



County of Fairfax, Virginia

Dulles Corridor Special Study Current Conditions- Interim Report

Presented to

The Reston Master Plan Task Force

Presented By

Fairfax County Department of Transportation

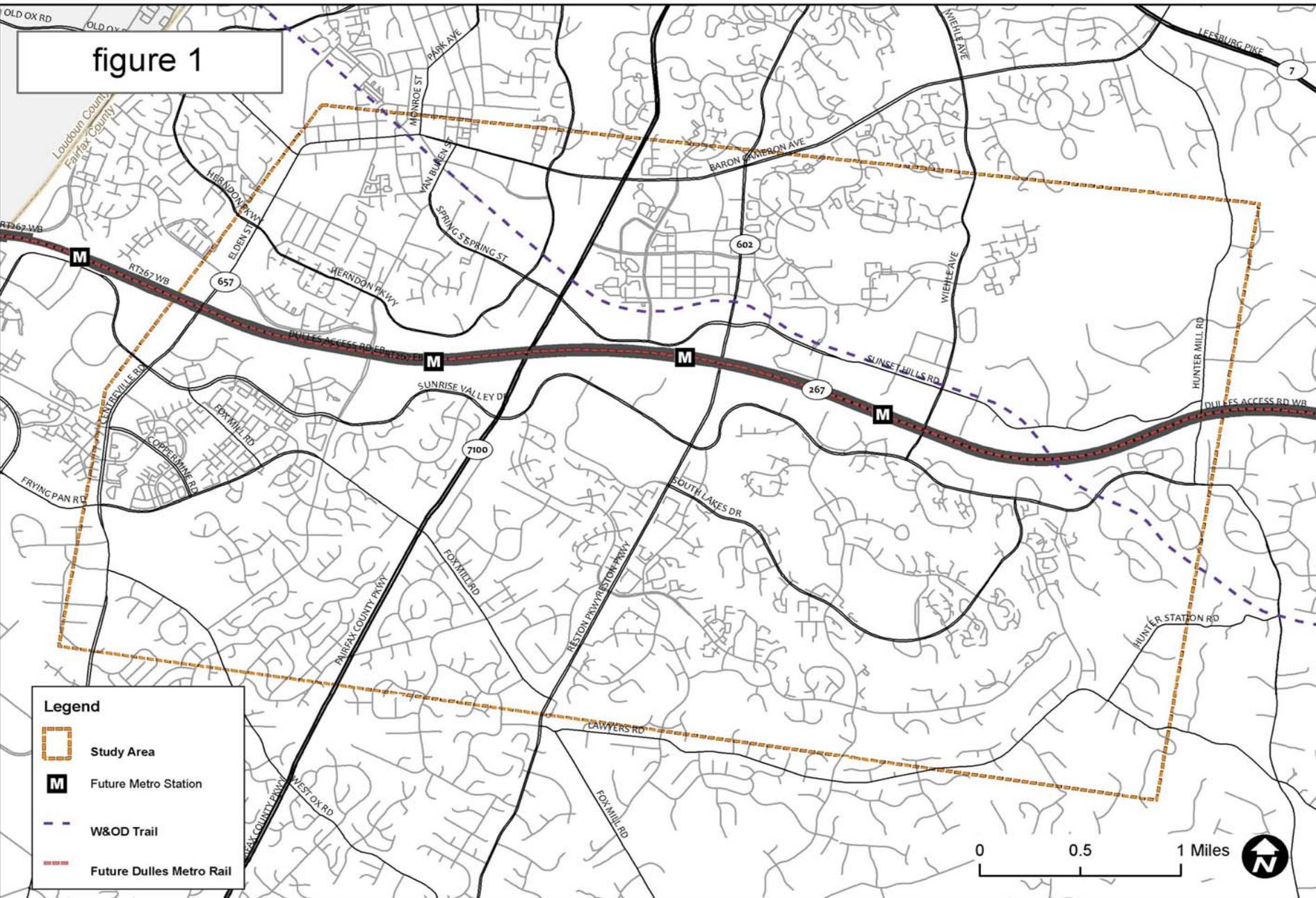
Date: May 11, 2010



Current Conditions Assessment

- Transportation Characteristics of the Study Area
- County's Current Transportation Plan (Comprehensive Plan)
- Transportation Demand Management (TDM) Goals

