

Community Meeting- November 18, 2015

Rocking Horse Road Center



Tonight's Agenda

6:30- 6:45p.m: Background and recap of prior meetings

- White Flint 1
- Transportation Policies
- White Flint West Workaround

6:45p.m-7:30 p.m: Transportation Modeling

- Regional Model
- Area Wide and Local Transportation Analysis

7:30 p.m-8:00 p.m: Questions

8:00 p.m-8:30 p.m: Connection Priorities

Prior Public Meetings

June 25, 2015: White Flint 2 Open House



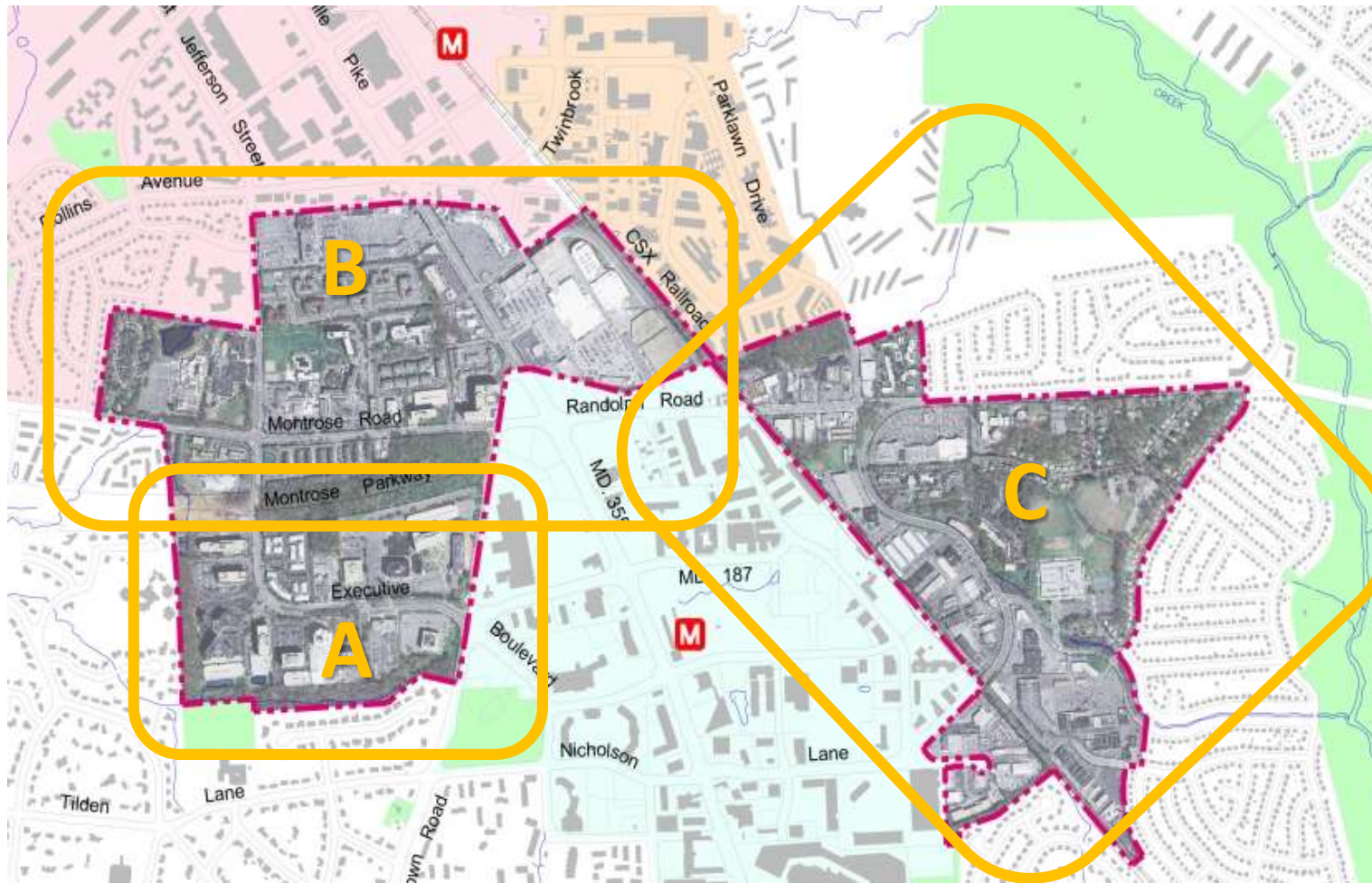
September 17, 2015: Walter Johnson Schools Meeting



