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**By Electronic Mail - Tysons@fairfaxcounty.gov**

November 5, 2015

Fairfax County Planning Commission  
Attn: Tysons Committee  
12000 Government Center Parkway, Suite 300  
Fairfax, Virginia 22035

**RE: Tysons Comprehensive Plan Amendment**

Dear Planning Commissioners:

On behalf of the Tysons Partnership, I am writing to thank you for all of your efforts in updating and improving the Comprehensive Plan for Tysons. Overall, the Partnership is supportive of many of the proposed changes and expects that the new text will successfully guide the future redevelopment and ongoing revitalization of Tysons. However, we respectfully submit for your consideration some editorial tweaks and certain key changes that we believe will help refine and clarify the guidance you've already put forth.

For example, we understand that the updated Conceptual Land Use Map in the Land Use section was updated to reflect approved development plans; however, the inclusion of all approved parks and public facilities on a map that is intended to be a planning guide could render future development plans or proffered condition amendment applications out of conformance with the Comprehensive Plan. We respectfully submit that planned land uses and approved parks/public facilities should be depicted on separate maps and annotated accordingly. In addition, and also in the Land Use section, we've proposed several changes to the phasing guidance in order to clarify and appropriately time the triggers for transportation improvements and programs, while still carrying forward the County's critical message that redevelopment proposals will need to accommodate transportation and infrastructure improvements, achieve trip reduction objectives and help change travel patterns to the greatest extent feasible.

Of considerable importance is the revision to the discussion of the Initial Development Level ("IDL"). The IDL was included in the 2010 Plan as a means of addressing the need to phase development to needed transportation improvements. Since 2010, the FCDOT has undertaken numerous studies and the Board has adopted policies to fund the needed improvements, including the Grid of Streets Transportation Fund, the Tysons-wide Transportation Fund and the Tysons Service District. Since the IDL is no longer applicable, it would be appropriate to delete the section of IDL in its entirety. The continued inclusion of this language giving the history of why an IDL was originally included will be confusing going forward. The Comprehensive Plan is intended to be a forward-looking plan and not an historic document. The definition of an IDL and its implementation is very confusing and could have a chilling effect on the development of Tysons under the Plan. In

addition, it was the understanding of land owners that once the policies were in place to fund necessary transportation improvements, an IDL would no longer be necessary and would be deleted from the Comprehensive Plan.

In the Transportation section of the Area Wide Guidance, we've highlighted certain areas of concern and proposed modifications to the text in accordance with recommendations from our expert consultants and direction given by the Planning Commission's Tysons Sub-Committee. For example, we note that during its review of the Transportation section, the Sub-Committee took issue with the concept of adding lanes to the Dulles Toll Road; specifically, the members were concerned about the practicality of making that improvement. In addition, and of supreme importance to Partnership members, is the Table 7A and 7B funding guidance. It has become clear to us that, despite the large sums of money already accumulating in the County's coffers for completion of the grid of streets, it is unlikely those funds will be used for condemnation of missing links, as contemplated during the 2010 Comprehensive Plan review. As a result, the Partnership feels strongly that zoning applications' required contributions should be recalculated to exclude costs for the County's acquisition of right-of-way from those properties where, according to the Comprehensive Plan, no redevelopment is planned or occurring.

Furthermore, it is unclear whether and when the transportation improvements listed in Table 7B will be required to come on-line or by whom they will be paid. We suggest that the County identify funding sources for those improvements other than the already over-burdened development community.

Enclosed please find the latest Staff proposed version of Plan revisions with the Partnership changes and comments added. You will see proposed changes sprinkled through the Land Use, Transportation and Environmental Stewardship sections of the Comprehensive Plan, which were submitted by the individual members of the Partnership and their consultants and then compiled so as to be presented to you in one comprehensive package. We would be happy to provide additional information or comment upon request.

Again, many thanks for your tireless efforts to make Tysons the dynamic, highly sought-after, urban environment that it is quickly becoming. We are excited to watch it all unfold.

Sincerely,



Michael A. Caplin  
President

cc: Chairman and members of the Fairfax County Board of Supervisors  
Fred R. Selden, Director, Fairfax County Department of Planning and Zoning  
Barbara A. Byron, Director, Fairfax County Office of Community Revitalization



Tysons Partnership suggested changes are highlighted in yellow. Please also see comment boxes.

## LAND USE

The land use concept creates a very different place from what exists in Tysons in 2010. It transforms 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, tapering down to transition 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 of 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, which 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 stable adjoining residential neighborhoods outside of Tysons.

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

## MIX OF USES

~~Overall, the~~ proportion of residential ~~development~~ 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 2030<sup>1</sup>.~~ Ultimately, the desired land use mix will provide a ratio of four jobs for every household in Tysons – a significant improvement over the ~~2010~~ 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 have existed in Tysons ~~in 2010, such~~ 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 ~~vertically (in the same a single building)~~ or horizontally (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 ~~should~~ 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.

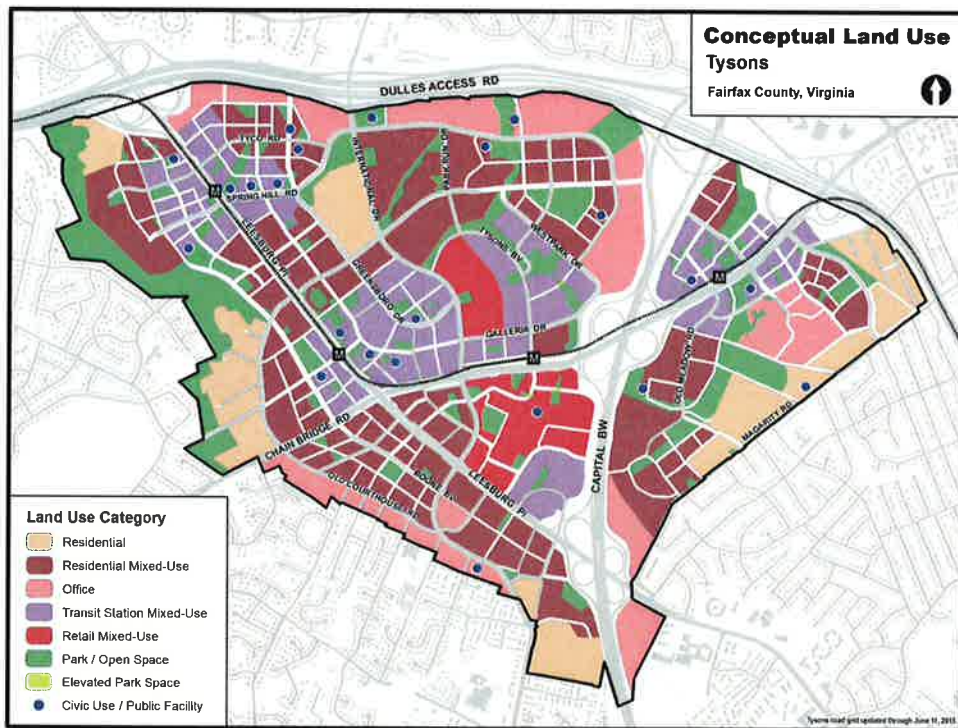
The following land use categories correspond to the proposed conceptual land use pattern, shown on Map 3. These categories indicate a general proportion of uses; however, the appropriate mix will be evaluated on a case-by-case basis during the development review process. Projects that ~~span multiple~~ contain more than one land use ~~category~~ categories 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 ~~intensity~~ intensities. The conceptual land use map generally reflects the highest intensity redevelopment option.

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<sup>1</sup> — It is estimated that by the year 2030 Tysons could have approximately 167,000 jobs and 44,000 residents.

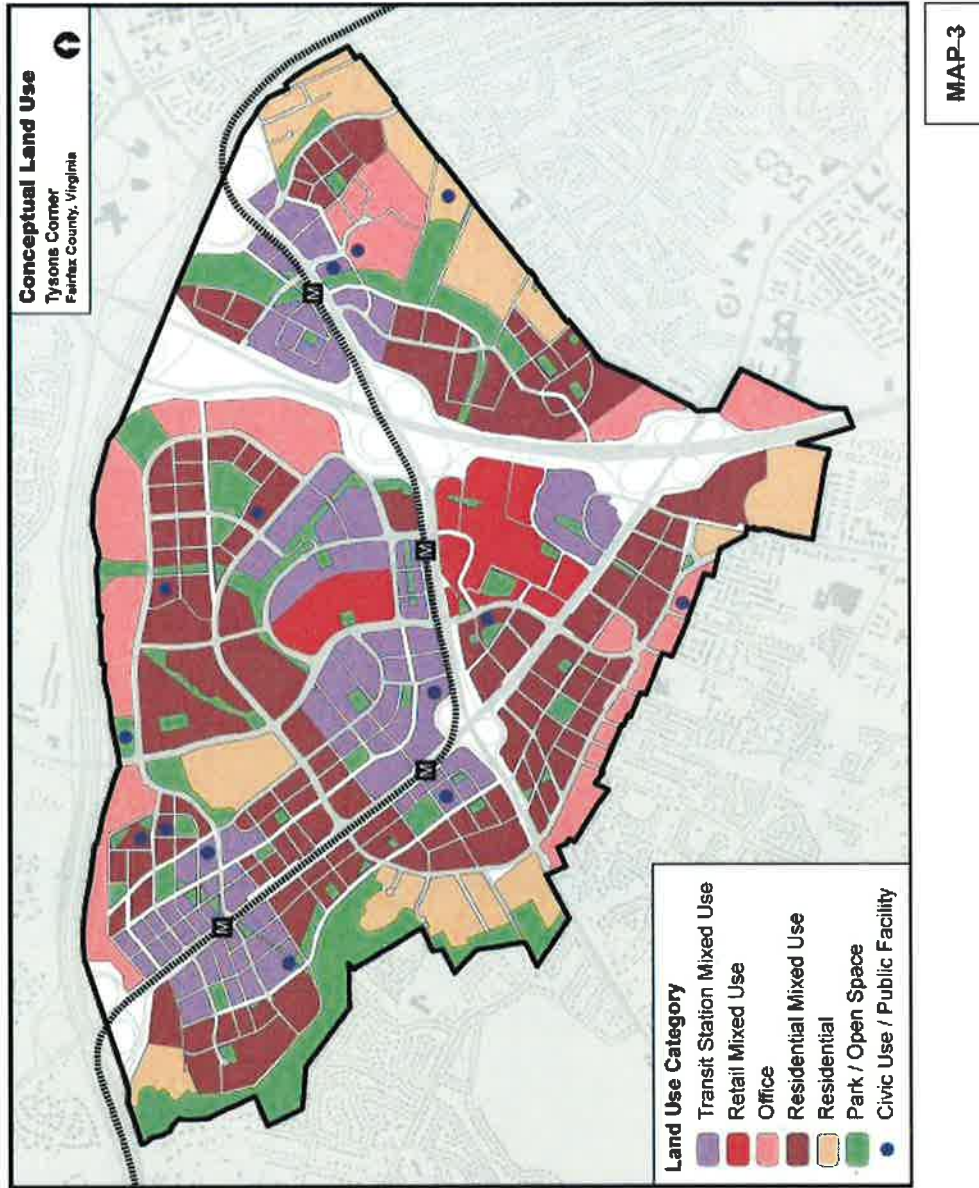




MAP 3

**Comment [A1]:** With regard to parks and public facilities, this map appears to be more a compilation of existing/approved facilities than a future plan. Including every proffered park and public facility is excessive. Given the fact that all development proposals are expected to meet the urban park standards – there is no need to show every proffered park.

There is a concern that a proffered park has now becomes a “Comp Planned” park. This is too restrictive. An applicant proposing a PCA could be told they are not in compliance with the Plan if they change a park from that shown on this map. This map should show the underlying recommended land uses instead of park. Example: the proffered athletic field on The Commons shows up green, when the underlying use is Residential Mixed Use (see old map 3 on page 28). We understood that this Comp Plan amendment would not be changing the specific land uses for individual properties, but this map shows differently. If you want to show proffered facilities and parks somewhere, label that map as “Proffered Facilities”, but don’t mix it with the basic land use map.



- **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 ~~target of office uses~~ will help Tysons maintain a balance ~~of between~~ land use and ~~the necessary~~ transportation ~~over the next 20 years infrastructure~~. Individual developments may have flexibility to build 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. ~~In all cases, synergies between complementary land uses should be pursued to promote vibrant urban communities.~~
- **Retail Mixed Use:** These areas are planned for regional and sub-regional retail centers that should be ~~complemented by~~ 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 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 ~~primarily~~ 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 ~~basic~~ 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 multi-family 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. ~~In some instances, the~~ ~~These~~ uses may be in a stand-alone building— ~~However, they may also be or~~ located within a commercial or residential building. The conceptual land use pattern ~~identifies shows~~ the planned locations for civic and public uses identified in the Public Facilities section. ~~In addition, civic or public~~ ~~Some of these facilities could 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 ~~Environmental Stewardship~~ **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 tool ~~incentive by allowing sufficient incentive to encourage~~ 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 ~~calculating allowable intensity and the associated parking ratios (as described in Table 6 in the Transportation section) in the TOD Districts~~ the Plan for Tysons Urban Center should be determined ~~for each Tier by a circle centered on~~ from the primary public entrance to a station. Each Metro station in Tysons has two primary entrances, one on either side of Route 7 or Route 123. The point of measurement from an entrance should generally be the base of the escalator, ~~as established during the initial construction of the station~~.

In order to achieve ~~the~~ recommended intensity, the walk to and from the closest station entrance to all ~~of the~~ 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-well-lit, and activated by the presence of other people. *Pleasant* means the walking experience is ~~in an~~ interesting, with opportunities to sleep, house, or eat high quality environment.

Projects that include areas of different varying intensity recommendations should have an overall intensity ~~that is~~ 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 ~~and character that is~~ envisioned for the area.

To encourage public-private partnerships, when building space is provided for a public facility, the floor area of ~~the 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 ~~these~~ livability factors ~~being~~ provided in a manner that is phased appropriately with development. ~~These e~~Components of a healthy community will ~~help~~ attract new residents to Tysons and enhance the quality of life ~~for residents 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 ~~are is~~ located in the Areawide Recommendations.

#### Initial Development Level

To implement the first 20 year increment of the ultimate vision for Tysons, an Initial Development Level (IDL) of 45 million square feet ~~the total amount~~ of office uses built and approved ~~in the entire urban center should not exceed an initial development level of 45 million square feet was established in the Plan.~~ This amount is represented 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 ~~that should to~~ be counted toward the ~~initial development level IDL includes~~ all existing office ~~buildings uses~~ and any office development ~~that is~~ approved through a proffered rezoning, a special exception, or a by-right site plan. Office floor area reserved for public facility bonuses ~~should would~~ also be counted toward ~~the this~~ initial development level.

**Comment [A2]:** Recommend that the entire section on IDL be deleted since it is no longer applicable. However, if it is not deleted, the following changes are suggested.