figure 1



Legend

-  Study Area
-  Future Metro Station
-  W&OD Trail
-  Future Dulles Metro Rail

Dulles Corridor Study Area





Travel Patterns in Study Area

- Warning: Following data drawn from multiple sources



Commute to Work Mode

Reston & Herndon Residents

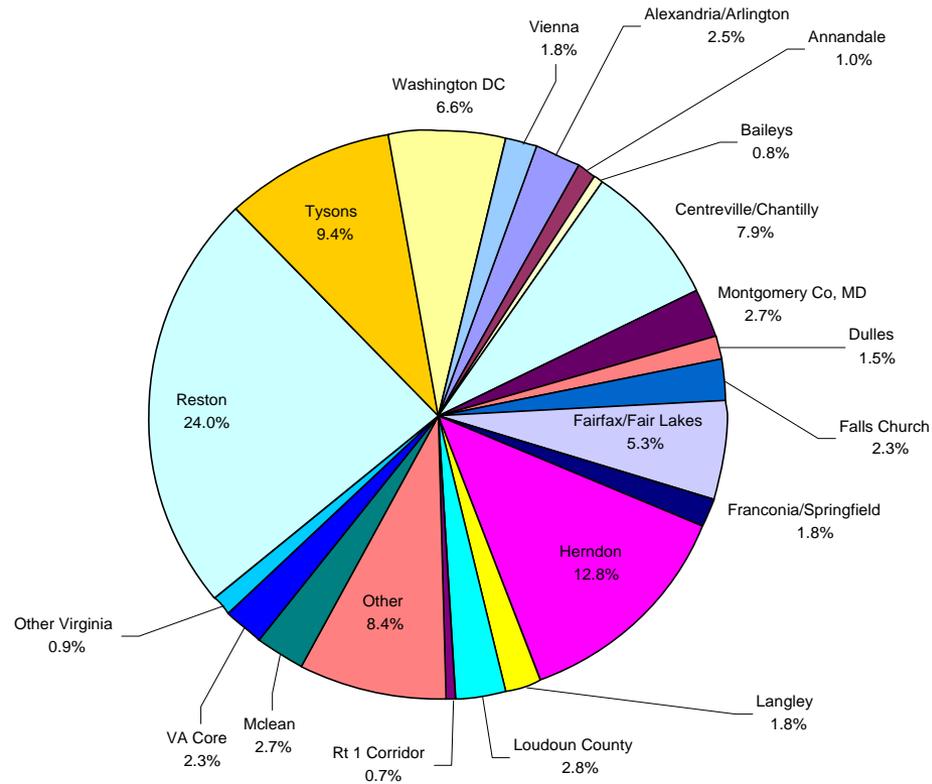
40,000 workers

- Drive Alone 78%
- Transit 5%
- Carpool 9%
- Walk 2%
- Work At Home 5%

Source: American Community Survey, 2006-2008; US Census Bureau



Figure 3: Work Location of Residents of Upper Potomac District





Work Location of Residents

Upper Potomac Planning District

• Reston	24%
• Herndon	13%
• Tysons	9%
• Washington DC	7%
• Centreville/Chantilly	8%
• Arlington/Alexandria	3%

