Parking

Report to Planning Commission
Tysons Committee

April 2, 2009

Presentation Outline

- Off-Street Parking
- On-Street Parking
- Car-Share Parking
- Bicycle Parking
- Parking Technology
- Parking Management
- Plan Text

Off-Street Parking

Peer Off-Street Parking Requirements

Comparison of Requirements to Neighboring Jurisdictions

	Fairfax Co.	Arlington		Alexandria		Montgomery	
Use	**Base Req.**	**Base Req.**	**Near Transit**	**Base Req.**	**Near Transit**	**Base Req.**	**Near Transit**
Multifamily	1.6	1.13 (first 200 units); 1 (each addtl.)	1.0 in "C-O Rosslyn" District, and "C-O-A" Districts	1.3 (1 bed) 1.75 (2 bed) 2.2 (3+ bed)	1.0 in King Street Transit Parking District	1.25 (1 bed) 1.5 (2 bed) 2 (3+ bed)	5-10% reduction w/in 1,600 ft. of Metro or in CBD
Office	2.6 (>125,000 square feet)	3.3 (up to 5th floor) 2.5 (each floor over 5th)	1 in "C-O Rosslyn" District*, 1.9 in C-O-A Districts	2 to 2.22	1.67 in parking district #6 (within 2,000 feet of Metro)	2.4–3	1.9– 2.6 (<800 ft. from Metro) 2.1– 2.7 (800–1,600 ft. from Metro)

Note: Residential requirements are spaces per unit, and office requirements are spaces per 1,000 s.f.

Off-Street Parking

Peer Off-Street Parking Requirements

Recently Approved Development Plans in Arlington County

Project	Dist. to Metrorail (ft.)	Metrorail Station	Parking Ratios (office: spaces per 1,000 s.f.) (residential: spaces per unit)
Central Place	Adjacent	Rosslyn	0.85 office, 0.83 residential
1812 N. Moore St	Adjacent	Rosslyn	0.83 office
Clarendon Center	Adjacent	Clarendon	~ 2 office, 1 residential
Quincy Plaza	1,200	Virginia Square	1.2 residential
Liberty Center	1,300	Ballston	1.72 office, 1.14 residential
The Phoenix at Clarendon Metro	600	Clarendon	1.72 office, 1.19 residential

Parking reductions are approved through the zoning process—Transportation Management Plans are required .

Off-Street Parking

Peer Off-Street Parking Requirements

Jurisdictions with No Minimum Requirements in CBD Districts

City	Land Use Affected
Boston, MA	RESIDENTIAL
Fort Myers, FL	RES./OFFICE
Los Angeles, CA	RES./OFFICE
Portland, OR	RES./OFFICE
San Diego, CA	RES./OFFICE
Seattle, WA	RESIDENTIAL

Off-Street Parking

Peer Off-Street Parking Requirements

Jurisdictions with Maximum Requirements

City	Geographic Restriction	Office Maximum (spaces per 1,000 s.f.)	Residential Maximum (spaces per unit)
Bedford, MA	City-wide	2.86	--
Bellevue, WA	Downtown core	2.7	2
Charlotte, NC	TOD Districts	3.33	1.6
Pasadena, CA	Within ¼ mile of LRT	**2.25**	1.75
Pittsburgh, PA	Downtown	**2**	1
Portland, OR	Downtown	**0.7**	1
San Francisco, CA	Downtown	**0.23**	0.75 - 1
Seattle, WA	Downtown, Urban Centers, LRT Stations	**1** (Downtown)	1 (Downtown)

Bold numbers in office column are less than Fairfax County minimum rates

Off-Street Parking

Determining the Fairfax County Rates for TOD Areas

- Derive a preliminary parking rate from the analysis of surveys of employees and residents in TOD areas
- Take into consideration the estimated vehicle trip reduction from the 2020 and 2030 transportation analysis
- Take into consideration the rates adopted for TOD areas by other jurisdictions
- Provide recommendations to TDM Study Steering Committee for review

Off-Street Parking

Determining the Fairfax County Rate for TOD Areas (continued)

- Conduct a workshop with stakeholders to review recommendations
- Provide recommendations to the PC Tysons Corner Committee, the PC Land Use Process Committee, and the TAC for review
- Proceed with process to adopt recommendations in special ordinance for Tysons

Presentation Outline

- Off-Street Parking
- On-Street Parking
- Car-Share Parking
- Bicycle Parking
- Parking Technology
- Parking Management
- Plan Text

On-Street Parking

Types of On-Street Parking: Parallel Parking

On-Street Parking

Types of On-Street Parking: Head-In Angle Parking

On-Street Parking

Types of On-Street Parking: Back-In Angle Parking

On-Street Parking

Angle Parking Compared to Parallel Parking

Advantages:

- It can contribute towards slowing traffic
- Provides 60% more parking spaces

Disadvantages:

- Requires additional street ROW
- Can present maintenance problems (streets sweepers might not reach everywhere)
- It is difficult to provide a bicycle lane because of different vehicle lengths
- Dangerous for cyclists and moving vehicles when parked vehicle backs out. Back-in angle parking overcomes this disadvantage

On-Street Parking

Types of On-Street Parking: Loading Zones

- Most businesses have multiple shipments every day; delivery timing is critical

- On-street parallel loading zones vs. alleys
  - Cars parked illegally in on-street loading zones or alleys result in double parking of trucks
  - On-street loading zones can be disruptive to pedestrian and vehicular traffic
  - Trucks backing out of alleys can be disruptive to pedestrian and traffic flow
  - Alleys can be unsightly: need maintenance
  - Both need enforcement

