Areawide Urban Design Recommendations).