October 14: Transportation and connections; parks and open space; and land use and density



Breakout Groups



- Vision, Image and Character
- Transportation and Connections
- Parks and Open Space
- Public Facilities
- Land Use and Density

Summary Comments

Table with Nkosi and Rick top priorities:

- Redevelop Randolph Hills Shopping Center.
- Connectivity, pedestrian and bicyclists to White Flint 1.
- MARC Station.
- Roadway improvements at Boiling Brook Parkway [and Rocking Horse Road].
- MCPS property transition to parkland, which is adjacent to Rocking Horse Road.

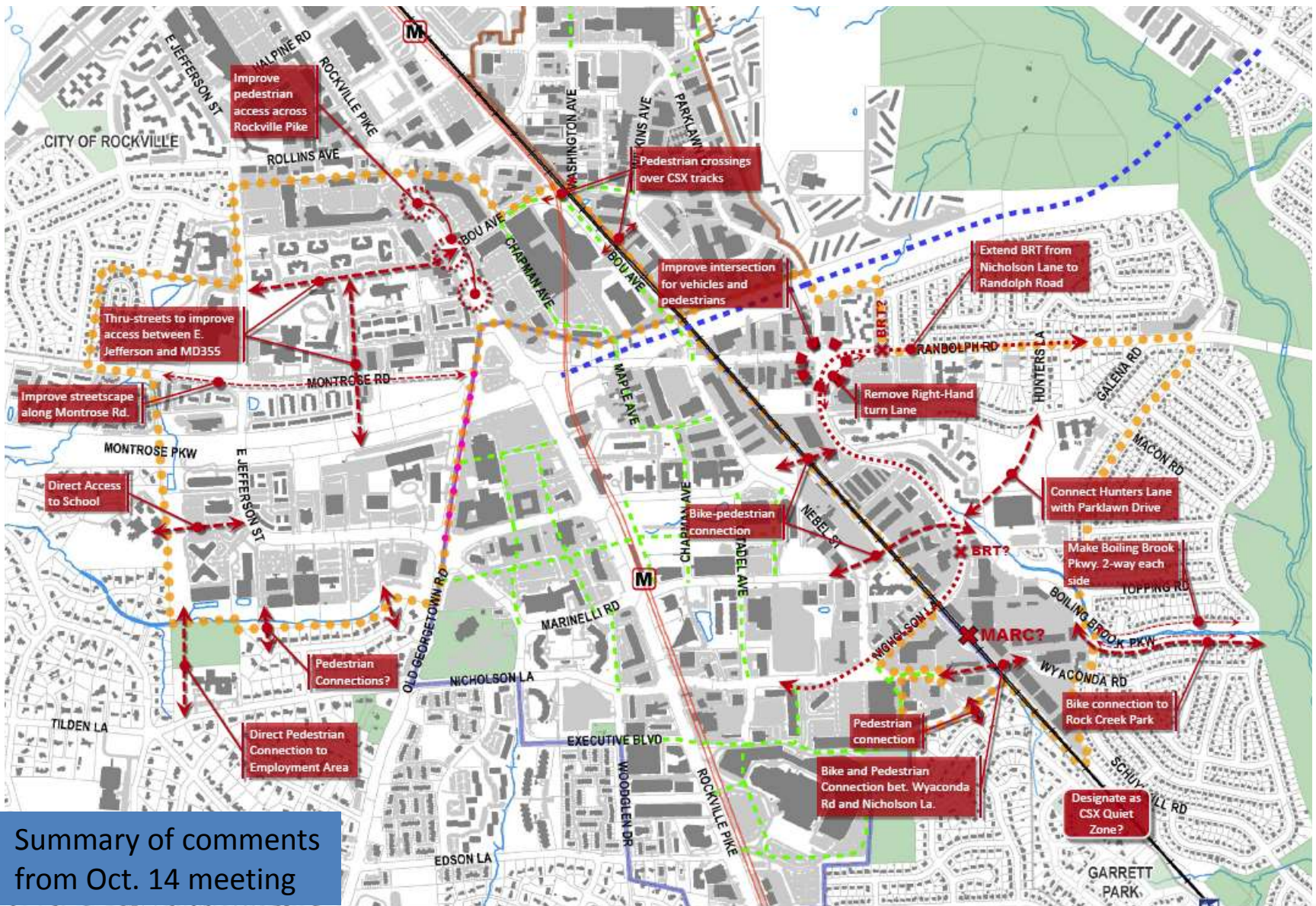
Table with Nancy, Steve and Robert top priorities:

- School capacity – WJHS needs solution. Add capacity or re-open Woodward – Keep students in these boundaries. What about Middle School?
- Parks and Green Space – Need grass and trees, not just bricks and benches
- Sidewalk improvements/streetscape along Montrose Road
- Improved pedestrian access across Rockville Pike
- 55+ active communities needed
- Connections across train tracks.