- Sufficient loading zones should be provided

Presentation Outline

- Off-Street Parking
- On-Street Parking
- Car-Share Parking
- Bicycle Parking
- Parking Technology
- Parking Management
- Plan Text

Car-Share Parking

- Some cities require developers to offer one or more spaces to established car-sharing organizations
- San Francisco requires car-share spaces at a rate of 1 space per 200 dwelling units

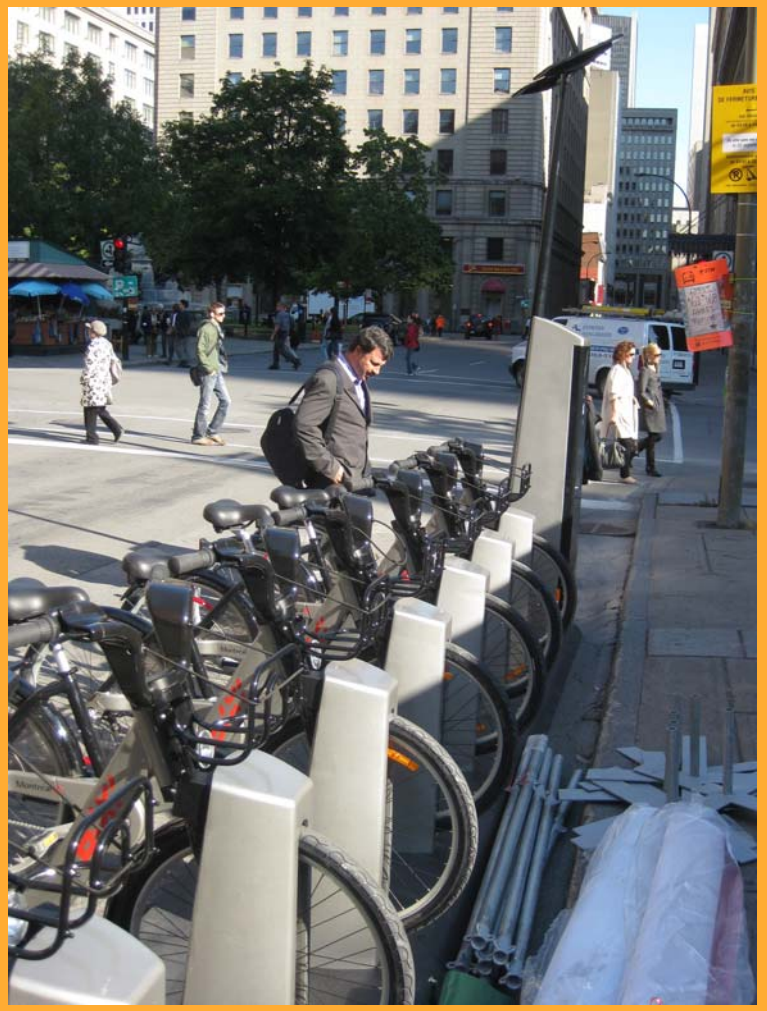
Source: Nelson\Nygaard Consulting Associates

Presentation Outline

- Off-Street Parking
- On-Street Parking
- Car-Share Parking
- Bicycle Parking
- Parking Technology
- Parking Management
- Plan Text

Bicycle Parking

- Fairfax County asks developers to provide:
  - 1 parking space per 7,500 s.f. for office
  - 1 parking space per 3 residential units
- Chicago requires one bike space for every two required vehicle spaces up to a maximum of 50 bicycle parking spaces
- Bike parking can be created on street in place of a parking spot



Presentation Outline

- Off-Street Parking
- On-Street Parking
- Car-Share Parking
- Bicycle Parking
- Parking Technology
- Parking Management
- Plan Text

Parking Technology

Parking Pay Stations

- One meter serves many spaces
- Can use debit and credit cards
- Can be programmed for different rates at different times
- Wireless communications
- Can be solar powered

Parking Technology

Smart Parking Services

- At least five companies in U.S that connect parking providers with those who need to park
  - SpotScout, Inc., MobileParking LLC, ParkingSpotter.com, Parkingspots.com, GottaPark
- Use desktop or mobile device to search for parking, find, reserve, and pay
- Includes spaces at private and public garages, at residences, and business lots
- Some provide this service free, others ask a service charge

Parking Technology

Real Time Parking Availability (Signs)

Presentation Outline

- Off-Street Parking
- On-Street Parking
- Car-Share Parking
- Bicycle Parking
- Parking Technology
- Parking Management
- Plan Text

Parking Management

- Shared parking
- Parking pricing
- Remote monitoring
- Parking enforcement
- Parking near Metrorail stations
- Temporary surface parking lots
- Parking signing and wayfinding
- Parking studies

A definite need for parking management!

Presentation Outline

- Off-Street Parking
- On-Street Parking
- Parking Technology
- Parking Management
- Plan Text

Parking and Plan Text

- Off-street parking rates for Tysons
  - within ¼ mile from Metrorail station entrances
  - between ¼ mile and ½ mile from Metrorail station entrances
  - other areas within Tysons

- Provision of on-street parking
  - street cross sections

- The need for parking management

- General provisions (already in draft Plan Text), e.g.
  - encourage shared parking
  - encourage smart parking technology
  - encourage preferential parking for carpools, vanpools
  - encourage parking pricing