



County of Fairfax, Virginia

Recommendations on Parking Requirements in Transit Oriented Development (TOD) Areas Outside Tysons

TRANSPORTATION ADVISORY COMMISSION
July 16, 2013

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1. This presentation is about staff's recommendations for parking requirements in TOD locations outside Tysons.
2. After this presentation, Eileen McLane will talk about the process in this case to amend the zoning ordinance.



Background

- Recommendations on parking requirements are limited to Metrorail station areas in Fairfax County located outside Tysons
- Preliminary recommendations presented to BOS Transportation Committee in Nov. 2010
- Concerns expressed by BOS members
 - Applicability of parking maximums in non-Tysons TOD areas
 - Low parking minimums in non-Tysons TOD areas

1. Recommendations are applicable to the area within ½ mile from the Metrorail stations.
2. Orange line: West Falls Church, Dunn Loring-Merrifield, Vienna/Fairfax-GMU; Blue line: Franconia-Springfield; Yellow line: Huntington; Silver line: Wiehle-Reston East, Reston Town Center, Herndon, Innovation Center. (5 existing and 4 with the Silver Line)
3. We made preliminary recommendations about 18 months ago.
4. The BOS members at that particular committee meeting expressed concerns.



Activities Since October 2010

- Our Transportation Demand Management (TDM) and Parking study was completed which provided more information
- More information obtained on parking requirements at neighboring jurisdictions
- Parking requirements were revised based in new information, including the removal of parking maximums

1. Since the previous meeting we benefited from additional information from a TDM and Parking study.
2. We also obtained information from Montgomery County, Alexandria, Prince Georges County and Arlington.
3. We were aggressive with our initial recommendations with parking maximums as we have in Tysons that was adopted by the BOS in June 2010 and low minimums. The approach at the time was to use limited but still workable parking as a way to increase transit use.
4. Taking the BOS member comments into consideration we revised our previous recommendations by removing parking maximums and increasing some of the minimum parking rates recommended.



Items Considered in Making Parking Recommendations

- Survey of office parking lots in Fairfax County
- Employee survey to determine vehicle trips generated, commuting preferences
- TDM programs' ability to reduce single occupant vehicle (SOV) trips
- Analysis of similar jurisdictions' parking requirements
 - Alexandria
 - Montgomery County

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2. TDM Programs can reduce peak hour trips in high to moderate transit areas by an additional 10-20% without paid parking and 15-30% with paid parking
1. Montgomery County planning to reduce minimums even further because of success with phase 1 reduction



Observations of Maximum Parking Occupancy (At parking garages in Fairfax County)

Area	Parking Provided (Spaces per 1,000 sq. ft. of office space)	Parking Space Used (As a percentage of garage capacity)
Reston	3.20	53%
Merrifield	3.56	38%
Herndon A	3.73	54%
Herndon B	3.74	40%
Fair Oaks	3.93	58%
Tysons	3.97	41%

1. We obtained data on the use of a number of existing parking garages in Fairfax County.
2. The second column indicates at what parking rate parking was provided at a particular location.
3. The last column provides information on how much parking is used.
4. This illustrates that there is generally an oversupply of parking in office locations in the county.
5. The reduction of the requirements will therefore lead to savings in resources – even more so at Metrorail station areas.



Assumptions Used

- TOD areas outside Tysons are unlikely to have the same amount of mixed use development and bus transit service as Tysons
- As the distance from Metrorail stations increase, the percentage of trips made by transit decreases
- For **office development**, parking can be reduced based on a reduction in vehicle trips due to transit, walking, and bicycle trips, as well as TDM

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Assumptions Used (continued)

- For **residential development**, the desire to have access to a car means there is not a direct correlation between required parking spaces and vehicle trip reduction
 - Compare with peer jurisdictions
- For **retail development**, the function of the retail establishment matters
- For **hotels**, transit and mixed use development will have a lesser impact on vehicle trips

1. For residential development, standards practices that work is the best source.



Calculation for Office Parking: Example

Assumptions:

- Office building within a ¼ mile of a Metrorail station
- Workers per 1,000 square feet = 3.5 (based on 4 workers per 1,000 square feet which is reduced by an absentee rate of 12.5%)
- Average vehicle occupancy = 1.1 persons
- Increase in parking spaces for visitors: 7%
- Allowance for inefficiency in finding all open spaces: 5% inefficiency
- Maximum reduction in vehicle use for office locations less than ¼ mile from station: 45%

Result:

Parking requirement = 1.96 spaces per 1,000 sq. ft., so use 2.0 spaces



Recommended Vehicle Trip Reduction Goals for TOD Areas (Metrorail) Outside Tysons

