



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

TRANSPORTATION ADVISORY COMMISSION  
July 16, 2013



## 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



## 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



## 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



## 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%



## 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



## 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



## Calculation for Office Parking: Example

### Assumptions:

- Office building within a  $\frac{1}{4}$  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  $\frac{1}{4}$  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.



# Recommended TOD Area Parking Minimums

Use	Current Fairfax County Minimum	Urban Center (ie- Tysons TOD)		<1/2 Mile from Metro Proposed Minimum	Optional 10% Reduction <1/4 Mile from Metro Proposed Minimum
		Minimum	Maximum		
<b>Residential or Lodging/unit</b>					
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
<b>Commercial Spaces/1,000 Sq. Ft.</b>					
>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.



# Next Step

Amendment to Zoning Ordinance

Questions?