- Source: 2005 Fairfax County Household Travel Survey



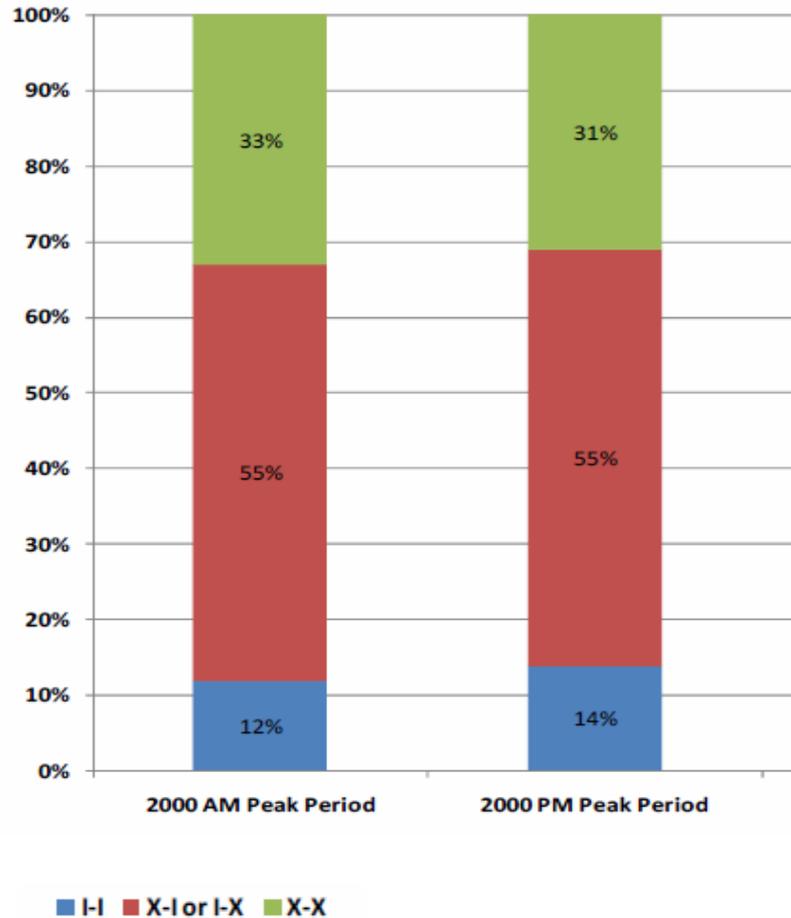
Current Travel Patterns

	AM Peak	PM Peak
Internal Internal (I-I) trips	12%	14%
Internal External (I-X or X-I) trips	55%	55%
External External (X-X) trips	33 %	31%

Source: **Wiehle Ave/Reston Pkwy Station Access Management Study, 2008**



Study Area Trip Purpose Split Excluding DIAAH Through Trips





Trip Distributions

- Daily Trips To Central Reston:
 - o 12% From the East (Dulles Toll Road)
 - o 6% From the West (Dulles Toll Road)
 - o 33% From the North and West
 - o 27% From the South