~~The initial development level focuses on office uses because they represent the majority of existing uses and have high peak period vehicle trip generation characteristics. New uses other than offices that have a significant impact on peak period trips should also be managed carefully and may be counted toward the initial office development level.~~

To encourage new housing development in Tysons, residential uses were not limited by the IDL and may could be rezoned at levels above the 2030 forecast for housing. Uses such as neighborhood retail, hotels, and arts/civic space may could also be rezoned at levels above the 2030 forecast if they do 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 will be necessary to track development performance. Monitoring will also be essential to future planning efforts. A particular 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 initial development level IDL of 45 million square feet of office uses may could be increased through a Tysons-wide or area-specific Plan amendment.~~

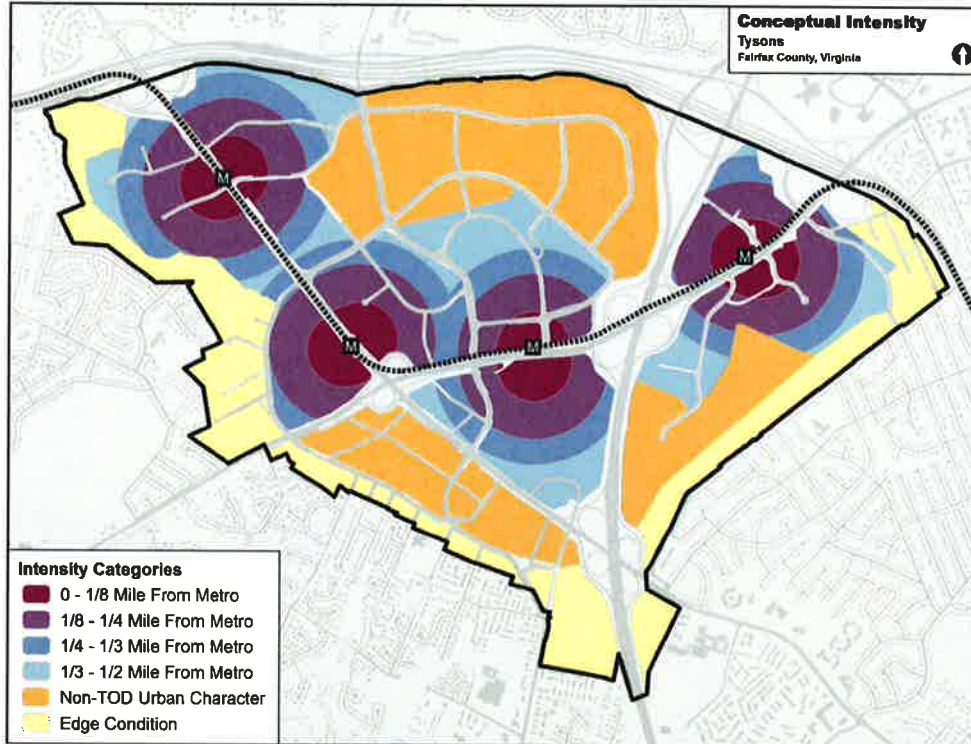
~~The following criteria should be considered when determining an increase in the initial development level for office uses:~~

- ~~• Progress achieved toward the realization of the vision for Tysons;~~
- ~~• Market demand for office space, as demonstrated by new building construction, vacancy rates, and revised forecasts;~~
- ~~• Balance between land use and transportation, including the provision of infrastructure and achievement of vehicle trip reduction levels identified for the year 2030 and TDM performance that exceeds the targets outlined in Table 5 in the Transportation section; and~~
- ~~• Funding arrangements for transportation improvements and programs, so that timely completion of improvements identified for the period beyond 2030 can confidently be expected.~~

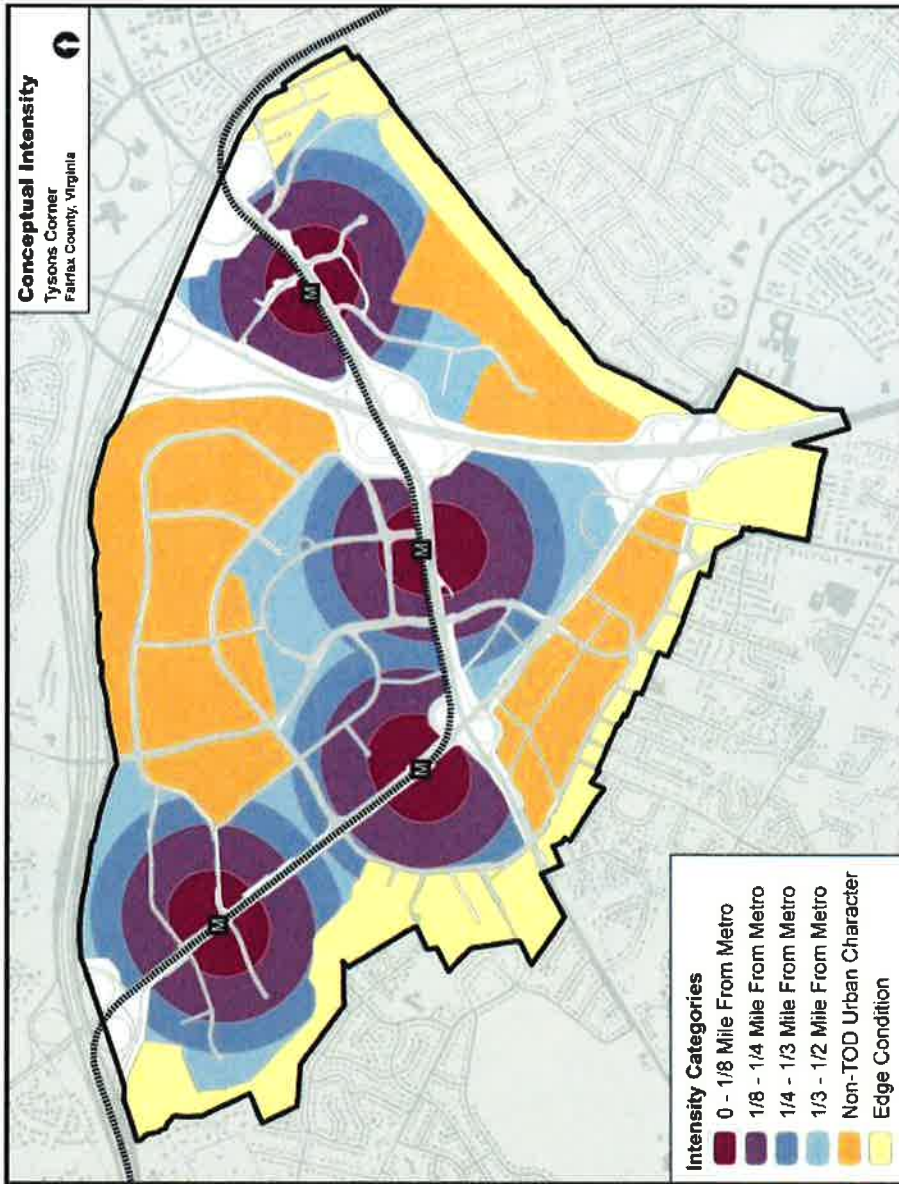


~~A Tysons-wide summary of existing and approved development based on information provided by the County should be included with all rezoning applications in Tysons.~~

On January 8, 2013~~October 16, 2012~~, the Board of Supervisors, ~~based on a recommendation from the Planning Commission,~~ endorsed a Transportation Funding Plan for Tysons, ~~which was on January 8, 2013.~~ This funding plan sets forth ~~for Tysons is a comprehensive strategy for funding the set of infrastructure improvements needed identified in the Tysons Plan~~ to support the 113 million square feet of development 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 Plan. Therefore, going forward,~~ ~~†~~The IDL of 45 million square feet of office use is no longer applicable as it has been superseded by the 113 million total square feet of development associated with the 2050 GMU forecast that was used as a basis for the adopted Transportation Funding Plan. ~~To this end, staff~~The County will ~~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 in Tysons to ensure that the pace of the transportation improvements and the pace of residential and non-residential development are proceeding substantially in tandem, as set forth in the Plan.



**MAP 4**



MAP-4



### TOD District Intensity

The highest intensities in Tysons should be built in areas closest to the Metro station entrances. Intensities should decrease as the walking distance from the stations increases. This reflects evidence from other urban areas that transit ridership is 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; ~~in other words,~~ no individual site within these areas should be subject to a maximum FAR.

~~Trip generation criteria are specified in the Zoning Ordinance's PTC District Regulations and the Board of Supervisors' Guidelines for Trip Generation Analysis for Rezoning Applications to the Tysons PTC District, adopted June 22, 2010, or as may be amended. To manage growth in Tysons effectively and encourage complete developments, a portion of the intensity proposed for a project within 1/4 mile of a Metro station may be approved through a special exception (SE). The SE will apply mostly to office uses, but may also include other uses, which have generate a high degree volume of peak period vehicle trips. In areas within 1/4 mile of the Metro stations, non-office uses that generate similar or fewer peak period trips than hotels, such as housing and neighborhood serving retail, may be approved through a rezoning without an SE if they meet the aforementioned criteria.~~

**Comment [A3]:** Reference to these criteria should be removed as they have always been problematic. Hopefully the Zoning Ordinance can also be amended to remove reference to "non-office uses that generate similar or fewer peak period trips than hotels"

Offices and ~~other high trip generating uses that generate more trips than hotels meet the trip generation criteria referenced above~~ may be approved through a rezoning up to an intensity of 2.5 FAR. Intensity above 2.5 FAR for these uses may be approved with an SE that accompanies a rezoning. For example, a proposed 6.0 FAR project that is 50% office and 50% residential could have 5.5 FAR approved by rezoning without an SE (2.5 FAR office plus 3.0 FAR residential) and an additional 0.5 FAR office approved by SE.

TOD District areas ~~that are~~ 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 superlative contributions toward implementing public facilities. However, sites ~~that are~~ 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 any development bonuses ~~achieved.~~

Redevelopment proposals for TOD District areas ~~that are~~ 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 intensity 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 ~~superlative~~ 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 ~~should be completed to determine the appropriate routes and operational characteristics~~ was undertaken in 2013. The routes and expected ridership ~~will be~~ were used to determine the degree to which additional intensity is warranted for areas located along the circulator routes. ~~Once the study is complete, the Comprehensive Plan should be amended to reflect its recommendations on routes and intensity.~~ 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 can be reconsidered.

Bonus Intensity

Additional intensity in the form of bonuses is allowed to encourage the provision of affordable and workforce housing and ~~significant superlative~~ 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 ~~the~~ 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 which~~ should be substantially greater than ~~the~~ what would be expected to mitigate the impact of the development itself, as ~~ations~~ described in the "Phasing to Public Facilities" portion of the Land Use section; ~~will be considered in determining the amount of additional floor area.~~

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 ~~in the Comprehensive Plan is linking to link~~ development to the provision of ~~the~~ infrastructure and public facilities ~~needed to support it. A dynamic and evolving phasing plan that links redevelopment to specific public improvements is critical to ensuring the transformation of Tysons.~~ 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. ~~Similarly, redevelopment should be linked to the construction of the parks and open space network, enhanced stormwater management facilities, and other public facilities such that they are in operation when residential redevelopment in Tysons generates sufficient demand for them.~~ Athletic fields, parks and open space, stormwater management, 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 ~~infrastructure-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.

Comment [A4]: Want to ensure this is a County function

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 seek~~~~are general strategies approaches for phasing development plans~~ to achieve a sustainable balance of development with infrastructure and public facilities throughout Tysons.

#### Phasing to~~Incorporating~~ Transportation Improvements and Programs

Accommodating an i~~ncreasing~~ in the amount of development in Tysons will require~~significant~~depends upon transportation improvements and changes in travel patterns. Planned roadway improvements, ~~including such as~~ new street connections, ramps to the Dulles Toll Road, and crossings of the Beltway, ~~are 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.

Just as p~~revious p~~Plans for Tysons phased growth to the provision of Metrorail, future~~r~~Redevelopment proposals should be phased to planned roadway and transit improvements and the demonstrated ability to significantly reduce single-occupancy vehicle trips. Tables 7A and 7B in the Transportation section of the Plan prioritize 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 ~~each decade~~development levels.

~~All development proposals should perform a traffic impact analysis~~Development proposals should conduct traffic impact analyses. ~~The m~~Mitigation measures identified by ~~this analysis~~these analyses should be considered along with the phasing guidance below.

~~Initial phases of developments~~Re-dDevelopment proposals approved in the early years after Plan approval should provide on-site grid of street improvements ~~and the grid of streets;~~ should significantly advance the provision of infrastructure; and ~~should~~ meet the applicable levels of trip reduction set forth in Table 5 in the Transportation section. ~~Later phases~~Development approved in later years should be triggered by As Tysons grows, achievement of trip reduction objectives and the provision of the infrastructure and other transportation improvements set forth in Tables 7A and 7B in the Transportation section will be necessary.

~~The necessary~~Transportation improvements and transit capital and operating costs will rely on both public and private sources of funding. Public ~~sources of funding may~~ comes from state and federal sources, general fund allocations, ~~tax increment financing,~~ and/or other sources. The private sector's share is ~~envisioned to be composed of planned to include on-site improvements, including the grid of streets, and contributions to the Tysons Road Fund, based on square feet or dwelling units, approved during the zoning process, 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. However, preliminary estimates of the cost of the transportation improvements needed to accommodate 84 million square feet of development (the high forecast for the year 2030) versus anticipated revenue sources result in significant shortfalls.~~

~~As a result, it is projected that it will be necessary to augment the aforementioned funding sources with a Tysons-wide Community Development Authority (CDA) or a similar entity that can generate the necessary funds over a period of 20 years. The CDA, or similar entity, should contribute an appropriate amount to cover the shortfall and ensure the success of a funding plan for the transportation improvements and transit operating costs. Smaller CDAs or similar entities~~

~~may also be able to fund the private sector's share of one or more of the Tysons-wide improvements.~~

~~Individual rezoning cases in Tysons should only be approved if the development is being phased to one of the following transportation funding mechanisms:~~

- ~~• A Tysons-wide CDA or a similar mechanism that provides the private sector's share of the Tysons-wide transportation improvements needed by 2030;~~
- ~~• A smaller CDA or a similar mechanism that provides a significant component of the private sector's share of the Tysons-wide improvements needed by 2030; or~~
- ~~• Other binding commitments to phase development to the funding or construction of one or more of the Tysons-wide improvements needed by 2030.~~

#### Phasing to Public Facilities

The Public Facilities section of the Areawide Recommendations identifies and describes the public services, ~~parks~~, infrastructure, and utilities needed to serve Tysons. Providing these facilities in pace with the planned employment and residential growth will be a challenge. Securing ~~the~~ land area or ~~the~~ space for public uses within privately-owned ~~structures~~ property is critical. ~~Past~~ practices employed by the County ~~in the past~~ 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. ~~In Tysons it will be critical that the land area or spaces for public uses are incorporated within private developments at no cost to the public sector.~~

The public facilities planned for Tysons over the next 40 years are based on ~~the~~ 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 ~~places will be available to construct~~ facilities may be constructed in concert with the pace of growth. ~~The land and/or building space needed for public facilities is critical to the assurance that such facilities can be constructed.~~ 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 important will be critical that land area or spaces for public uses are~~ incorporated within private developments at minimal cost ~~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 ~~private-private~~ 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~~

**Comment [A5]:** Not every application will be able (or should be required) to provide a requested facility at no cost – it is dependent on the scope of the application and the facility being requested. The County may also want to provide funding to achieve a higher level facility.



~~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 these 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.~~

Comment [A6]: Remove paragraph break

~~Substantial consolidation for rezoning proposals is one mechanism that helps essential in part bB~~ because larger developments ~~that contain a significant land area~~ can better facilitate the achievement of one or more public facility objectives. ~~substantial parcel or land area consolidation for rezoning proposals is critical.~~ 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. ~~Especially d~~ During the early years of Plan implementation, funds would likely ~~not~~ 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 ~~rezoning~~ 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 a 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

~~Monitoring the progress of the Plan toward achieving the vision for Tysons is essential. Advances in information technology have and will continue to increase the County's capacity to maintain databases that may be shared among agencies and with the public. The data collected may be useful for future planning efforts in Tysons and other activity centers in the County and the region. Collecting and applying key information and data is essential for continued planning efforts in Tysons and in other activity centers in the County and the region.~~ Information and performance data ~~that should~~ 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, and income mix of affordable and workforce dwelling units
- 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, especially including public schools
- Progress toward implementing the street grid and urban design goals, ~~such as build-to lines and streetscape improvements~~
- Progress toward implementing facilities for pedestrians and bicycles
- Number and location of parking spaces
- ~~A repository of digital 3-dimensional models of built and approved structures, to be used in evaluating the context of development applications within their districts~~

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 Comprehensive Plan for Tysons should be reviewed regularly, and~~ 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. ~~Examples of appropriate times for Plan review include when 45 million total square feet of office uses are approved through the zoning process; when 10 million square feet (of any use) zoned under this Plan are built; or as needed, based on events such as the completion of Phase 2 of the Silver Line or the implementation of other transit projects that serve Tysons.~~

#### LAND USE GUIDELINES

The following land use guidelines are necessary to ~~create a people-focused urban setting~~ 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 to 120 percent of AMI (Area Median Income), as set forth in Table 1. 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.
- 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 Table 1 for WDUs.