Development		TOD Locations		Non-TOD Locations (More than 1/2 Mile from Metrorail Station)
		0 to 1/4 Mile from Metrorail Station	1/4 to 1/2 Mile from Metrorail Station	
Office	Baseline*	30%	25%	20%
	TDM Goal**	45% - 35%	40% - 30%	35% - 25%
Residential	Baseline	30%	25%	15% - 10%
	TDM Goal**	45% - 35%	40% - 30%	25% - 15%

*Baseline refers to the inherent reduction from ITE trip rates observed in Fairfax County without any formal TDM program elements in place. These reductions include the following: vehicle trip reduction due to transit use, peak hour spreading and existing TDM activities (prior to a formal TDM program)

**Use of the higher end of the reduction range should be considered especially for developments in areas of high existing or planned urban accessibility, located close to and with easy and convenient pedestrian access to transit stations (<1/4 mile for rail, <1/8 mile for bus service), and in a walkable, mixed-use environment. Mixed-use development supports higher levels of vehicle trip reduction due to internal trip capture and as well as to walk and bicycle trips within the development or to adjacent developments. A project with TDM that is part of a larger mixed-use development may, therefore, support greater vehicle trip reductions than a smaller, single-use, stand-alone project that implements the same site-level TDM measures.

1. Divided into two groups – residential and lodging. The parking rates for these are provided by unit. For hotel it is per room. Commercial is parking spaces per 1,000 sq. ft. The second column provides the current parking recommendations – minimums. Please note that the 1.6 parking spaces for multifamily housing. It is the same required rate no matter how large the apartment is.
2. The next two columns are the Tysons recommendations approved by the BOS in June 2010. These contain maximums.
3. The green columns are the recommendations.
4. We wanted to make sure if a developer implements the minimum rate, that it will still be an acceptable parking situation.
5. The second last column applies to developments that are within ½ mile from the station. The last column represents an optional further 10% reduction in parking if a development is within ¼ mile of a rail station.
6. There are no parking maximums recommended. Prof. Donald Shoup, considered an expert in parking has the view that a developer will park at a level that is most cost-effective for a particular development.
7. For residential, we could not use the increase in transit use as a direct factor to reduce parking since the occupants often still want to have a vehicle available even though they might not use it that much. We therefore found that current practice for locations similar to our Metro stations is the best source. We looked at our peer jurisdictions (Montgomery county, Alexandria in particular). Particularly Montgomery county since they indicated to us that they are from experience, happy with their recommendations in terms of providing adequate parking and might reduce their requirements somewhat in future.
8. The hotel is at our existing requirement with a 7% reduction if within a ¼ mile of station. (employees, some particularly from airport).
9. Office is based on TDM goals with allowances for absentees, visitors and inefficiencies in finding the very last parking spaces in a parking garage. The recommendations are very close to Montgomery county and Alexandria.
10. For other commercial we already have a reduction of 20% in our ordinance for retail parking in TOD areas and this was applied to our existing rates.
11. Footnote: For some specific uses listed the first 5,000 feet was assumed to be neighborhood serving retail and no parking needs to be provided. These uses can also be served by on-street parking. All other commercial, other than office, the required spaces will be based on a 20% reduction in parking specified in the zoning ordinance.



Recommended TOD Area Parking Minimums

Use	Current Fairfax County Minimum	Urban Center (ie- Tysons TOD)		<1/2 Mile from Metro	Optional 10% Reduction <1/4 Mile from Metro
		Minimum	Maximum	Proposed Minimum	Proposed Minimum
Residential or Lodging/unit					
Townhouses	2.7	1.0	2.2	2.0	1.8
Multifamily 0-1 Bedroom	1.6	1.0	1.3	1.3	1.2
Multifamily 2 Bedroom	1.6	1.0	1.6	1.5	1.4
Multifamily 3+ Bedroom	1.6	1.0	1.9	2.0	1.8
Hotel	1.08	No Minimum	1.05	1.08	1.0
Commercial Spaces/1,000 Sq. Ft.					
>125,000 Sq Ft Office	2.6	No Minimum	1.6 - 2.0	2.2	2.0
<125,000 Sq Ft Office	3.6	No Minimum	1.6 - 2.0	2.3	2.1
Retail	4.0-4.8	No Minimum	Current Rates	3.2 - 3.8*	No Minimum*

* For uses not specifically listed above, the minimum parking space requirement set forth in Sections 11-103, 11-104, 11-105 and 11-106 shall apply as follows: In TOD districts, the first 5,000 square feet of gross floor area located on the ground or street level for the following uses shall not be included in the calculation of required parking: personal/business services, fast food restaurant, quick service food store and/or eating establishment. Beyond 5,000 square feet the minimum number of parking spaces required shall be based on eighty percent (80%) of the specified rates set forth in such Sections.

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Next Step

Amendment to Zoning Ordinance

Questions?

- Eileen McLane will now provide information about the process for a change to the zoning ordinance.