Source: Fairfax County DOT calculation

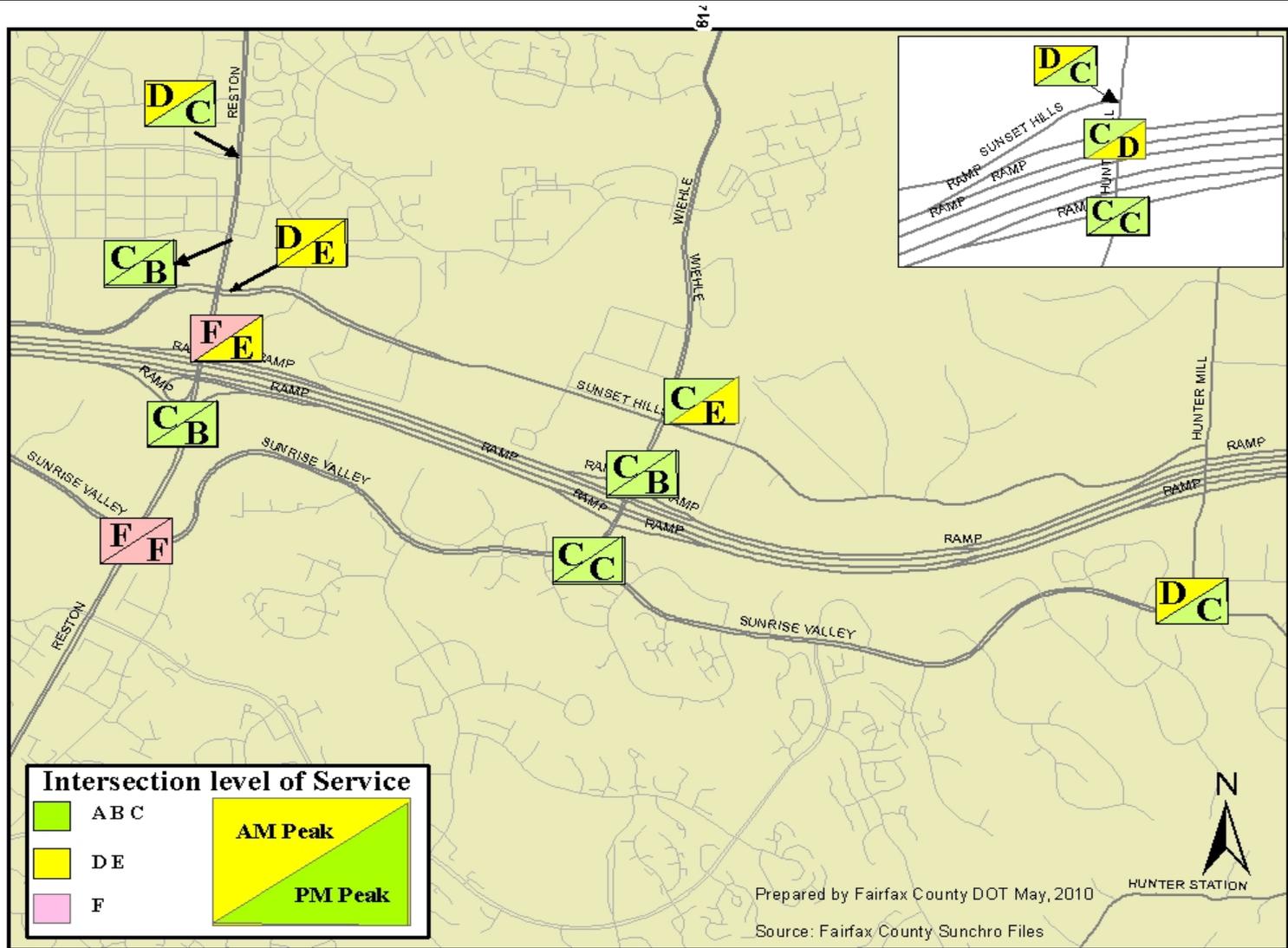


Review of the Current Roadway System Performance

- A commonly utilized measure for determining the performance of a facility or the quality of service is measuring the existing volume to capacity (V/C) ratio of the intersections
- This analysis assigns a “grade” to indicate the relative operational efficiency of an intersection as compared with standard capacities for similar intersections
- The grades are typically shown as “A” through “F”, with A indicating a free-flow condition and F a failing condition indicating very high levels of traffic congestion and poor condition unacceptable to most drivers