**Table 1**  
**Income Tiers for Workforce Dwelling Units**

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

- 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 non-residential 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 ~~October 15, 2007~~ 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 Table 1.
- 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 ~~October 15, 2007~~ 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.
- Cash contributions in lieu of providing WDUs are not desired.
- 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~~ ~~is~~ 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 ~~incorporating 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.~~ Non-residential 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 ~~25 cents~~ \$0.25 per nonresidential square foot over a period of time to be determined at the time of rezoning ~~to approval~~ ~~to the housing trust fund~~ ~~a housing trust fund that will be used to create affordable and workforce housing opportunities in Tysons.~~ ~~These contributions should be adjusted annually based on the Consumer Price Index from a base of January 1, 2014~~ 2017. Such developments may provide an equivalent contribution of land or affordable units in lieu of a cash contribution. Non-residential contributions could also be used to fund affordable housing opportunities in Tysons through a partnership. If non-residential 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.

Comment [A7]: Seems inappropriate to have a CPI factor in the Plan; but if it stays it should not be retroactive.

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 non-residential development in Tysons. ~~Residential development should be guided by the Policy Plan objectives on Resource Conservation and Green Building Practices.~~ 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 ~~focusing on refining~~to refine an area's grid of streets as well as ~~determining to determine~~ the location of open space and public facilities (e.g. athletic fields). ~~Private-private~~ partnerships or agreements will likely be needed in order to effectively address the multitude of redevelopment issues.

~~In many cases, p~~Parcel consolidation ~~will may~~ be necessary to ~~allow achieve~~ planning objectives ~~to be achieved~~. Proposed parcel consolidations should demonstrate how the project will function in a well-designed and ~~efficient manner and should be sufficient in size to provide redevelopment in several phases~~. ~~Each phase~~ Development should be linked to the provision of public facilities and infrastructure and demonstrate the attainment of critical plan objectives, such as ~~achieving~~ a functioning grid of streets, trip reductions, shared parking, ~~green buildings, and stormwater management facilities~~. Through parcel consolidation, a grid of streets can be planned in a way that enhances the value of the land and ~~provides achieves~~ greater connectivity and consistency with the Tysons Plan.

Comment [A8]: Why does a project need have several phases?

~~As an alternative to consolidation~~Alternatively, coordinated proffered development plans (i.e., concurrent rezoning applications) that ~~achieve~~ the same Plan objectives as consolidation ~~should be~~ 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.

~~The d~~Desired acreage for consolidations or coordinated development plans varies ~~due to the because of each district's~~ unique parcel configurations and planning goals ~~of each district and subdistrict~~. 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;
  - ~~○ Conceptual engineering of streets that demonstrate connectivity to surrounding areas and satisfy the guidance in the Transportation section should be completed. Such engineering should be done in coordination with land owners in the surrounding area, and the proposed street alignments should be included in an official map, as described in the Transportation section.~~
  - ~~○ If an official map has already been adopted for the area, the development proposal should be in conformance with the street alignments in the map.~~
- Provision of parks ~~and open space, and recreational facilities~~ as set forth in the ~~Environmental Stewardship~~ 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 and Services

~~In most instances, Most~~ existing development in Tysons is not consistent with the long-term vision, ~~which is the for Tysons eventual redevelopment of these properties.~~ However, the expansion and remodeling of existing buildings ~~should be~~ may be permitted as long as these changes ~~do not inhibit the achievement of~~ are not counter to Plan objectives. Proposals to modify an existing use should be considered if they ~~would~~ result in significant public benefits ~~that outweigh adverse effects~~ and if ~~such proposals~~ do not delay or interfere with the achievement of the long term vision for Tysons. Improvements to open space, streetscapes, and streets ~~that are~~ identified in the Plan are encouraged; ~~but if full compliance with the Plan is they are~~ not feasible due to an existing building's location on the site, alternative improvements ~~could~~ may be considered ~~which may help implement the Plan's intent.~~

~~It is desirable to maintain m~~ 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 ~~within into~~ street-level retail spaces provided through mixed use redevelopment. ~~There may also be ways to incorporate repair shops and storage facilities within parking structures.~~

Comment [A9]: Original was better than revision.

#### Residential and Other Noise-Sensitive Uses

Significant ~~highway~~ noise impacts are likely in some parts of the Tysons ~~Corner~~ area due to the ~~proximity existence of major roadways and interstate highways transportation infrastructure to planned future development.~~ The Policy Plan indicates that new residential and other noise-sensitive uses should not ~~develop be built~~ in areas where current and future noise levels exceed 75 dBA DNL, ~~which is~~ (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 ~~requires Fairfax County~~ permits a locality to voluntarily designate one or more Urban Development Areas in ~~the 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 ~~or 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 a UDM. Tysons Corner is the designated Urban Development Area for Fairfax County.~~ The Tysons ~~Corner~~ Urban Center boundaries found on the Comprehensive Plan Map ~~and related Tysons Corner land use maps~~



reflect the boundaries of the UDA. The Tysons ~~Corner~~ land use plan is consistent with the UDA ~~requirements~~ 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.



Tysons Partnership suggested changes are highlighted in yellow. Please also see comment boxes.

## 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 major 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.

In 2010, the vast majority of people traveling to, from, within and through Tysons do so using private automobiles. While still accommodating automobiles, the transportation system in the future must give people choices for making these 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~~ activity centers; 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, to, from, and within Tysons. The planned extension of the Metrorail system, with four Metrorail stations in Tysons, offers an opportunity ~~for~~ to create 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, ~~c~~ creating a livable and walkable place will require that the needs of pedestrians, bicyclists, and transit users ~~an effective circulation system~~ be given preference in

many circumstances over the need to move people exclusively by automobile. Streets help define the quality of the public realm in addition to accommodating vehicular traffic. Remaking Tysons into a great transit-oriented urban center will require a balance among safety, mobility, community and environmental goals in all transportation planning for Tysons.

In order to be successful, a fundamental transformation of Tysons' transportation system will be required. 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. The transit system will serve regional trips through with 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 systems is needed. The existing Circulator System will initially be operating when Metrorail opens. Initially it will currently operate on-street, in mixed traffic. In future years, the Circulator System will contain with segments and later on-street that will operate on-within its own rights-of-way.
- A neighborhood feeder bus network should connect nearby communities to Tysons.
- Enhancements to the automobile network, such as a grid of streets, improved Beltway crossings, additional connections to the Dulles Toll Road, and state of the art traffic management systems should be provided.

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Tysons Corner is located at the intersection of two major regional freeways, the Capital Beltway (I-495) and the Dulles Toll Road (DTR) and surrounds the intersection of two major arterials, Leesburg Pike (Virginia Route 7) and Chain Bridge Road (Virginia Route 123). These major highways as well as other arterials have historically served the vast majority of trips to, from, and through the Tysons area. Although extensive, this highway 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. Although planned road improvements will reduce the increase in traffic congestion in and around Tysons, this strategy is not sustainable in the long term because of 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 Corner.

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

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- The provision of the necessary transit infrastructure and services to increase transit use over time.
- The achievement of higher vehicle trip reduction levels over time through transportation demand management programs (TDM), 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 successful 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 development 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 on regarding this balance between land use and transportation. The Scenario Analysis compared the impacts of different levels of growth. This analysis was done throughout the multi-year planning process. The 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 in 2013. 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. Recommendations from this study are reflected in sections of the Comprehensive Plan covering the areas where each recommendation is located. ~~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.~~

**Comment [RLA1]:** If these improvements are incorporated into those other Plan sections then directing owners here to consider them with adjacent development seems superfluous.

## 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 traveling 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, which are also major employment 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 circulators buses is necessary to connect other areas of Tysons to the Metrorail stations and to provide a robust internal transit system within Tysons. Finally, local bus routes, will continue to serve Tysons will continue to and these routes 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 the level of development in Tysons forecasted for the year 2050, it is necessary for transit to achieve a 31% mode share of all person trips to, from and within Tysons Corner 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 by the year 2050.

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

- The extension of Metrorail in the Dulles Corridor to Loudoun County
- Express bus/BRT routes on I-66, I-95/I-495 and Leesburg Pike east of Tysons-Corner
- 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.
- At least two additional urban rail corridors with substantial TOD development; for example, a more direct connection to a future Orange Line extension and a Beltway rail line to Montgomery County, both having TOD at their stations.

**Comment [RLA2]:** Other places in the Comp Plan proposed text call it Table 7A... should be consistent.

**Table 2**  
**Transit Mode Share at**  
**Increasing Levels of Development**

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

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 ease of as few transfers as possible
- Operating flexibility
- Efficient and effective integration with other modes
- Efficient and effective placement of stops and operational facilities

**Metrorail**

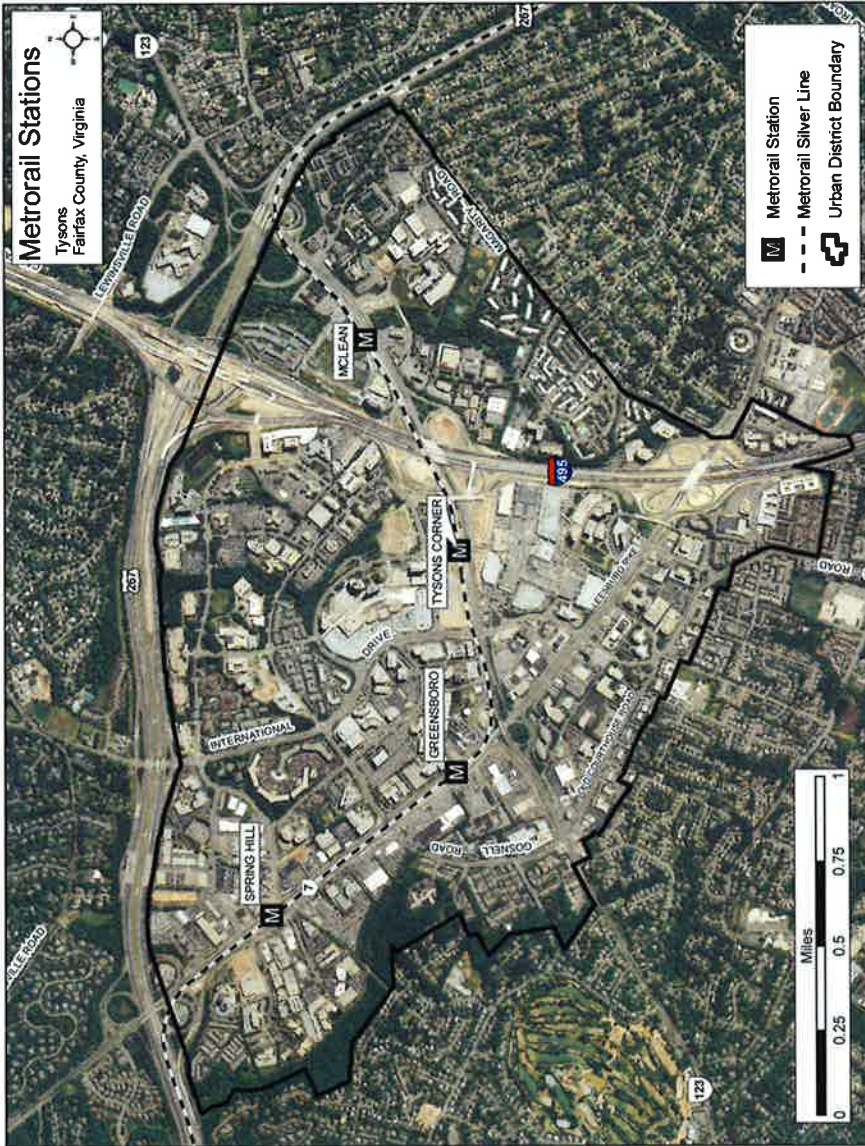
The extension of Metrorail into the Dulles Corridor, with four stations located within Tysons, will offers mobility and accessibility from many portions of the region to Tysons. More importantly, Metrorail will provides a necessary alternative to the automobile in order for Tysons to retain its economic viability and achieve its full potential. The Metrorail service will 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.

Metrorail service is anticipated to operate seven days a week from early morning until late at night. During rush periods, trains will provide frequent and reliable service to commuters and the Tysons workforce. During the midday, nights, and weekends, off-peak service will be provided. Metrorail stations in Tysons will also serve as transportation hubs allowing for convenient intermodal transfers, the provision of bicycle storage and rental facilities, and short term rental car spaces.





MAP 5



MAP 5



### 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 ~~developed in the 1990s~~ 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 ordinary streets.

~~In November 2012, The opening of~~ 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 on~~ 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 and light rail, Bus Rapid Transit and express bus services are potential transit options for Tysons. R~~Serving Tysons with robust express bus service is needed to complement Metrorail. ~~Existing~~These express buses are likely to use the Metrorail stations as terminal points ~~allowing and having~~ passengers to transfer there to an internal Tysons circulation system just like Metrorail passengers.

### System of Circulators

~~In order to increase the use of Metrorail for trips to, from and within Tysons, it is essential to provide a system of transit circulators is essential. The Tysons C~~irculator systems therefore ~~should achieve~~ ~~has~~ ~~will have~~ the following ~~two~~ main functions:

- ~~P~~To provide quick and convenient access for Metrorail passengers to and from locations within Tysons but beyond walking distance from the Metrorail stations
- ~~P~~To provide a quick and convenient way to travel within Tysons
- ~~E~~xtend 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.
- ~~D~~ecrease 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 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.



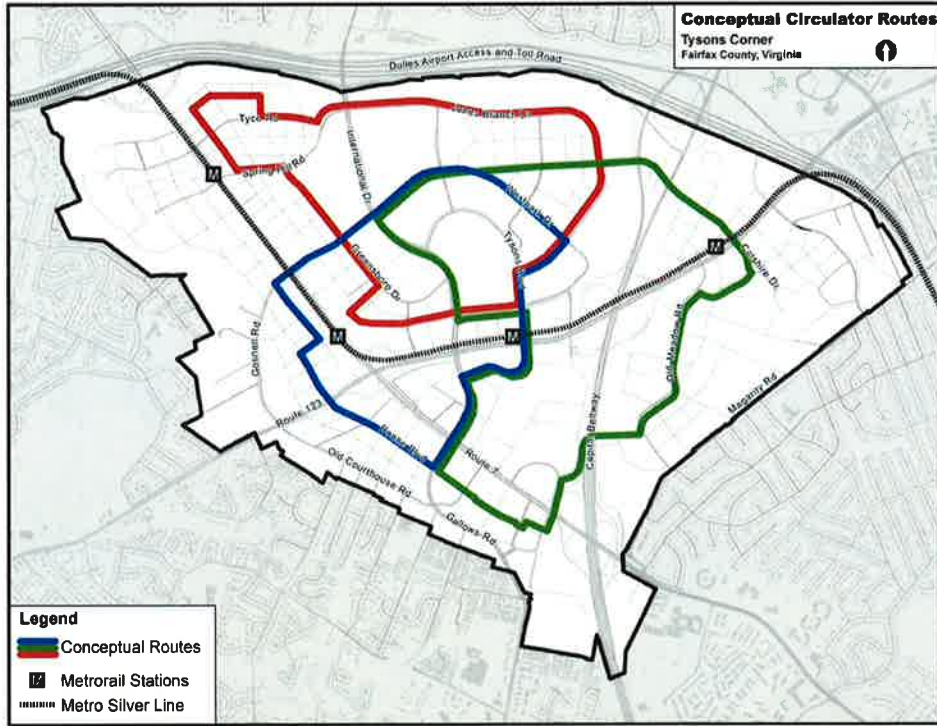
The first phase of a Tysons Circulator System, serving the four Metrorail stations in Tysons is a bus service operating in mixed-traffic, on within existing rights-of-way. Three of these routes are currently operating. In order to develop a longer term Circulator System intended to support the Tysons 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.