Table with Emily, Don and Eric top priorities:

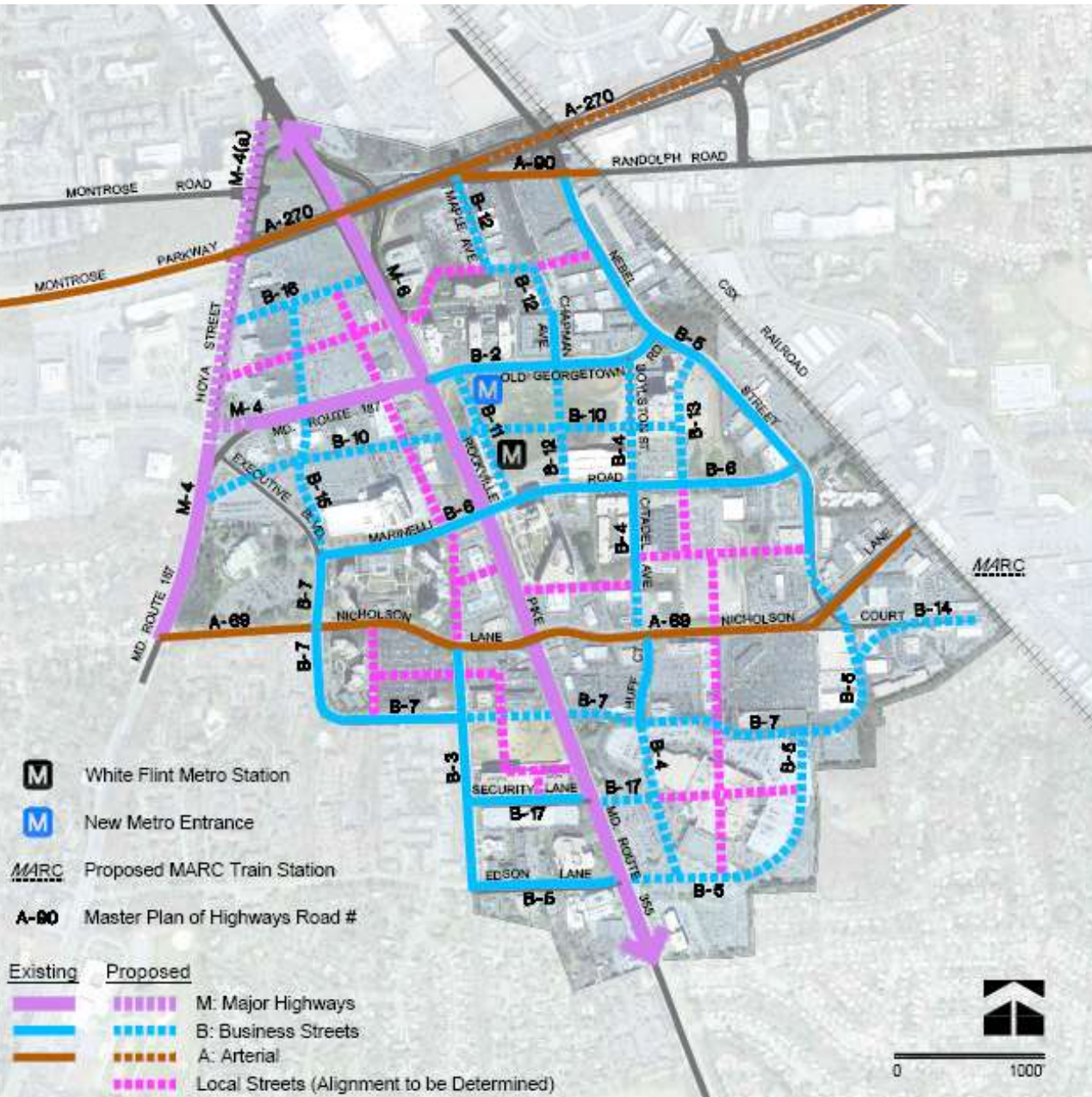
- Road connection to Green Acres.
- Public pool, including special needs on East Jefferson Street.
- Pedestrian crossing at Montrose Crossing and Montrose Road.
- Federal Plaza needs better egress and a thru street?
- High rises are OK close to the Pike; low-rise mixed use along Executive Boulevard.
- Montrose Crossing needs a community center/park space.
- Montrose school is an urban desert. Community park? Center?
- Need another connection between Parklawn Drive and Randolph.
- Bike path to Rock Creek Park along Boiling Brook.