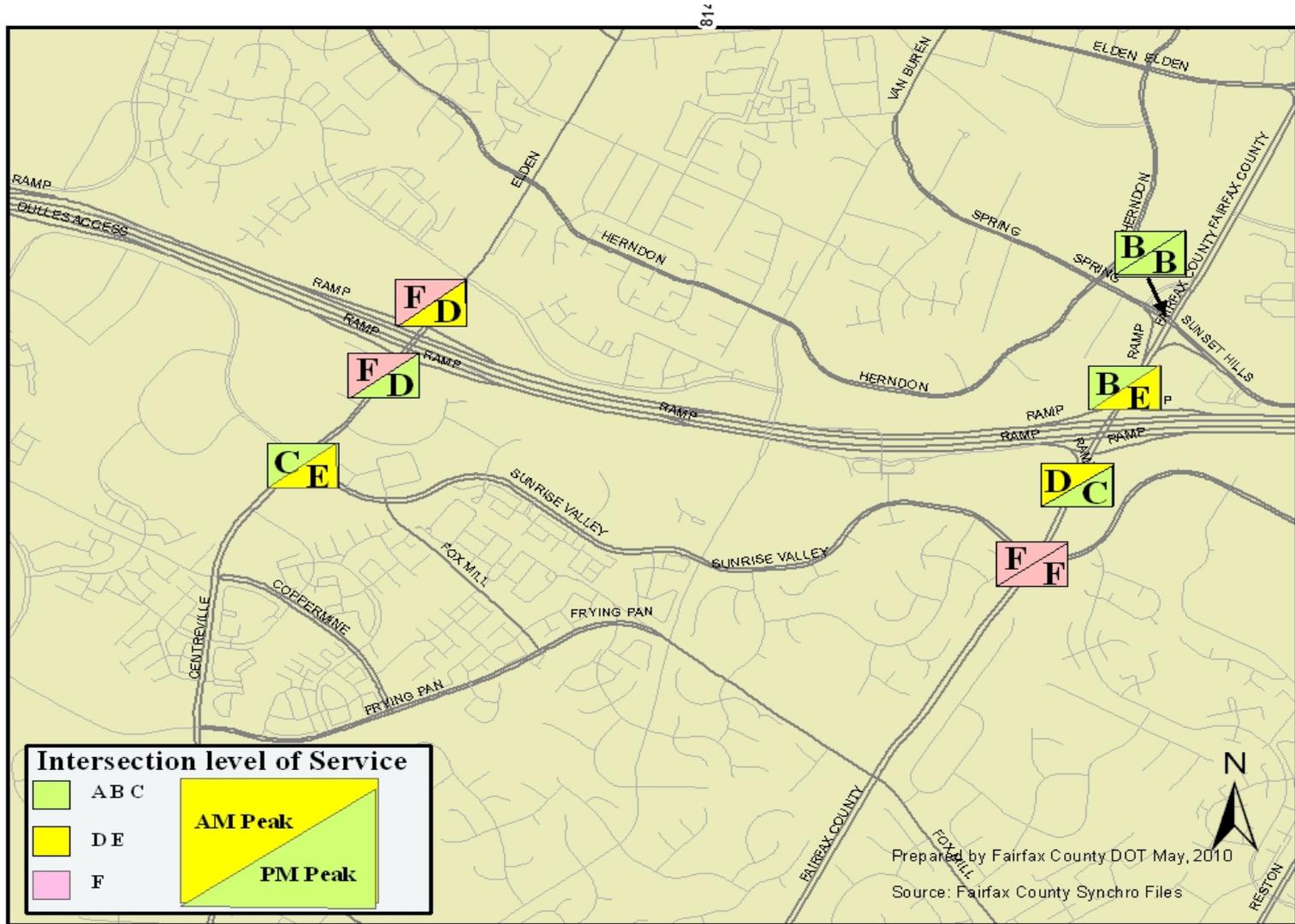


County of Fairfax, Virginia





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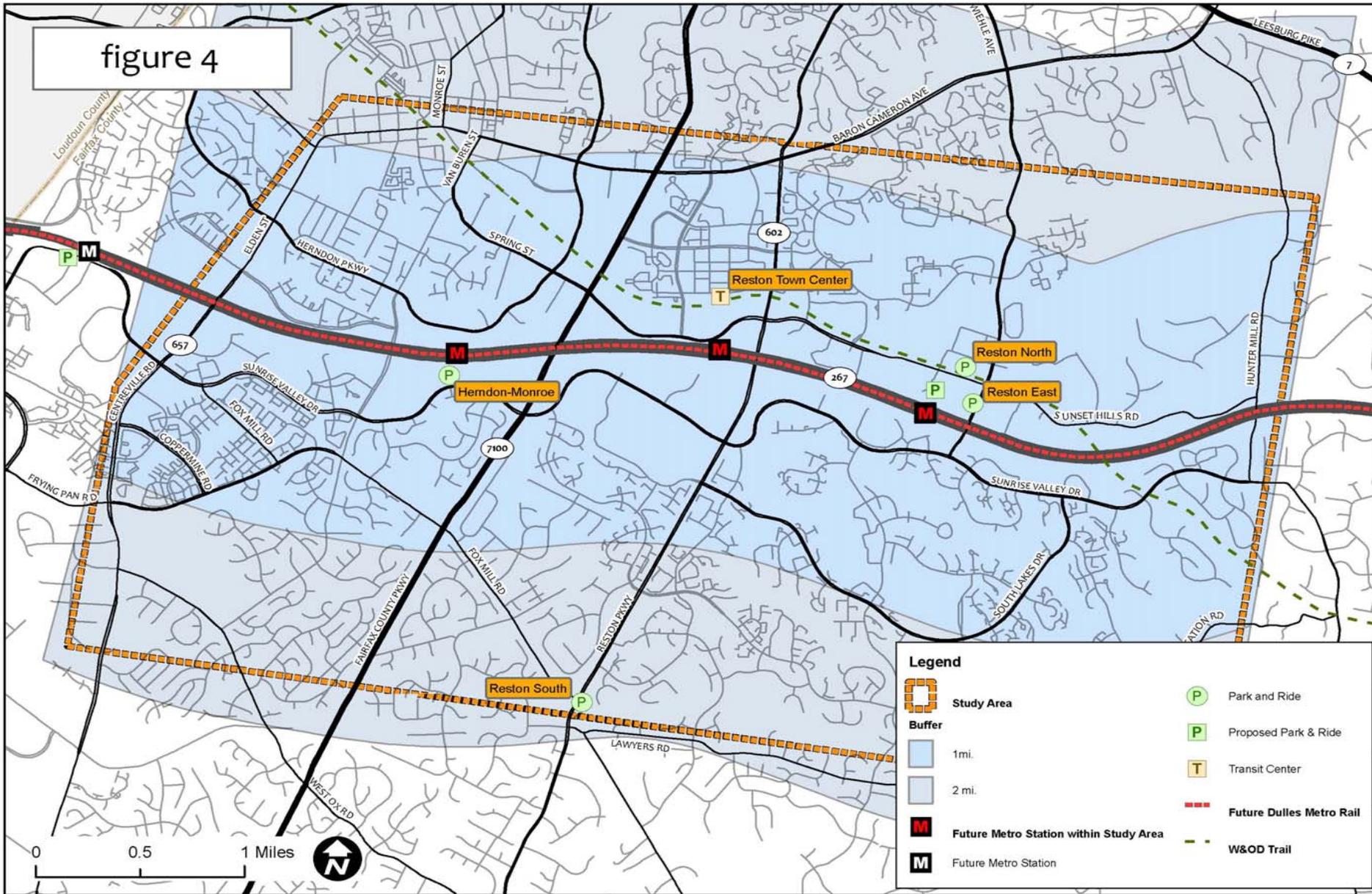