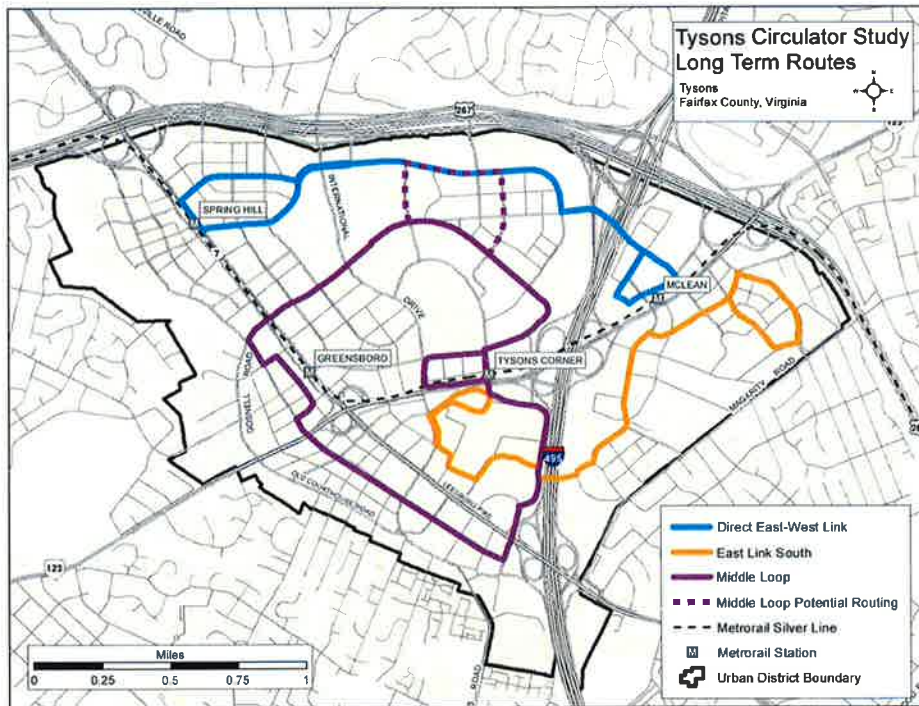
The Tysons Circulator Study used detailed analyses to refine conceptual circulator routes. The study did the following:

- 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.

A system of circulator routes is proposed to connect most of Tysons, specifically the North Central, East Side and Old Courthouse Districts, with the four Metrorail stations and other districts in Tysons. To facilitate use of the Circulator System, it must be integrated with all other transit serving the greater Tysons area and be accessible, frequent, and convenient for users. In order to accomplish this goal, the circulators should operate in their own, dedicated right-of-way. The first phase of the Circulator System, serving the Metrorail stations immediately after opening, will be bus service operating in mixed-traffic on existing rights-of-way.

Over the long term the Circulator System may evolve through several phases, transitioning from buses operating in mixed-traffic to buses operating on exclusive rights-of-way to, when feasible, a fixed guideway operating on exclusive rights-of-way. A storage and maintenance facility within Tysons will be necessary to support a fixed-guideway system. Map 6 shows the Recommended Circulator Network, from the Tysons Circulator Study, a conceptual system of circulator routes that could serve Tysons in the longer term once the grid and two new Beltway crossings are constructed. It should be noted that all Circulator Routes are anticipated to provide two-way service. The ultimate alignment may will likely change based upon the results of the Circulator Study and other factors, such as the availability of the necessary rights-of-way and other factors. Certain segments of the routes may travel on private streets; the following objectives should guide the implementation of the Circulator System:





**MAP 6**

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. routes for a conceptual Circulator System. The Circulator System study will refine these alignments and a new system map will be developed. **It should be noted that portions of one or more of the Circulator Routes utilize private streets; therefore, agreements with property owners will be required.**

- The circulators should extend the reach of the Metrorail System and connect the various districts within Tysons.
- The connection with the Metrorail stations should be 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.



- The Circulator System should 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 should be convenient enough to serve as a substitute for long walking trips within Tysons.
- The circulator routes should include service to locations with higher existing concentrations of trip origins (e.g. Freddie Mac, Gannett) and future high concentrations of residential and employment areas.
- The circulators should reflect industry best practices including the provision of real-time arrival information at station locations.
- Signal priority should be provided to circulators and to selected bus routes.
- Circulator stops should be comfortable for passengers, providing protection from the weather and real-time schedule information.
- The circulators should preferably travel in both directions on each of the proposed circulator routes to maximize accessibility to the four Metrorail stations.

### 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, including McLean, Falls Church, Vienna and Arlington. Most of the routes stop at the Tysons Corner Center and some routes provide connections to other various parts of Tysons. Overall, though, these bus routes do not provide an effective circulation function within Tysons.

~~When the Metrorail extension opens, these Local bus routes were have been are expected to be realigned to provide better service to the new Metrorail stations, while other existing routes were may be eliminated or replaced by modified, routes or the extended Metrorail service. Bus service frequencies were will also be 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 ability of 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~~

**Comment [RLA3]:** These studies should be included in the Plan as supplemental documents. Over the years documents get lost or misplaced.

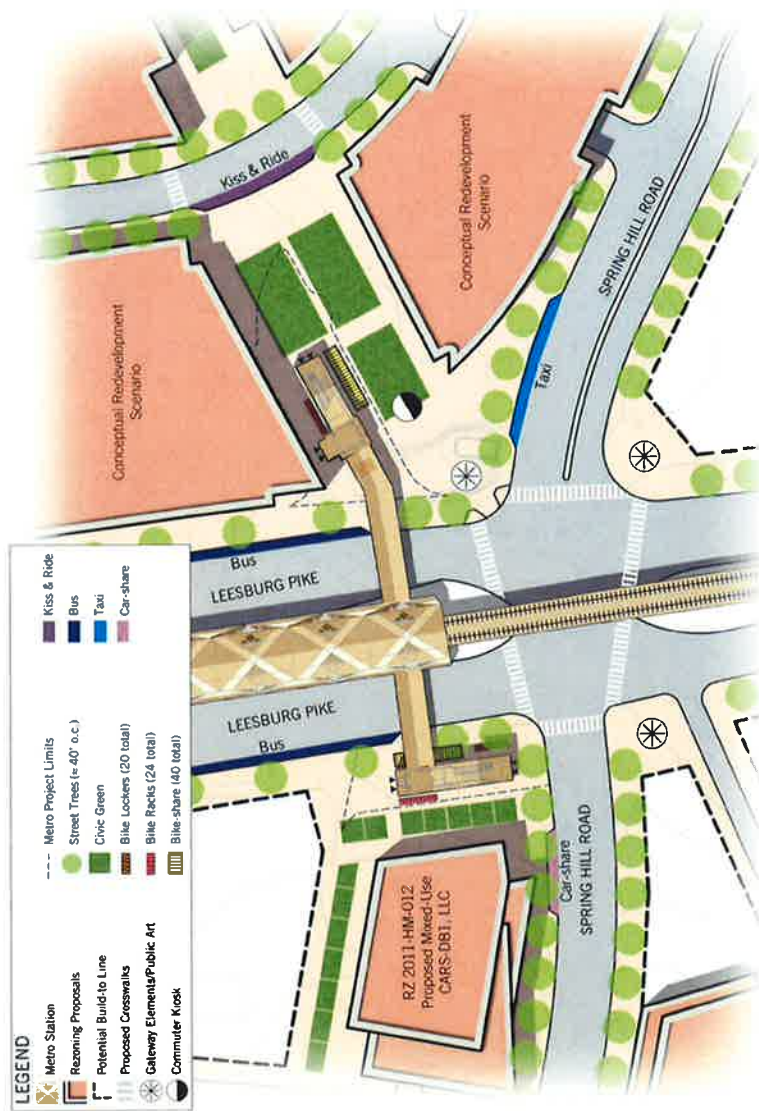
~~programs, bike share, bike racks, bike lockers, taxi stands, kiss and ride locations, commuter kiosk and civic green locations at each station. The document includes phased plans for each station to allow for changes as redevelopment occurs on the properties surrounding the stations. Recommendations from this document should be considered when redevelopment is proposed adjacent to the Metrorail stations.~~

~~Multimodal transportation hubs are envisioned to provide alternative modes of transportation and transportation services including:~~

- ~~• Transit (rail and/or bus)~~
- ~~• Bike sharing~~
- ~~• Car sharing~~
- ~~• Other personal transportation devices~~
- ~~• Taxis~~

~~Some transportation services such as bike sharing, car sharing, and other personal transportation devices can be provided by a retail service.~~

**Comment [RLA4]:** Suggest you put in the build out concepts for each of the four stations.



MAP 7

**Comment [EB5]:** Delete reference to specific rezoning cases. The term Conceptual Redevelopment Scenario is sufficient. Delete specific references to the number of bike lockers, bike racks and bike share in the legend. Add note that the graphic is illustrative of the type of facilities recommended.



The Road Network

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**Overview**

The following principles describe the are adapted from the document “Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities,” published by the Institute of Transportation Engineers (2008). They describe an 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, sStreet 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 and redundancy, including alternative paths, 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) should be applied in the planning and design of transportation projects in and around Tysons. 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. CSS aims to achieve the following:~~

- 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 ~~large~~ superblocks with a relatively small number of streets. This places excessive emphasis reliance on the street system's role as a way to move vehicle

traffic, and the large block sizes inhibits 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 concept is shown in Map 87. This grid was refined/revised according to FCDOT's the County's Consolidated Traffic Impact Analyses (CTIA's/CTIAs) for Tysons. Nevertheless, future development, and further analyses and input from stakeholders may necessitate additional changes to the grid shown. A perfect grid is unlikely in Tysons Corner due to the alignment of existing roads and topographical constraints. However, where possible, a grid of streets should be planned.

In planning/With Implementation of the grid of streets, should take the following should be taken into consideration:

- Maximize Continuity, within the grid of streets, should be maximized.
- Avoid intersections with an acute angles, off-set intersections-awkward dog-legs, and intersections with more than four legs, should be avoided.
- Safe and convenient/Provide good -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 Route 7 and Route 123 should ideally be 600 feet.
- Where possible, even spacing between intersections should be maintained.

With the provisions described above, the street network in Tysons-Corner 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 indicates 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 major principal arterial, such as Route 7. 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.

**Comment [RLA6]:** There is nothing listed in the functional classification table as a "Major" arterial.

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

Highway Functional Classification	Urban Design Functional Classification
Primary 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 87 shows a functional classification of the Tysons street network, including the grid of streets, HOTBeltway I-495 Express lane ramps and potential proposed new ramp locations to the Dulles Toll Road. The functional classification of streets in Tysons should be updated as the results of further related studies become available. Map 7 shows the conceptual grid of streets for Tysons Corner, including service streets. Future engineering 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.

**Comment [RLA7]:** Somewhere there should be a list that clearly indicates which ramps are problematic in the long term.

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 8, take into consideration the recommendations resulting from this study as well as recommendations associated with the Dulles Toll Road determined by MWAA.

**Comment [RLA8]:** These concepts should be included within the Plan.

Map 8 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 further to the west, from the Rt.7 interchange to the Hunter Mill Road 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.

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**Comment [RLA9]:** This was a huge point of discussion with the Planning Commission Tysons Committee. They requested clarification on this. Do you really need another lane on the Toll Road? How is that going to be done practically speaking?



Modified Intersection Treatment Area on Rt.123 (Superstreets) – Left turn movements may be modified at intersection approaches to facilitate regional through movement on boulevards. Right-of-way impacts are less than traditional roadway widenings. Additional attention should be paid to pedestrian and bicycle crossings at these intersections. Restricting and/or relocating such movements could have a significant impact on key regional office and retail trip generators in Tysons between the Beltway (I-495) and International Drive. Prior to implementing such modifications, the County should complete a comprehensive traffic analysis to determine the impacts of the same along the Route 123 corridor with stakeholder input. Further, such modifications should be designed with high consideration given to the following criteria:

- 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.
- The improvement should be designed in a manner that results in no adverse impacts (either physical or fiscal) to the regional office and retail businesses located along and with access to/from Route 123.

- 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.

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Comment [RLA10]: Where are these locations?

### Official Map of Public Streets in Tysons

The proposed “Grid of Streets” is critical to the future form and function of Tysons. The implementation of this network of arterials and local streets will be extremely challenging. Engineering studies will be done to refine the conceptual grid shown above. Consideration should be given to creating and adopting an “official map” of public streets in Tysons. An official map is a description of planned public streets. This map will establish the location and character of the public street network. It should be created with input and cooperation from local landowners, the Virginia Department of Transportation, and the Fairfax County Department of Transportation, and be adopted by the County.

The official map would be based on conceptual engineering sufficient to determine the center line and width of the right-of-way, in order to determine what is feasible to implement in each area. Adoption of an official map would help in the review of development applications.

### 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.

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 Corner, streetpavement 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 Corner:

- Continuity of streets is desirable in order to achieve a more effective grid.
- ~~Streets in Tysons Corner will be designed as complete streets, addressing the pedestrian experience and contributing to creating great places. By definition, complete streets are 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 in addition to their function of moving traffic, including wide pedestrian facilities, dedicated bicycle facilities and lighting.~~
- ~~Urban design guidelines for streets, including enhanced pedestrian elements such as sidewalks buffered from traffic by street trees, and bicycle facilities, enhancements such as separate bike lanes, 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.

**Comment [RLA11]:** Private streets should not be depicted on Map 8 or at least annotated as private. Areas south of Route 7 should be cleaned up. State Street should be identified. Potential ramp improvements at the DAAR/7 should be highlighted pink.



MAP 87



Note: The Tysons Road Network is subject to change pending results from more detailed analyses of the connections to

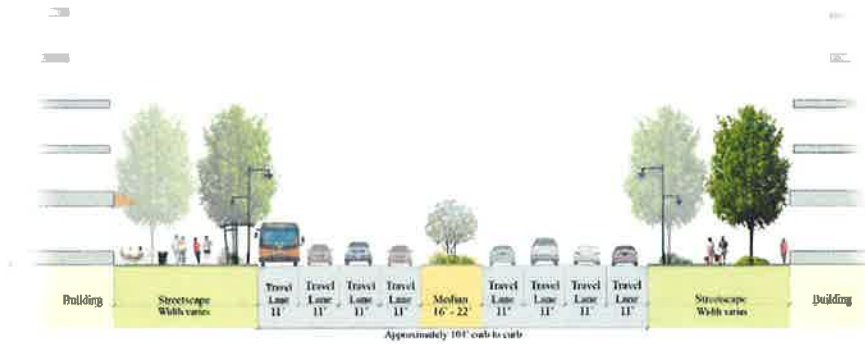
*Boulevards (Major Arterials)*

Route 7 and Route 123 are both boulevards (major 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. Route 7 and Route 123 are both boulevards (major arterials).

**Comment [RLA12]:** No where is there listed a "Major" arterial classification in the Plan

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 Routes 7 and 123. 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**



~~Note: The outside lane in the Boulevard Street Section may be used for on-street parking where applicable.~~

Boulevard cross-section dimensions:

- The desirable width of the median is 20 feet to allow safe pedestrian refuge.
- ~~24 foot median (36 feet at stops) to accommodate the Circulator.~~
- 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. within Tysons can play a role in taking the pressure off the boulevards by diverting vehicular traffic from the boulevards to the avenues. Portions of avenues may also accommodate circulators and provide desirable addresses to new business and residential development. Boone Boulevard, Greensboro Drive and Westpark Drive are examples of avenues. 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**

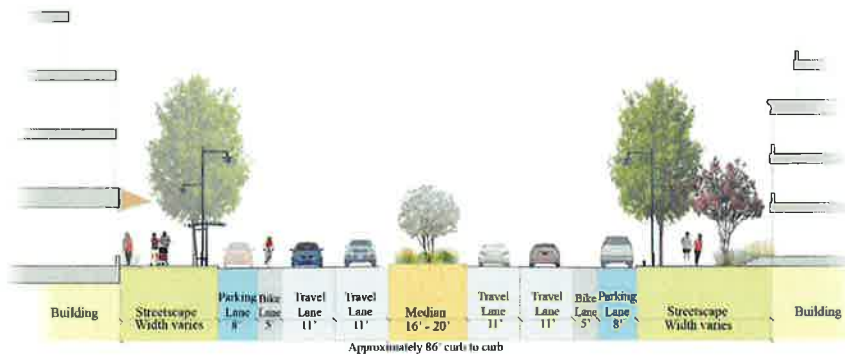




Figure 3  
 Avenue section with Circulator

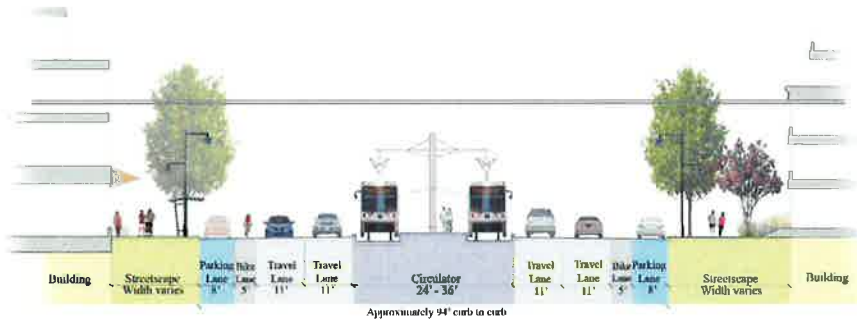
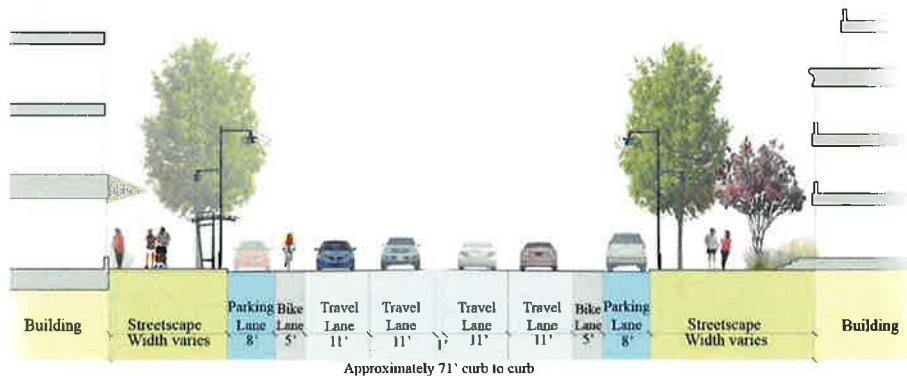


Figure 34  
 Avenue section with no median



Avenue cross-section dimensions:

- The desirable width of the median, if provided, is 20 feet to allow safe pedestrian refuge.
- Accommodate Circulator, as identified in the Tysons Circulator Study, or as Tysons Circulator Study may be amended in the future. 24-foot median (36-foot-at-stops) to accommodate the Circulator where applicable.
- 2 or 3 travel lanes per direction (11 feet minimum for each lane).
- 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.
- 4 to 6.5 foot on-road dedicated bike lane per direction.