Fairfax County Transportation Plan

- What Transportation Services and Facilities Are Planned for the Study Area?

figure 4



Fairfax County Transportation Facilities within the Dulles Corridor Study Area





Fairfax County Transit Development Plan TDP

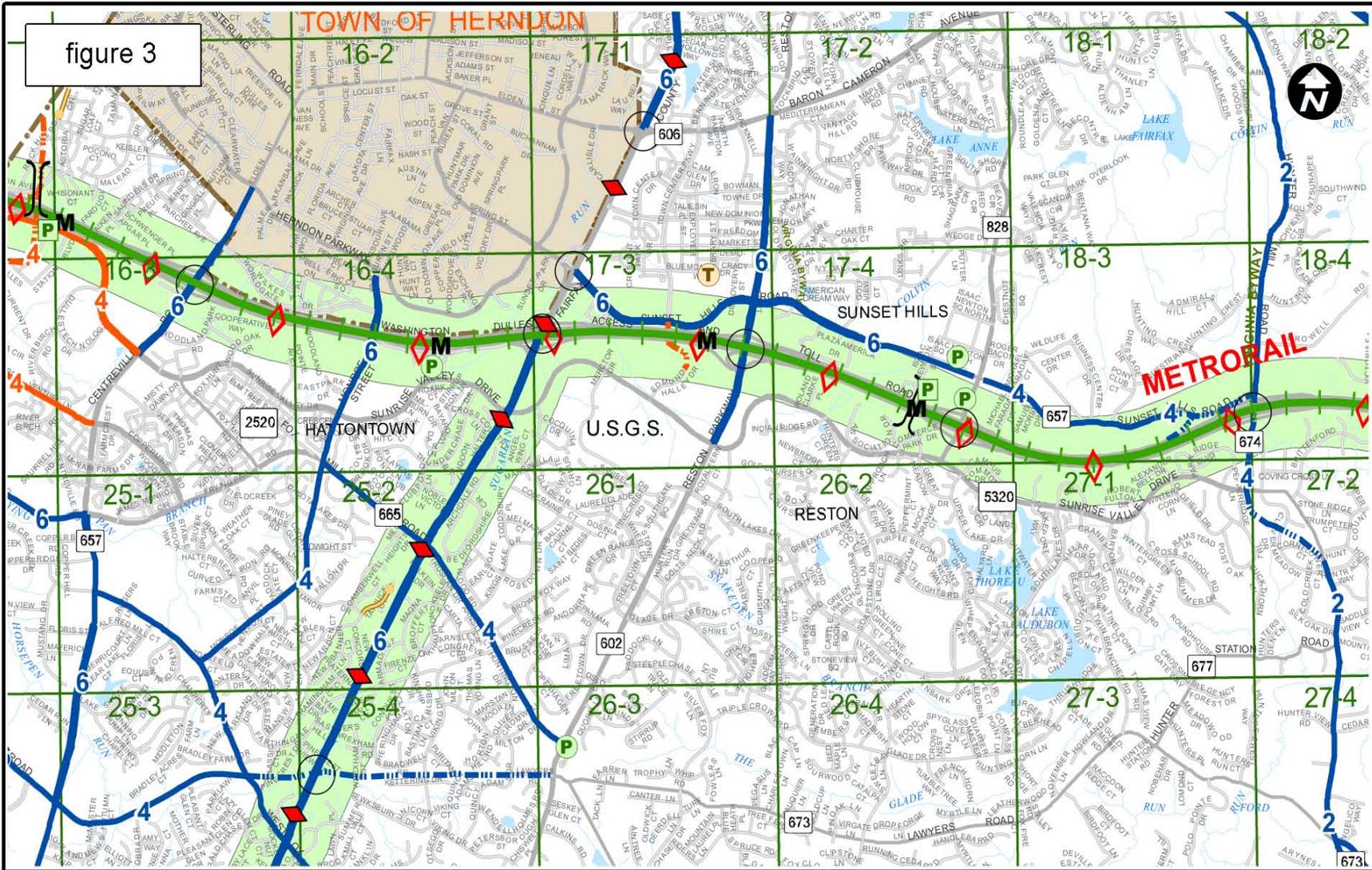
- A comprehensive 10 year plan for all bus service in Fairfax County (Fairfax Connector and Metrobus)
- Financially Unconstrained
- Prioritized Service Recommendations
- Planning focused on priority corridors and activity centers to best link the County's vibrant economic activity centers
- Commenced in January 2008 and Completed in December 2009