**Comment [RLA13]:** Should recognize 10 foot wide lanes for residential collectors

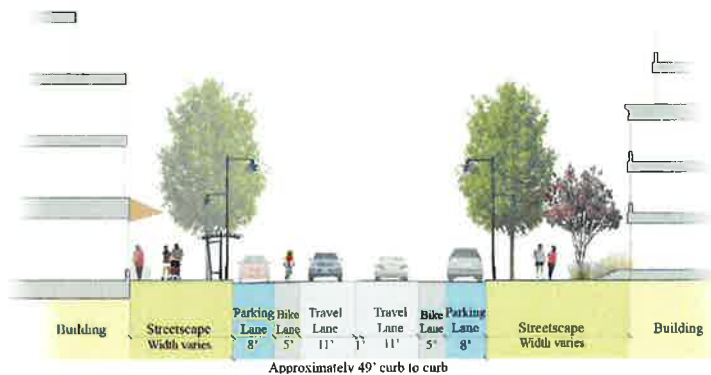
- The desirable minimum width of the median, if provided, is 2016 feet to allow safe pedestrian refuge.
- Refer to the Urban Design Recommendations for guidance on the streetscape.

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 or rights-of-way for the circulator.

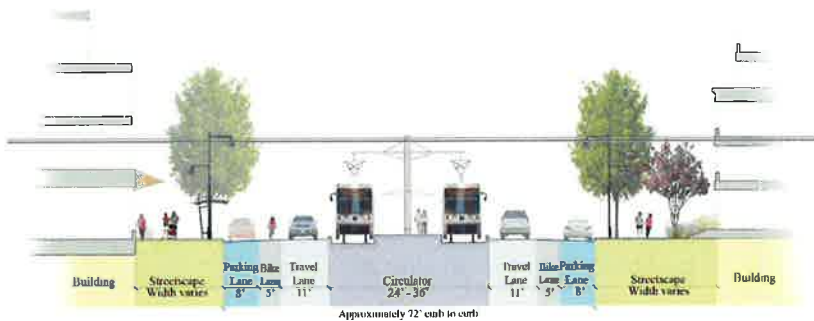
**Figure 45**  
**Collector Street section with**  
**one travel lane in each direction and no median**



**Figure 56**  
 Collector Street section with  
 two travel lanes in each direction and no median



**Figure 7**  
 Collector Street section with circulator



Collector Street- cross section dimensions:

The desirable width of the median, if provided, is 20 feet to allow safe pedestrian refuge.

- Accommodate Circulator, as identified in the Tysons Circulator Study, or as Tysons Circulator Study may be amended in the future, 24-foot median (36-foot-for-stops) to accommodate the Circulator where applicable.
- 1 to 2 travel lanes per direction (11 feet minimum for each lane).
- 8 feet for on-street parallel parking per direction.
- 5-4 to 6 foot on-road dedicated bike lane per direction.
- The desirable minimum width of the median, if provided, is 20-8 feet to allow safe pedestrian refuge.

**Comment [RLA14]:** Should recognize that residential collectors can have 10 foot lanes.

**Comment [RLA15]:** The Transportation standards reference minimum of 8 feet for pedestrian refuge.



- Refer to the Urban Design Recommendations for guidance on the streetscape.

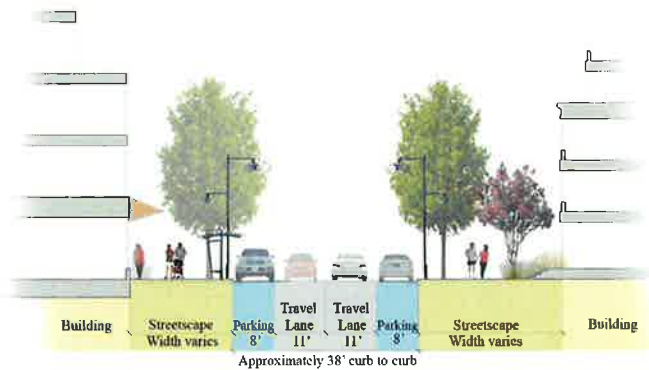
Typical street cross sections are depicted. Although dimensions are noted, final street design will require accommodation of all applicable road design infrastructure. Additionally, final street designs may vary as necessary to address other design and engineering goals and requirements, as well as individual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

#### Local Streets (Local)

Local streets will typically generally be the lowest volume streets within Tysons and will carry slow-moving traffic. Medians should not be considered. Local streets They 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 are typically accommodated in the travel lane rather than in a dedicated bicycle lane.

Figure 68  
Local Street section



Local Street- cross section dimensions:

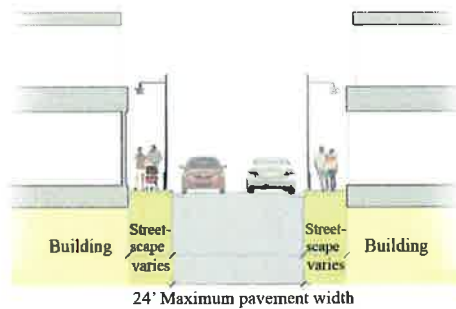
- No medians should be considered.
- 1 travel lane per direction
- 10 foot lane widths may be considered for residential streets.
- 8 foot on-street parking lane per direction.
- Local streets are low speed facilities that may or may typically do not require bike lanes.
- Refer to the Urban Design Recommendations 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/alleys should be designed to maximize functionality for service vehicles. Allowances should be made for pedestrian access as needed.

**Figure 79**  
**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 Beltway 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 Beltway crossing connecting the Tysons Corner Center area to Old Meadow Road (limited to transit, pedestrians and/or bicyclists).
- Ramps connecting Greensboro Drive extension to westbound Dulles Toll Road and eastbound Dulles Toll Road to the Greensboro Drive extension.
- Ramps connecting Boone Boulevard extension to westbound Dulles Toll Road and eastbound Dulles Toll Road to the Boone Boulevard extension.
- Ramps connecting Jones Branch Drive to westbound Dulles Toll Road and eastbound Dulles Toll Road to Jones Branch Drive.
- A collector-distributor road system on the Dulles Toll Road between the Route 7 interchange area and the Hunter Mill Road interchange area.
- An additional lane on the Outer Loop of the Beltway (I-495) between the Route 7 on-ramp and I-66.
- Interchange improvements at Dulles Toll Road and Route 7; and
- Interchange improvements at Dulles Toll Road and Spring Hill Road.
- Modified intersection treatment (Superstreets) configurations along Route 123 between International Drive and the Dulles Access Road overpass as qualified by the Plan text;
- Changes to the northwest quadrant of the interchange of where Route 123 and connects with the Dulles Access Road. to. These changes will tie in the grid of streets into with the endpoint of the ramp from eastbound Dulles Access Road to Road 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 intersection.
- A new connection between Gallows Road and the I-495 Southbound Ramp at Gallows Branch. should be evaluated.

**Comment [RLA16]:** Are you implying additional lanes/right-of-way?

**Comment [RLA17]:** Again this would require connection to a private street network.

**Comment [RLA18]:** Does this include the additional one lane in each direction on the Toll Road staff is proposing?

These improvements need to be designed to fit into the new Tysons, sensitive to the context in which they will be implemented. ~~The connections to the Dulles Toll Road listed above and their exact locations are subject to more detailed analyses. A preliminary analysis found that a maximum of two additional ramps entering Tysons from the Dulles Toll Road and two additional ramps exiting Tysons to the Dulles Toll Road is necessary.~~



### 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.

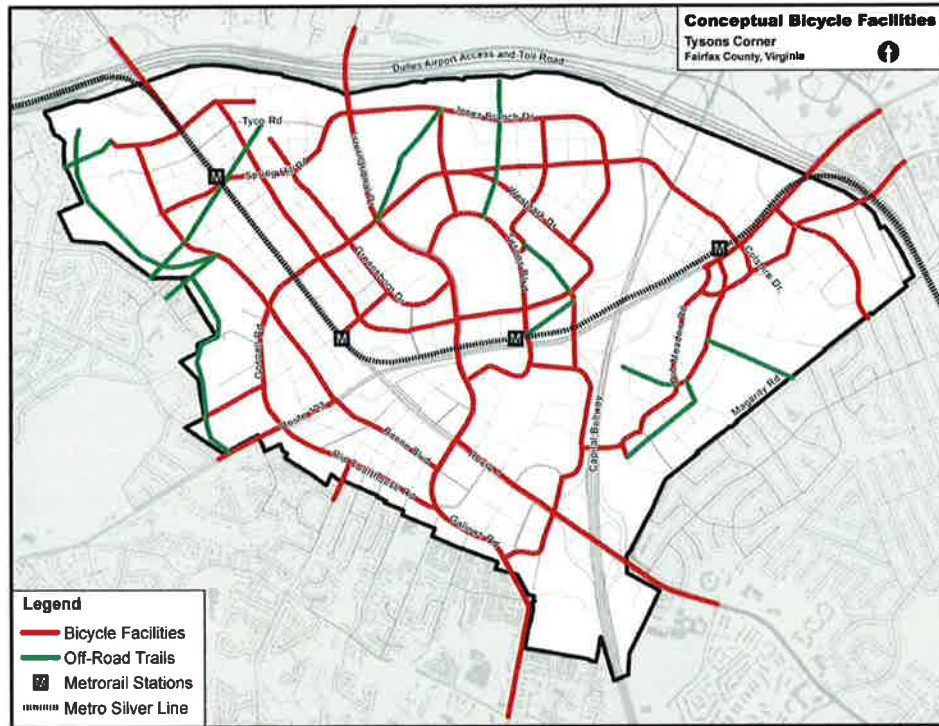
### Bicycle Network

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.

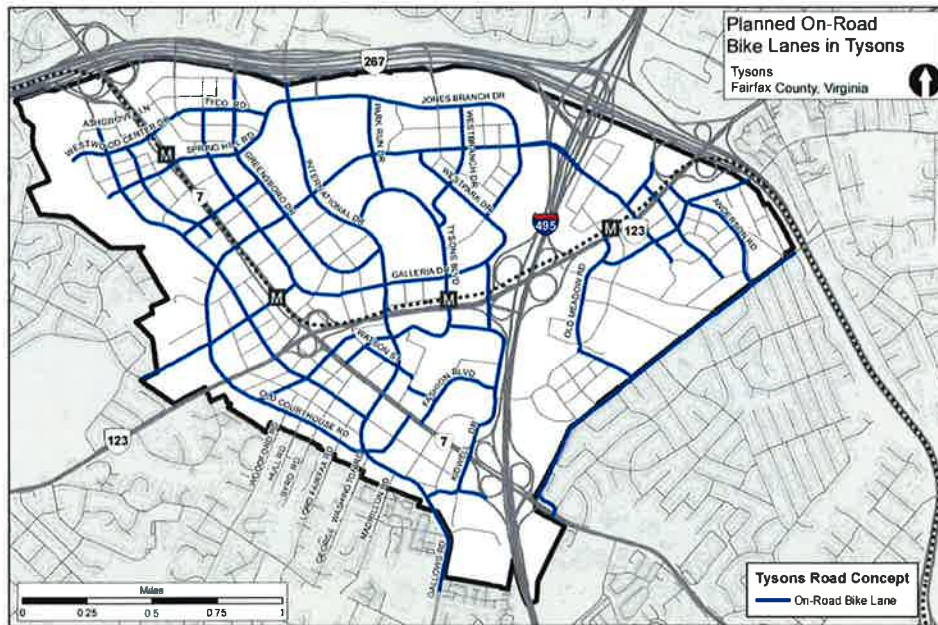
In 2006, the Board of Supervisors unanimously approved a comprehensive bicycle initiative, a program designed to encourage bicycling and make Fairfax County bicycle friendly and safe. New streets will be designed and older streets retro-fitted to better accommodate bicycles. Transit options will become 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 Corner Urban Center plan affords an opportunity to incorporate these elements of bicycling, making Tysons Corner a bicycle friendly community.

Map 9 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 is shown on Map 8. The Fairfax County Bicycle Master Plan, adopted by the Fairfax County Board of Supervisors in 2014, study has been initiated for the greater Tysons area provides more detailed recommendations for specific locations within Tysons. Once completed, bicycle routes in, around, and through the urban center will be refined and Map 8 will be updated. It should be noted that bicycle facilities are shown on Route 7 and Route 123 entering Tysons. It is anticipated, as shown on the Countywide Trails Plan, that these will be off-road facilities. However, bicycle facilities within Tysons will be provided on alternate routes. Bicycle facilities are graphically depicted in Figures 1-9 of the previous section of this report, "Street Types and Design Guidelines."

**Comment [RLA19]:** Delete Map 8 from the Plan now that you have Map 9



MAP 8



Map 9 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. The Tysons section of the Fairfax County Bicycle Master Plan provides more detailed recommendations for specific locations within Tysons.

MAP 9

**Comment [RLA20]:** Remove the on road bike lane connecting Kidwell with the Beltway ramps.

**Bicycle Parking**

In an effort to encourage bicycling in Tysons, safe, secure, and convenient bicycle parking should be provided. This number of bicycle parking spaces should be in relation to 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 by 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 will be~~ addressed in these forthcoming documents: Fairfax County Bicycle Master Plan, Fairfax County Policy and Guidelines for Bicycle Parking, and Tysons Urban Design Guidelines.

**Table 4**  
**Bicycle Parking Ratios for Urban Mixed Use Centers and Transit Station Areas**

Type of Use	Requirement
Multi-Family Residential	1 space for every 35 residential units and 1 visitor space for every 25 residential units or to the satisfaction of the Director of Transportation. Minimum is 2 spaces.
Commercial-Retail	1 employee space per 12,500+0,000 sq. ft. and 1 visitor space per 5,000 sq. ft. or to the satisfaction of the Director of Transportation. Minimum is 2 spaces.
Office	1 employee space per 7,500 sq. ft. and 1 visitor space per 20,000 sq. ft. or to the satisfaction of the Director of Transportation. Minimum is 2 spaces.

**Comment [RLA21]:** These seem very excessive.

~~Note: These ratios are subject to change. Final numbers and ratios will be developed and included in the "Fairfax County Policy and Guidelines for Bicycle Parking."~~

**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:

- ~~O~~orient first-time passengers disembarking in Tysons, and should:
- 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. ~~Signage should conform to the new revised bicycle wayfinding guidelines as defined in Chapter 9 of the Manual of Uniform Traffic Control Devices, 2009 (MUTCD).~~
- 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 will be addressed in the forthcoming Tysons Urban Design Guidelines.

### Interim Improvements

Many of the transportation improvements described in this chapter are of a large scale, are dependent on redevelopment, or have other attributes that will allow their implementation over a longer period of time. In some locations, the lack of existing facilities justifies the need for "interim" improvements. These improvements may not fulfill the longer term vision for Tysons but will serve a necessary need, on an "interim" basis, until the ideal improvement can be implemented. Interim improvements may include, but are not be limited to, the following:

- Interim climbing lanes, shared lane markings and other improvements for bicyclists.
- Interim sidewalk, crosswalk and trail improvements for pedestrians.
- Phasing the implementation of new roadway links.

### Level of Service

#### Impacts on Roads

An overall Level of Service (LOS) 'E' goal is expected for the street network in Tysons Corner. 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 by adding exclusive turn lanes and/or through lanes, increases street widths at intersections and works against creating an attractive environment for pedestrians. For this reason, roadway widenings will in most cases not be undesirable, since it will increase street widths at intersections and therefore work against an attractive environment for pedestrians. In lieu of the additional of 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

**Comment [RLA22]:** Impossible to do with out county support of condemnation.

**Comment [RLA23]:** What constitutes adequate improvement of LOS.

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. ~~An acceptable level of transit service nevertheless needs to be maintained.~~

A high level of service should also be maintained for pedestrians and cyclists, including safety and security, direct pathways, ~~reasonable grades,~~ 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.

**Comment [RLA24]:** Providing funding to WMATA or the County for additional transit as another "ad hoc" fund is unacceptable.

**Comment [RLA25]:** Define high level of service?

## 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~~ the four Metrorail stations ~~now~~ open in Tysons and denser mixed use transit-oriented development ~~planned and underis-constructioned~~ 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 should 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 contingency funds~~. The remedial fund is to be used if TDM goals are not met, and ~~the contingency 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 latter 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.

**Comment [RLA26]:** There are no more budget contingency funds

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**

<b>TDM Vehicle Trip Reduction Goals For Commercial and Residential Development</b>				
<b>Square Feet of GSA in Tysons</b>	<b>Distance from Metro Station</b>			
	<b>0 to 1/8 Mile</b>	<b>1/8 to 1/4 Mile</b>	<b>1/4 to 1/2 Mile</b>	<b>Beyond 1/2 Mile</b>
	<b>Trip Reduction Goal (Percentage reduction from the ITE Trip Generation Rate)</b>			
<b>Up to</b>	45%	35%	30%	25%

<u>65,000,000</u>				
<u>65,000,000</u>	50%	40%	35%	30%
<u>84,000,000</u>	55%	45%	40%	35%
<u>90,000,000</u>	58%	48%	43%	38%
<u>96,000,000</u>	60%	50%	45%	40%
<u>105,000,000</u>	63%	53%	48%	43%
<u>113,000,000+</u>	65%	55%	50%	45%

Development levels in total square feet (with corresponding forecast year)	TDM-Vehicle-Trip-Reduction-Goals, (Percentage Reduction from ITE Peak Hour Rates)			
	TOD Locations			Non-TOD Locations (more than 1/2 mile from station)
	0 to 1/8 Mile from Station	1/8 to 1/4 Mile from Station	1/4 to 1/2 Mile from Station	
2010 to 2020	45%	35%	30%	25%
84 million (2030)	55%	45%	40%	35%
96 million (2040)	60%	50%	45%	40%
113 million (2050)	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% in 2013; over 40% in 2030; and over 50% in 2050 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-Corner 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
- Employee sShuttle 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 use of resources. In 201509, Tysons had more land devoted to cars than to people with approximately an estimated 11067,000 parking spaces, covering 40 million square feet. This amount of parking far exceeds what is necessary for adequate parking. Much of this has occurred because there is no convenient internal circulation system or adequate pedestrian-friendly street and sidewalk network in Tysons. Additionally, there is limited inter-parcel access and shared-use parking. Each development provides parking for its own peak demand, an approach that often leads to excess parking supply and a wasted use of resources.~~

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 non-residential 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.

**Comment [RLA27]:** Where can these be found?

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/adhered to:

- 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.

**Comment [RLA28]:** Practical implementation is lengthy and near impossible to achieve under current practices.

**Comment [RLA29]:** Cannot provide without an SE.

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.

**Comment [RLA30]:** Practical application too hard to achieve. Would require BOS process likely.

**Table 6**  
**Parking Ratios for Tysons-Corner**

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.	Max	Min.	Max	Min.	Max.	Min.	Max.
<b>Townhouse</b>	<b>2.7</b>	<b>1.75</b>	<b>2.2</b>	<b>1.75</b>	<b>2.2</b>	<b>2.0</b>	<b>2.5</b>	<b>2.0</b>	<b>2.7</b>
<b>Multifamily</b>									
<b>0-1 bedroom</b>	<b>1.6</b>	<b>1.0</b>	<b>1.3</b>	<b>1.0</b>	<b>1.3</b>	<b>1.1</b>	<b>1.4</b>	<b>1.1</b>	<b>1.4</b>
<b>2 bedroom</b>	<b>1.6</b>	<b>1.0</b>	<b>1.6</b>	<b>1.0</b>	<b>1.6</b>	<b>1.35</b>	<b>1.7</b>	<b>1.35</b>	<b>1.7</b>
<b>3+ bedroom</b>	<b>1.6</b>	<b>1.0</b>	<b>1.9</b>	<b>1.0</b>	<b>1.9</b>	<b>1.6</b>	<b>2.0</b>	<b>1.6</b>	<b>2.0</b>
<b>Hotel/Motel</b>	<b>1.08</b>	<b>none</b>	<b>1.0</b>	<b>none</b>	<b>1.0</b>	<b>none</b>	<b>1.05</b>	<b>0.85</b>	<b>1.08</b>
<b>Office</b>	<b>2.6</b>	<b>none</b>	<b>1.6</b>	<b>none</b>	<b>2.0</b>	<b>none</b>	<b>2.2</b>	<b>2.0</b>	<b>2.4</b>

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 Corner 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.

- Encouraging shared parking arrangements across parcel lines.

- Creating 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.
- Securing parking management agreements such as parking pricing.
- Unbundling parking from commercial and residential leases and sales.
- Allowing on-street parking, and where appropriate, to counting those spaces towards parking requirements.
- Implementing “Smart Parking” technology to maximize parking utilization.
- Providing preferential parking for carpools, vanpools, and car-sharing vehicles.
- Allow rReductions for shared parking on mixed use sites.

#### Information and Communications Technology and Intelligent Transportation Systems

The application of Intelligent Transportation Systems (ITS)Information—and Communications Technology (ICT) in Tysons-Corner 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 ITSICT in Tysons:

- Electronic information infrastructure that works in concert with physical infrastructure to maximize the efficiency and utility of the system, 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.

ITSICT can be used to not only monitor and mitigate traffic congestion, but also to enhance emergency services in Tysons-Corner. 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. As part of ICT,I-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 ~~established~~ for Tysons-Corner. 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-Corner 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 7A. 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 below) to verify that strategies 1 and 2 are realized as planned and apply timely adjustments if there are variations from the recommendations on how a balance will be maintained.

Comment [RLA31]: define

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 7A. 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, and/or~~
  - ~~Phasing development so that the required transportation infrastructure and programs as determined at the time of zoning be fully funded with a mechanism in place to ensure construction within the required time period as specified in Table 7. Full funding can be achieved by forming and/or participating in a Community Development Authority (CDA), coincident with a zoning application that is of appropriate size and scope and commits to the provision of an acceptable level of funding to address the transportation improvement responsibilities of the CDA. The transportation improvement responsibilities for a particular CDA will consist of one or more applicable Tysons-wide projects and all applicable District projects as determined by analysis at the time of zoning. Funding responsibility should be achieved with 100% of funding provided by the CDA or provided by a combination of CDA and public funds. The applicable CDA should meet the following requirements:~~
    - ~~The required and applicable legal, financial, and administrative principles that clearly defined the scope, functions, and goals of the CDA should be finalized and approved by the County Board of Supervisors.~~
    - ~~A memorandum of understanding should be approved by the County Board of Supervisors and be in place at the time of the zoning application.~~
- 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.

Comment [RLA32]: The implication is “construction” or your past “completion” especially since the next bullet has been totally struck. Language regarding funding should be tweaked and put back in.

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

Table 7A and 7B provides the required transportation infrastructure, programs, and services as Tysons grows over time. Table 7A 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 analysis, the Consolidated Traffic Impact Analyses (CTIA<sup>2</sup>s), was conducted in 2013. In addition, the future land-use allocation in the Tysons

Comment [RLA33]: Funding for Table 7B is not to come from the Tax Service District. Should be other sources and asking for contributions is just another fee on an already fee burdened development community.

station areas ~~wasere~~ 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 7A since the current funding plan for transportation improvements is based on Table 7A. ~~Projects recently completed. A number of projects,~~ including the construction of Phase I of the Metrorail Silver Line, the construction of the ~~I-495 Express HOT lanes on I-495,~~ as well as associated ramps, are ~~scheduled to be completed by 2013 and~~ represents a significant investment in transportation.

**Table 7A**  
**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
<b>I. Transportation Improvements To Be Completed by 2013</b>		
<b>A. Transit and Pedestrian Improvements</b>		
Rail Transit Routes	Complete 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-66 and 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>B. Tysons-wide Road Improvements</b>		
Roads – Arterial Widening	Complete widening of Rt. 7 to 8 lanes from the Dulles Toll Road to Rt. 123	Tysons-wide
Roads – Freeway Widening	Widen I-495 from 8 to 12 lanes to provide 4 Express HOV lanes between the Springfield Interchange and the American Legion Bridge	Tysons-wide/ Countywide
Roads – Freeway Ramp	Express Lane HOV ramp connecting to Jones Branch Drive	Tysons-wide
Roads – Freeway Ramp	Express Lane HOV ramp connecting to the Westpark Drive Bridge	Tysons-wide
Roads – Freeway Ramp	Express Lane HOV ramp connecting to Rt. 7	Tysons-wide
<b>C. TDM Measures</b>		
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
<b>II. Required Additional Transportation Improvements to Accommodate 60 Million sq. ft. of Development (2013 - 2020)</b>		
<b>A. Transit Improvements</b>		
Rail Transit Routes	Completion of Phase II of Metrorail Silver Line (from the Wiehle/Reston East Metrorail Station-Avenue 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 on I-95/I-495 I-66 and additional express bus service on I-66, 95/I-495	Tysons-wide/ Countywide
<b>B. Tysons-wide Road Improvements</b>		
Roads – Arterial Widening	Widen VA 123 to 8 lanes from Rt. 7 to I-495	Tysons-wide
Roads – Arterial Widening	Widen VA 123 from 4 to 6 lanes between Rt. 7 and Old Courthouse Road	Tysons-wide
Roads – Arterial Widening	Widen Rt 7 from 4 to 6 lanes between I-495 and I-66	Tysons-wide
Roads – Arterial Widening	Widen Rt. 7, from 6 to 8 lanes, from Rt. 123 to I-495	Tysons-wide
Roads – Arterial-Extension	Extend Boone Boulevard from Boone Boulevard to Northern Neck Drive	Tysons-wide
Roads – Arterial-Extension	Extend Greensboro Drive from Spring Hill Road to Tyco Road	District
Roads – Freeway Ramp	Ramp connecting Greensboro Drive extension to westbound Dulles Toll Road	Tysons-wide
Roads – Freeway Ramps	Ramps connecting Boone Blvd. extension to westbound Dulles Toll Road and eastbound Dulles Toll Road to Boone Blvd. extension.	Tysons-wide
Roads – Freeway Widening	Collector – distributor roads along the Dulles Toll Road from Greensboro Drive extension to Hunter Mill Rd.	Tysons-wide
Roads – Connecting Bridge/Ramp	Bridge/Ramp connecting Jones Branch Drive to Scotts Crossing Road	Tysons-wide
Roads – Arterial Widening	Widen Rt. 7, from 4 to 6 lanes, from the Dulles Toll Road to Reston Avenue	Tysons-wide
<b>C. Grid of Streets</b>		
Roads – Grid of Streets	Grid west of Westpark Drive	District
Roads – Grid of Streets	Grid bounded by Gosnell Rd., Rt. 7, and Rt. 123	District
Roads – Grid of Streets	Grid connections to Greensboro Drive	District
Roads – Grid of Streets	Grid of streets east of I-495	District
<b>D. TDM Measures</b>		
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

<b>E. Misc. Improvements</b>		
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
<b>III. Required Additional Transportation Improvements to Accommodate 84 Million sq. ft. of Development (2020 – 2030)</b>		
<b>A. Transit Improvements</b>		
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>B. Tysons-wide Road Improvements</b>		
Roads—Arterial Widening	Widen VA 123 to 8 lanes from Rt. 7 to I-495	Tysons-wide
Roads—Arterial Widening	Widen VA 123 from 4 to 6 lanes between Rt. 7 and Old Courthouse Road	Tysons-wide
Roads—Arterial Widening	Widen Rt 7 from 4 to 6 lanes between I-495 and the City of Falls Church	Tysons-wide
Roads—Arterial Extension	Extend Boone Boulevard from Boone Boulevard to Northern Neck Drive	Tysons-wide
Roads—Arterial Extension	Extend Greensboro Drive from Spring Hill Road to Tyco Road	District
Roads—Freeway Ramp	Ramp connecting Greensboro Drive extension to westbound Dulles Toll Road	Tysons-wide
Roads—Freeway Ramps	Ramps connecting Boone Blvd. extension to westbound Dulles Toll Road and eastbound Dulles Toll Road to Boone Blvd. extension.	Tysons-wide
Roads—Freeway Widening	Collector – distributor roads along the Dulles Toll Road from Greensboro Drive extension to Hunter Mill Rd.	Tysons-wide
Roads—Collector Widening	Widen Magarity Road from 2 to 4 lanes from Great Falls Street to Rt. 7	Tysons-wide
Roads—Arterial Widening	Widen Gallows Road from 4 to 6 lanes from Rt. 7 to I-495	Tysons-wide
Roads—Connecting Road	Beltway crossing connecting the Tysons Corner Center area to Old Meadow (limited to transit, pedestrians and bicyclists)	Tysons-wide
<b>C. Grid of Streets</b>		
Roads—Grid of Streets	Substantial sections of the grid of streets	District
<b>D. TDM Measures</b>		
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
<b>E. Road Safety Improvements</b>		
Roads—Collector Safety Improvement	Improve and enhance the safety of Old Courthouse Road from the Town of Vienna to Gosnell Road	District
<b>F. Misc. Improvements</b>		
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
<b>IV. Required Additional Transportation Improvements to Accommodate 113 Million sq. ft. of Development (2030 – 2050)</b>		
<b>A. Transit Improvements</b>		
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>B. Tysons-wide Road Improvements</b>		
Roads—Freeway Widening	Widen I-495 (Outer Loop) between Rt. 7 and I-66 by one lane	Tysons-wide



Roads – Freeway Ramps	Ramps connecting Jones Branch Drive to westbound Dulles Toll Road and eastbound Dulles Toll Road to Jones Branch Drive.	Tysons-wide
<b>C. Grid of Streets</b>		
Roads – Grid of Streets	Completion of the grid of streets	District
<b>D. TDM Measures</b>		
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 7B8**  
**Transportation Infrastructure Resulting from Changes in Land Use Distribution and Resulting from Further Analysis and Planning of the Grid of Streets**

**Comment [RLA34]:** Are all of these really Tysons wide improvements.

<u>Type of Transportation Program or Infrastructure Project</u>	<u>Description of Transportation Program or Infrastructure Project</u>	<u>Area Served by Improvement</u>
<b>Required Additional Transportation Improvements to Accommodate 84 Million sq. ft. of Development (2020 – 2030)</b>		
<b>Road Improvements</b>		
<u>Roads: Intersection Improvements</u>	<u>Modified Intersection Treatment (Superstreet)s configurations along Route 123 between International Drive and the Dulles Access Road overpass.</u>	<u>Tysons-wide</u>
<u>Roads: Interchange and grid of streets integration</u>	<u>Changes to the northwest quadrant of the interchange where Route 123 connects with the Dulles Access Road. These changes will tie in the grid of streets with the endpoint of the ramp from eastbound Dulles Access Road to Road 123.</u>	<u>Tysons-wide</u>
<u>Roads: Intersection Improvements</u>	<u>Improvements to the connection of Magarity Road and Route 7.</u>	<u>Tysons-wide</u>
<u>Roads: Intersection Improvements</u>	<u>A grade separation along Route 123 at the Lewinsville Road and Great Falls Road intersection.</u>	<u>Tysons-wide</u>
<u>Roads: Interchange reconfiguration</u>	<u>A reconfiguration of the Route 123 / Route 7 interchange to allow additional capacity.</u>	<u>Tysons-wide</u>
<u>Roads-Freeway Ramp</u>	<u>Gallows Rd. at Gallows Branch, to I-495 Southbound Ramp</u>	<u>Tysons-wide</u>

### 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 exogenous 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 factorseconditions might change in the future which could result in unforeseen changes toin 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 7A 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 7A and 7B, schedule 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 Contingency Funds to increase TDM activities.
- ChangesAn increase 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.