TDP Recommendations

- Two Phase Plan for Metrorail
- Restructuring plan covers all roads with bus service
- Streamlines service
- Extensive Span of Service: 5 AM to 12 midnight (many routes)
- Peak Frequency: 15 to 30 minutes
- Off-Peak and Weekend Frequency: 30 minutes
- Details at: <http://www.fairfaxcounty.gov/fcdot/tdp.htm>

figure 3



Fairfax County Transportation Plan within the Dulles Corridor Study Area





Current Fairfax County Comprehensive Plan Transportation Recommendations

- HOV lanes on Fairfax County Parkway
- Rail Stations (Wiehle Avenue, Reston Parkway and Herndon-Monroe)
- Widening of Sunset Hills Road (up to 6 lanes west of Wiehle Ave.)
- Widening and improvement of some of the major facilities like Reston Parkway, Monroe Street, McLearen Road and Fox Mill Road
- Extension of McLearen Road from West Ox Road to Reston Parkway
- Full Interchange on Fairfax County Parkway and McLearen Road
- An overpass west of Wiehle Ave over the Toll Road (Soapstone extension) and underpass from Sunset Hills Road to Edmund Halley Drive
- Encourage TOD development and TDM measures



Reston Metrorail Station Access Management Plan

➤ RMAG Recommendations Based on the Following Priorities:

1. Pedestrians
2. Bicyclists
3. Transit Users (buses)
4. Private Vehicles (drivers and carpools)



TDM Goals

- What Are Reasonable TDM Goals in Transit Station Areas?



County TDM Study

Study Objective

- Develop a TDM Manual and process to provide Fairfax County and the development community a clear and consistent application of TDM within the development review process
- Recommend changes to parking requirements for TOD locations

Study Status

- Nearly Complete



Transportation Demand Management Trip Reduction Goals Consultant Recommendations

➤ Trip Reduction Goals - Office and Residential Development

High Level of Transit Service

% Reduction from ITE PM Peak Hr Rates

With TDM 35% - 45%

* High = within 1/2 mile walking distance of a rail transit station

Source: County TDM Study (Preliminary Recommendations)



TODs/Transit Station Areas – Parking Maximums Consultant Recommendations

Maximum Requirements, Spaces/Unit or Spaces/1,000 sq. ft.

Use	Current Minimum	Zone A – <1,000' from Metro	Zone B – 1,000-2,000' from Metro
Single-Family Detached	2.0	2.5	2.5
Townhouses	2.75	2.2	2.5
Multifamily	1.6	1.3 – 1.9	1.4 – 2.0
Office	2.6-3.6	2.5 – 3.0	2.9 – 3.4
Retail	5.0-6.0	5.0	5.6



Tysons Plan

Proposed Trip Reductions (Over Time)

Development levels in total square feet (with corresponding forecast year)	TDM Vehicle Trip Reduction Goals, (Percentage Reduction from ITE 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) (Comprehensive Plan Level)	65%	55%	50%	45%



Tyson's Plan Proposed Parking Rates

Parking Ratios for Tyson's Corner

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



- Questions?