Comment [RLA35]: Who determines?

### Funding for Transportation Improvements

The transportation improvements listed above in Table 7A 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. need to be pursued to implement these improvements. 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 theThe local portion of Phase I of the Dulles Metrorail Project is being funded through a tax district. Numerous small-scale improvements in Tysons Corner have been funded over the years through the Tysons Transportation Fund, a voluntary contribution for new commercial development. In 2009, the

rate for this contribution was \$3.87 per square foot for non-residential development and \$859 per unit for residential development adjusted annually for inflation. 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 Corner. As part of an overall strategy for funding transportation needs, the contribution rate for the Tysons Transportation Fund should be reassessed.

In March of 2011, the Board directed the Planning Commission to engage in an inclusive process to address funding the Table 7A 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 7A Tysons-wide transportation improvements. Table 7A 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 7A projects. The funds collected will supplement other funding sources for the Table 7A 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.

**Comment [RLA36]:** This statement implies the need to condemn for grid links. If the County is unwilling to ever condemn for such links then the continuation of this fund should be reevaluated. After all after a certain time period the money reverts to the general fund and is lost.



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.

A number of the necessary transportation improvements will be constructed as development occurs by the responsible developer. For instance, it is anticipated that the vast majority of the grid of streets so essential for the vision of the future Tysons Corner will be built by the private sector as development occurs.

Other innovative funding mechanisms are required to generate sufficient funds to implement the improvements in Table 7. Community Development Authorities (CDAs) are expected to play a key role in generating the dedicated and ongoing funding that will be needed. Both a Tysons-wide CDA and a number of smaller district-level CDAs are anticipated to be formed and provide a critical source of funding for transportation improvements. For those improvements categorized as Tysons-wide, a combination of public funds and funds from a Tysons-wide CDA would be used. For those improvements categorized as District, a combination of public funds and funds from a smaller CDA would be used.

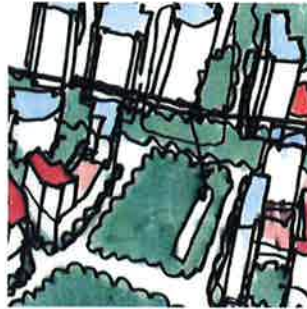
Overall, there is an identified need for increased funding of transportation improvements and services in order to achieve the vision for the future of Tysons Corner. Increased public sector funding from all sources and innovative private sector sources of funding, including continuation of the Tysons Transportation Fund and the formation of CDAs, are necessary.

#### 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 7A, 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.

Comment [RLA37]: Another fund?





Tysons Partnership suggested changes are highlighted in yellow. Please also see comment boxes.

## 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 ~~meet their~~ 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. Existing park land is primarily resource-based and located at the transitional edges of Tysons. Only one park, Westgate and Freedom Hill Parks, ~~has had significant~~ 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 ~~should 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, ~~contributions of~~ 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 ~~service level~~ number of facilities provided ~~enjoyed by~~ for residents, workers, and visitors to Tysons, ~~who will have~~ 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. ~~Through innovative design features such as~~ 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 can be expanded and the number of needed fields can be reduced. Overlay- ~~Fields~~ 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 ~~there will be a majority of adult field users.~~ Corporate softball, flag football, kickball, soccer, and adult baseball are anticipated needs. Other field sports, ~~such as cricket,~~ 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. ~~The green network will have sufficient publicly accessible park acreage to be consistent with the County's adopted urban park service level standard.~~



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 lighting, 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 may 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. Connecting eContinuous linear spaces that are connected with the grid of streets in Tysons provides an important amenity that 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. The street network in Tysons will incorporate Low Impact Development in medians and rights-of-way for additional environmental benefits. In addition to being green, streets will also be “complete,” with walking and jogging trails and bicycle paths.

**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.

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**Comment [EB1]:** The Green Artery concept, particularly in the median under the rail along Route 7, seems problematic, and should not be considered a definite park plan.

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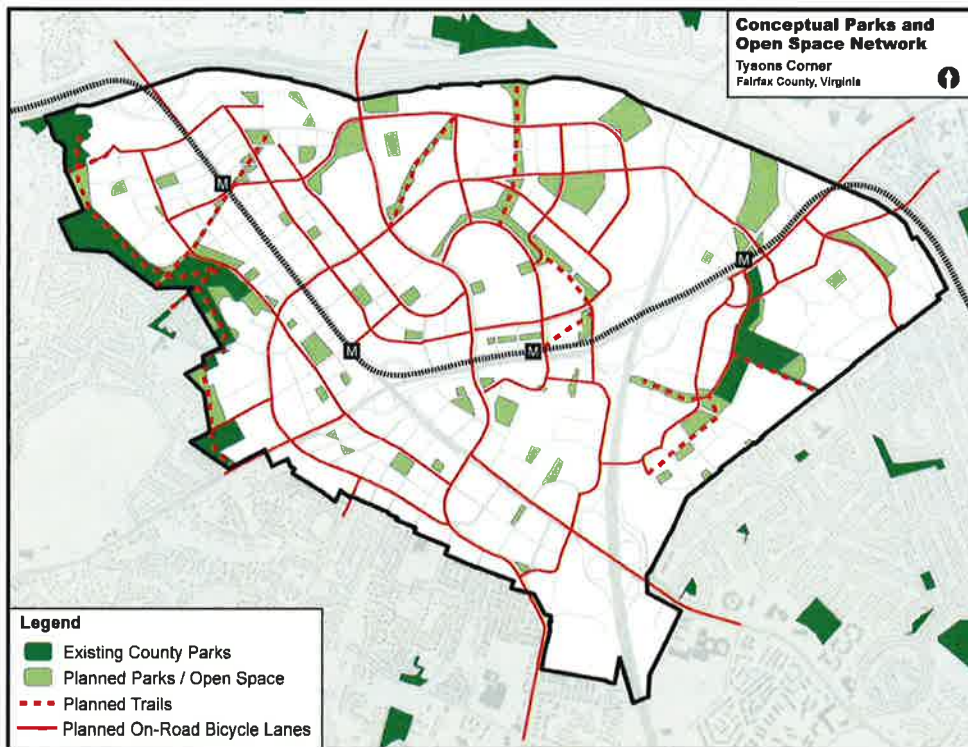
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**Comment [EB2]:** Seems like a random spot to include this sentence. Suggest just adding the word “lighting in 2<sup>nd</sup> sentence of this paragraph.

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



MAP 9

~~Within urban, transit-oriented development areas, 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 ~~complement~~ 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 ~~Typology~~

The Urban Parks Framework, found in the Policy Plan, sets forth aAn urban park typology and urban park service level standards ~~that to~~ guide the creation of urban park systems in Fairfax County. The ~~u~~Urban ~~P~~arks ~~F~~ramework for Fairfax County includes ~~four-five~~ distinct types of urban parks: pocket parks, common greens, civic plazas, ~~and~~ recreation-focused urban parks, ~~and linear parks~~ (see definitions below). The ~~four-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. ~~A distinction should be made between u~~Urban parks ~~that align with the typology and 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 are Usually~~ 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-larger~~ larger than pocket parks, ~~these urban 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. ~~The 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. ~~Examples of recreational facilities~~ ~~Suitable expamples~~ 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. This publicly-accessible park~~ Civic plazas include public art and multiple activity areas and ~~is 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.

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### 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. ~~This park type~~ 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/or 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/or 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.

### ~~ENVIRONMENTAL STEWARDSHIP~~ PARKS AND RECREATION GUIDELINES

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

### Parks and Open Space

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. ~~However, there should be a distinction between urban parks that provide a public benefit aligning with the typology below, and elements such as streetscape areas, sidewalk cafes, commercial entertainment venues and retail browsing areas.~~ It will be more difficult, but no less important, to provide parks ~~land~~ 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. ~~For example, a new development with 330 dwelling units or 3,000,000 square feet of office space would generate a need for about 1 acre of publicly accessible urban park space.~~

~~Urban parks are~~ Typically, urban parks are less than five acres and often under 1/2 acre. ~~Service areas~~ 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.

~~In addition,~~ 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 park-land 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. Some of the active recreational facility needs may be accommodated by adding or upgrading facilities at existing public school sites or in nearby existing parks surrounding Tysons. If facilities are constructed on publicly-owned land, an offsetting contribution of park facilities, park-land, 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 needed onsite park space, offsite park improvements may be considered. This may include

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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.

*[Relocated to a different section of the Tysons Plan]*  
Stormwater Design

~~Environmentally-friendly stormwater design should be an integral design principle that should be part 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 the Tysons Corner Urban Center 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. This could include the construction of new regional ponds or modifications to existing regional ponds.~~

~~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 are recommended for applications for which a significant increase in density/intensity is proposed (e.g., a redevelopment option is being pursued):~~

- ~~• Stormwater quantity and quality control measures should be provided that are substantially more extensive than minimum requirements, 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 possible 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 both the stormwater design quantity control and stormwater design quality control credits<sup>2</sup> of the most current version of the LEED-NC or LEED-CS rating system (or the equivalent of these credits) 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 possible 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 where feasible; 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 Corner should also be encouraged.~~

~~The above guidelines are intended to improve stormwater management controls sufficiently to allow for improvements to the habitat and recreational values of streams in Tysons Corner through natural restorative processes and/or through restoration projects.~~

#### Green Building Design and Energy/Resource Conservation

~~Existing Fairfax County policy calls for certain zoning proposals for nonresidential development and multifamily residential development of four or more stories in urban centers to incorporate green building practices sufficient to attain LEED certification or its equivalent. Nonresidential development in Tysons should go one step further and seek LEED Silver~~

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~~2 These credits, as set forth in LEED 2009 for New Construction and Major Renovations, are as follows:~~

#### ~~SS Credit 6.1: Stormwater Design Quantity Control~~

- ~~For sites that have greater than 50% impervious cover in the existing condition, the total volume of runoff released from the site in the post-developed condition for the 2-year, 24-hour storm should be at least 25% less than the total volume of runoff released in the existing condition for the same storm. Furthermore, the peak runoff rate for the 2-year, 24-hour storm in the post-developed condition should be at least 25% less than the existing condition peak runoff rate for the same storm.~~
- ~~For sites that have 50% or less impervious cover in the existing condition, the total volume of runoff released as well as the peak release rate for the 1- and 2-year, 24-hour storm in the post-developed condition should be equal to or less than the total runoff volume and peak release rate in the existing condition for the same storm. Alternately, a stormwater management plan that protects receiving stream channels from excessive erosion, including stream channel protection and quantity control strategies, may be pursued.~~

#### ~~SS Credit 6.2: Stormwater Design Quality Control~~

- ~~Stormwater runoff associated with the development should be controlled such that the first one (1) inch of rainfall is reused, infiltrated or treated in a manner through which 80% of the average annual post-development total suspended solids (TSS) are removed.~~

~~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 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:~~

- ~~• Transit-oriented development design~~
- ~~• Transportation demand management programs~~
- ~~• 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 use of grey water~~
- ~~• The use of information and communications technology to improve the efficiency and economy of building operations.~~
- ~~• 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. As such, 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 regularly reviewed and updated.~~





Tysons Partnership suggested changes are highlighted in yellow. Please also see comment boxes.

## PUBLIC FACILITIES

Making Tysons a livable place 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 for 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

~~The Tysons Corner Urban Center is currently served by a total of ten multiple public schools. There are four elementary schools: Freedom Hill, Spring Hill, Westbriar, and Westgate. Tysons is served by three four middle schools: Cooper, Kilmer, and Longfellow. Finally, there are, and three four high schools: Langley, Marshall and McLean, 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 the existing Westgate Elementary School schools serving Tysons could be expanded. Consistent with the vision of a more urban Tysons, an elementary school could also be located in a commercial office building, provided that all access, safety, security and play space requirements are met.



~~Typically, an~~ elementary school is constructed with a design ~~has a~~ capacity for 950~~00~~ students. ~~In 2010, t~~he 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 ~~will could~~ generate ~~an additional 555~~approximately 550 elementary students, resulting in a need for ~~the first~~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 ~~will could~~ generate an additional 890 elementary students, resulting in a need for ~~the a~~a second elementary school by 2050.

~~A~~ Typically, a middle school has a design capacity for ~~1,250~~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 ~~will could~~ generate ~~an additional~~approximately 370 new middle school students. For purposes of long-range planning, ~~expansion of capacity enhancements at one or more of the middle schools serving Tysons (Kilmer or Thoreau) is projected to~~may be needed by the year 2050 ~~to address the growing student population. Pimmit Hills Alternative High School may in the future be considered for use as an elementary or middle school. A secondary school may also need to be considered.~~

~~A~~ Typically, a high school has a capacity for ~~2,000~~2,500 students. ~~Based on the household projections noted above, Between 2010 and 2050 there are projected to be a total of 33,600 new households in Tysons. This number of new households will generate an additional 806~~800 new high school students ~~may be anticipated.~~ For purposes of long-range planning, ~~expansion of capacity enhancements at the existing one or more of the high schools serving Tysons, Marshall, is projected to~~ 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 ~~number of residents~~residential population in Tysons reaches 50,000, or between 2030 and 2040. The recommended site would be near the ~~Tysons Central~~7 Greensboro Metrorail station, with possible co-location with a community center or a performing arts center.

Another consideration would be replacement of the existing regional library, which has limited usable public space, with a new regional library in ~~the~~ Tysons Central 7 District. A regional library could also be co-located with a community center, ~~or~~ performing arts center, ~~or~~ other public use. ~~Under this scenario, The the current site of the~~ Tysons-Pimmit Regional Library ~~site could~~would be used available for another public purpose.

## 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 for the Station 29 replacement (as a two-level fire station constructed and dedicated within a new high-rise residential building with options for a stand-alone station) and for 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. ~~The higher intensity of development and taller buildings at the transformed Tysons will require two new urban fire stations. These stations could be located on the first two to three floors of commercial or mixed-use buildings. In order to maintain an adequate response time for emergency medical services, the first station will be needed by 2020, or when the number of residents reaches 31,400 and the number of jobs in Tysons reaches 140,300. The first station could be located in the Tysons Central 7 or Tysons Central 123 district.~~

~~The second station will be needed by 2040, or when the number of residents reaches 64,000 and the number of jobs in Tysons reaches 188,600. The second fire station could be located in the Tysons East district.~~

~~Because the existing Station 29 is adjacent to the Tysons West Metrorail station, it is planned for relocation to the edge of the North Tysons West Subdistrict or to co-locate with the Spring Hill Transit Center in the North Central District. Relocation of Station 29 will take place regardless of the level of development in Tysons, and is therefore considered an existing need.~~

## POLICE

Tysons is currently served by the McLean Police District. The projected workload due to growth in Tysons ~~will 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 satellite police station should preferably be located near in one of the central Metro station areas/districts. ~~Such a station could be co-located with the Fire and Rescue station in the Tysons Central 7 or Tysons Central 123 district, which is due for construction by the year 2020. 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).

~~There should also be at~~ At least one publicly accessible helipad accessible to public agencies for emergency services should be located in Tysons in Tysons.

*[Relocated to a different section of the Tysons Plan]*

## PARKS

~~The Fairfax County Park Authority (FCPA) currently owns about 86 acres of park land within the boundaries of Tysons. An urban park standard of 1.5 acres per 1,000 residents and 1 acre per 10,000 employees should be used to determine proportionate contribution levels for~~



~~urban park land. The proposed Tysons park system should include a mix of small urban pocket parks of less than one acre, one to five acre civic plazas and common greens, and two to ten acre recreation-focused urban parks. One of the civic plazas should be a centrally located signature park. The green network in Tysons will also include linear open spaces, trails, and other non-motorized linkages.~~

~~— In addition to land for urban parks, land for active recreation and trails will be needed to serve growth in Tysons and should be provided by new development.~~

~~— The Countywide recreation facility service level standards in the Park 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. Provision of facilities to meet these service level needs will ensure that as Tysons redevelops, publicly accessible athletic fields, tennis courts, basketball courts, fitness and program space, swimming pools, and other active recreational facilities will be provided at levels meeting the needs of future Tysons residents, employees and visitors. Using 2050 development projections, anticipated urban field 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.~~

~~— Some of the active recreational facility needs may be accommodated by adding or upgrading facilities at existing public school sites or in nearby existing parks surrounding Tysons. However, most future active recreational facilities will need to be provided within Tysons' redevelopments. In addition, trails should be provided in accordance with the County's adopted Trails Plan. Trails should also connect open space to the grid of streets, in accordance with specific guidance in the District text.~~

~~— See the Parks and Recreation section of the Areawide Environmental Stewardship recommendations for full guidance on urban parks, trails and urban active recreational facilities. Guidance on location of specific facilities is also provided in the District text.~~

*[Relocated to a different section of the Tysons Plan]*

#### STORMWATER MANAGEMENT

~~— The vision for Tysons includes stormwater management practices that return water into the ground, reuse it, or delay its entry into the stream system. All redevelopment sites should be designed to ensure protection of downstream areas and prevent stream degradation. Environmentally friendly stormwater design should be included at the conceptual stage of design on all redevelopment projects. Low Impact Development (LID) techniques should be integrated into streetscapes, open space, buildings and rail. These techniques include rain gardens, vegetated swales, porous pavement, vegetated roofs, and tree box filters. LID techniques should be augmented by conventional detention practices such as ponds where needed and appropriate. Vegetated ponds can be considered both as a stormwater management technique and an aesthetic amenity. Consideration should be given to reuse of stormwater as grey water, in order to reduce consumption. See the Stormwater section of the Areawide Environmental Stewardship recommendations for full guidance on stormwater management.~~

#### 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. ~~is pursuing the purchase of additional treatment capacity at Blue Plains and at the Loudoun County Sanitation Authority. However, it is not yet known how much additional capacity could be made available to the County at this time.~~ 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, ~~in both of which~~ have there is some 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

~~The Tysons area is currently served by both the Falls Church Department of Public Utilities and Fairfax Water. Fairfax Water has a major pumping station providing for transmission through Tysons Corner as well as local distribution at their existing facilities on International Drive.~~

~~Fairfax Water has identified future improvements 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.~~

~~Expansion plans to meet local distribution needs based on current population estimates include additional storage tanks in 2030 and 2040, two additional distribution pumps in 2010 and one distribution pump in each of 2020 and 2030. A northerly 24- or 36-inch main from Spring Hill Road along Greensboro Drive and Galleria Drive to Fairfax Water's 42-inch main along the~~

~~Capital Beltway, or the hydraulic equivalent, and a southerly 24- or 36-inch main from Fairfax Water's 24-inch main from the Route 7/Dulles Toll Road interchange to Gosnell Road and along Old Courthouse Road, or hydraulic equivalent, have been identified for installation concurrent with development.~~

~~Several transmission mains through Tysons have also been identified to meet future needs. The Spring Hill Road water main will be extended to the existing Fairfax Water facilities on International Drive. Fairfax Water also plans to extend water mains from its pumping station to Magarity Road, from its treatment facilities in Dranesville to Tysons, and along route 7 from Route 123 to its existing main in Gallows Road. Construction of these facilities will enable Fairfax Water to provide full transmission capacity to serve all of Tysons. Specific details pertaining to water distribution infrastructure would be developed during the requisite site plan engineering process.~~

~~Falls Church Water recently upgraded their storage capacity at Tysons to 2.2 million gallons. Among their plans for capital improvements in Tysons are the installation of 24-inch and 16-inch water mains by the year 2020. By the year 2030 Falls Church Water plans to install another 24-inch main to serve Tysons. 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

Dominion Virginia Power's existing Tysons substation is located on Tyco Road. It will be able to support approximately one third of the expected growth for Tysons-will be expanded to serve approximately 400 MVA (megavolt-amperes) for normal operating conditions. By the year 2050, Dominion projects that growth in Tysons will generate demand for 738 megavolt amperes (MVA).

Therefore, a A second substation (Spring Hill Substation) is planned for the year 2020, with a preferred location south of Route 7 near Spring Hill Road, adjacent to Dominion's existing high voltage transmission line. A third substation (Jones Branch Substation) is planned for 2030 with a preferred location in the North Central District / northeast Jones Branch Drive area, adjacent to the Toll Road and proximate to Dominion's existing high voltage line on the north side of the Toll Road. The new facilityBoth new facilities will be a conventional walled substations developed in an urban format (walled, reduced footprint). The new facilities and will require up to 2.5 acres of land. ; Ceonsolidation with adjacent development with coordinated access and stormwater management, may significantly reduce the acreage required for these substations.

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~~The new Spring Hill Substation will serve the Tysons West and Tysons Central 7 Metrorail stations, as well as development along the south side of Route 7, and Tysons Corner Center. The existing Tysons Substation will serve the Tysons Central 123 and Tysons East Metrorail stations, as well as development on the north side of Route 7, the Gannett Building and Tysons Galleria.~~

~~From the second substation to the existing substation on Tyco Road, Dominion's high voltage line should be placed underground, in order to ensure a pedestrian friendly environment. As an alternative to underground placement, the high voltage line could be relocated to an alignment away from the Metro station entrance. The existing Tysons Substation on Tyco Road will generally serve the north side of Route 7 west of Route 123. The new Spring Hill Substation will generally serve the south side of Route 7, west of the 495 Beltway. The new Jones Branch Substation will generally serve the northern and eastern portions of Tysons.~~

In order to ensure a pedestrian friendly environment and to promote a logical pattern of development, Dominion'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 ~~very~~ 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 ~~unlikely~~ 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 located nearby, such as the McLean Community Center, with the Alden Theater and the McLean Project for the Arts, (with a small theater and nationally recognized visual arts exhibits); 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, and performances at The Barns at Wolf Trap (388 seats). First Stage, a small professional theater



company with limited visual arts exhibit space, is ~~temporarily~~ currently located on Spring Hill Road, within Tysons.

To provide a 24-hour livable/walkable environment, an arts center should be provided ~~in the South Tysons Central 7 Subdistrict. This center should~~ 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 programing, including, if possible, access to outdoor areas for outdoor arts programming. In addition to the arts center, aAt 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 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**

<u>Map Key</u>	<u>Facility</u>	<u>Threshold</u>	<u>Proffer Commitment</u>
<u>7</u>	<u>Fire Station 29, relocation</u>	<u>2020</u>	<u>RZ 2010-PR-014A, B, D, E Construct, fit-out and dedicate by 2020; go-located in residential building</u>
<u>11</u>	<u>New Fire Station (East)</u>	<u>2020</u>	<u>RZ 2011-PR-010, 011 Construct, fit-out and dedicate by 2020; free-standing</u>
<u>NOT SHOWN</u>	<u>New Fire Station (Central)</u>	<u>64,000 residents and 188,600 jobs (approx. 2040)</u>	<u>N/A</u>
<u>NOT SHOWN</u>	<u>Police, interim office space</u>	<u>Current need</u>	<u>N/A</u>
<u>NOT SHOWN</u>	<u>Police Station</u>	<u>N/A</u>	<u>N/A</u>

**Comment [EB4]:** By adding the proffer commitment column, it seems this table will constantly be out-of-date



<u>Map Key</u>	<u>Facility</u>	<u>Threshold</u>	<u>Proffer Commitment</u>
<u>18</u>	<u>Dominion Virginia Power Substation #2</u>	<u>2020</u>	<u>N/A</u>
<u>16</u>	<u>Dominion Virginia Power Substation #3</u>	<u>Development in North Central and Central 123</u>	<u>N/A</u>
<u>10</u>	<u>Community Center</u>	<u>N/A</u>	<u>PCA 2010-PR-021 Construct, fit-out and no-cost 70 yr. lease; co-located in office building</u>
<u>9</u>	<u>Elementary School</u>	<u>12,900 new households (approx. 2030)</u>	<u>RZ 2011-PR-023 Dedicate land for elementary school (done)</u>
<u>NOT SHOWN</u>	<u>Elementary School</u>	<u>20,700 new households (approx. 2050)</u>	<u>N/A</u>
<u>N/A</u>	<u>Secondary School Expansion</u>	<u>33,600 new households (approx. 2050)</u>	<u>N/A</u>
<u>20</u>	<u>Community Library or Regional Library<sup>1</sup></u>	<u>50,000 residents (approx. 2030-2040)</u>	<u>N/A</u>
<u>12</u>	<u>College/Community Space</u>	<u>No set threshold</u>	<u>RZ 2011-PR-005 Construct, fit-out and no-cost 50 yr. lease; co-located in residential/hotel building</u>
<u>NOT SHOWN</u>	<u>Additional Higher Education facilities</u>	<u>No set threshold</u>	<u>N/A</u>
<u>NOT SHOWN</u>	<u>Performing and Visual Arts Center</u>	<u>50,000 residents (approx. 2030-2040)</u>	<u>N/A</u>
<u>8</u>	<u>Arts Office</u>	<u>No set threshold</u>	<u>RZ 2011-HM-032 Construct, fit-out and no-cost 50 yr. lease; co-located in mixed-use building</u>
<u>NOT SHOWN</u>	<u>Athletic Fields<sup>2</sup></u>	<u>One field per 4.5 million square feet of development</u>	<u>N/A</u>
<u>17</u>	<u>Civic Commons<sup>2</sup></u>	<u>No set threshold</u>	<u>N/A</u>
<u>13</u>	<u>Indoor Recreation Space</u>	<u>No set threshold</u>	<u>RZ 2012-PR-002 Construct, contribution for fit-out and no-cost 50 yr. lease; co-located in residential building</u>
<u>NOT SHOWN</u>	<u>Two additional Indoor Recreation Spaces<sup>2</sup></u>	<u>No set threshold</u>	<u>N/A</u>
<u>NOT SHOWN</u>	<u>Expansion of Spring Hill Recreation Center<sup>2</sup></u>	<u>+18,000 residents</u>	<u>N/A</u>

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Comment [EB5]: This chart is mixing public facilities and public parks (which are addressed in a separate section).

Comment [EB6]: Why is this a Tysons responsibility, when this is not located in Tysons?

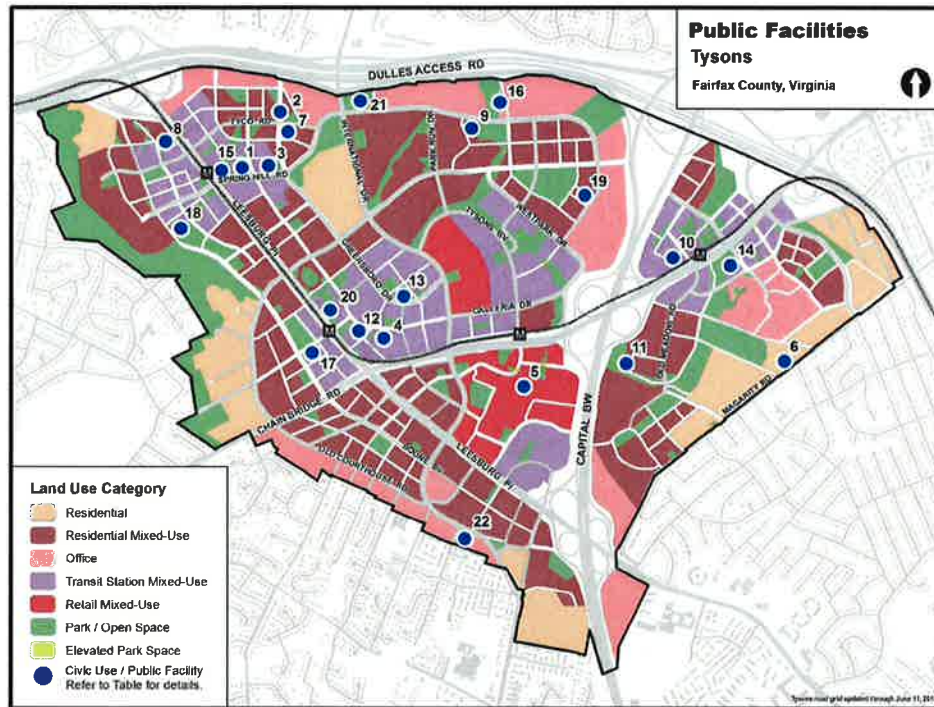
Notes:

1. New library may be co-located with an arts center or other public facilities.
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**

<u>Map Key</u>	<u>Facility</u>
<u>1</u>	<u>Fire Station 29, existing (to be replaced)</u>
<u>2</u>	<u>Dominion Virginia Power Substation (Tyco)</u>
<u>3</u>	<u>US Post Office</u>
<u>4</u>	<u>Fairfax Water water storage tank</u>
<u>5</u>	<u>Tysons Corner Center Community Space</u>
<u>6</u>	<u>Westgate Elementary School</u>
<u>14</u>	<u>McLean Metrorail Station Kiss and Ride</u>
<u>15</u>	<u>Spring Hill Metrorail Station Kiss and Ride</u>
<u>19</u>	<u>Fire Marshal Review office space</u>
<u>21</u>	<u>Tysons West*Park Transit Station Kiss and Ride</u>
<u>22</u>	<u>Virginia Dept. of Motor Vehicles office</u>



MAP 10

**Comment [EB7]:** Is this a "Planned Public Facilities" map or "Existing Public Facilities" map? Example: Station 29 (#1 on map) exists, but is to be replaced by #7 on map.

PUBLIC FACILITY GUIDELINES

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

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.

{A0685015.DOC / 1 Parks/ Public Facilities Section with Partnership comments highlighted 001688 000022}

MAP 10



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

~~Practices employed by the County in the past to provide space for public facilities in largely undeveloped suburban areas cannot be relied upon 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. In Tysons it will therefore be critical that the land area for free-standing uses or space within buildings for public co-located uses are is incorporated provided within private developments at no cost to the public sector.

While ~~the facilities themselves may will actually~~ be constructed throughout the planning horizon ~~based upon~~ 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 that places will be ~~locations are~~ available for the County to construct facilities in concert with the pace of growth.

~~The land and/or building space needed for public facilities is critical to the assurance that such facilities can be constructed.~~ 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 private-private 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.

~~Also, e.~~ 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 based on the George Mason University High Forecast for growth in Tysons~~ [Public Facility Needs, Table 8](#); ~~refer to the table at the end of this section.~~

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

#### ~~Public Facilities Sustainability Goals~~

~~Reduction of the per capita consumption 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; networks 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 events such as terrorist attacks.~~

~~Library services: Provision of secure access to customer accounts, databases and other Fairfax County Public Library information.~~

#### 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, 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.



**Table 8**  
**Timing of Public Facility Needs**  
**Based on GMU High Forecast for Growth in Tysons**

Type of Facility	Commitment or Threshold
Fire Station 29 relocation	N/A
New Fire Station	31,400 residents & 140,300 jobs
Satellite Police Station; possibly co-located with New Fire Station	31,400 residents & 140,300 jobs <u>Secure temporary space before a permanent station is constructed for immediate use</u>
Dominion-Virginia Power Substation	31,400 residents & 140,300 jobs
Elementary School Building	555 new elementary students based on 42,900 new households
Community Library or Regional Library (See Note 1)	50,000 residents
Performing Arts Center	50,000 residents
New Fire Station	64,000 residents & 188,600 jobs
Elementary School Building	890 new elementary students based on 20,700 new households
Secondary School Expansion	1,186 secondary students based on 33,600 new households
Athletic Fields (See Note 2)	One field per 4.5 million square feet of mixed use development

Notes:

1. New library may be co-located with an arts center in Tysons.
2. Needs for parks, recreational facilities and trails are discussed in the Environmental section of the Areawide Recommendations.
3. Transportation facilities are discussed separately in the Areawide Recommendations.
4. Land for facilities should be acquired well in advance of year of operation. Ideally, land or spaces for public facilities should be secured by 2020 or 2030.