Potential WF2 Connections



Summary of comments from Oct. 14 meeting

White Flint I Street Network



New street network-public and private streets

Rockville Pike as an urban boulevard

White Flint I Street Network

Table 4: Roadway Facility and Segment

Street	From	To	Road Number	ROW (feet)	Lanes*	Road Code Standard
Major Highways						
Old Georgetown Rd (MD 187)	Nicholson Ln	Executive Blvd	M-4	150	6, divided	2008.02 mod.
	Executive Blvd	Rockville Pike (MD 355)	M-4	120	4, divided	2008.01 mod.
Hoya St	Executive Blvd	Montrose Pkwy	M-4a	120	4, divided	2008.01 mod.
Rockville Pike (MD 355)	Sector Plan southern boundary	Sector Plan northern boundary	M-6	150 (162**)	6, divided	2008.02 mod.
Arterials						
Montrose Pkwy	Hoya St	Sector Plan eastern boundary	A-270	300	4, divided	2007.01 mod.
Randolph Rd	Montrose Pkwy	Plan eastern boundary	A-90	100	4	2004.01 mod. / 2004.28 mod.
Nicholson Ln	Old Georgetown Rd (MD 187)	Sector Plan eastern boundary	A-69	90	4	2004.02 mod. 2004.28 mod.
Business Roads						
Chapman Ave (Maple Ave)	Marinelli Rd	Old Georgetown Rd	B-12	70	2	2005.02
	Old Georgetown Rd	Montrose Pkwy	B-12	70	2	2005.02
Citadel Ave/Boylston St	Nicholson Ln	Old Georgetown Rd	B-4	70	2	2005.02
Edson Ln	Woodglen Dr	Rockville Pike (MD 355)	B-5	70	2	2004.21 mod. / 2005.02 mod.
Executive Blvd Extended	Marinelli Rd	Nebel St Extended (B-5)	B-7	80	4	2004.01
Huff Ct/ Huff Ct Extended	Executive Blvd Extended	Nicholson Ln	B-4	70	2	2005.02
Huff Ct/ Huff Ct Extended***	Nebel St Extended (B-5)	Executive Blvd Extended	B-4	70	2	2005.02
Station St	Marinelli Rd	Old Georgetown Rd	B-11	70	2	2005.02
Marinelli Rd	Executive Blvd	Nebel St	B-6	90	4	2005.03 mod.
Market St	Old Georgetown Rd (MD 187)	Rockville Pike (MD 355)	B-10	70	2	2005.02
McGrath Blvd	Rockville Pike (MD 355)	Wentworth Pl (B-13)	B-10	70	2	2005.02
Mid-Pike spine street	Marinelli Rd	Old Georgetown Rd (MD 187)	B-15	80	4	2004.01
	Old Georgetown Rd (MD 187)	New Street (Mid-Pike rung) (B-16)	B-15	70	2	2005.02
Nebel St Extended	Randolph Rd	Plan northern boundary	B-5	80	4	2004.24 mod.
Nebel St	Nicholson Ln	Randolph Rd	B-5	80	2	2004.24 mod.
Nebel St Extended	Rockville Pike (MD 355)	Nicholson Ln	B-5	80	2	2004.01 mod. 2005.02 mod.
new street (Mid-Pike rung)	Hoya St	Rockville Pike (MD 355)	B-16	80	2	2005.02 mod.
Nicholson Ct (realigned)	Nebel St Extended	900 feet east of Nebel St Extended	B-14	70	2	2005.02
Old Georgetown Rd	Rockville Pike (MD 355)	Nebel St	B-2	90	4	2004.02 mod. / 2005.03 mod.
Security Ln/Security Ln Extended	Woodglen Dr	Huff Ct Extended (B-4)	B-17	70	2	2005.02
Wentworth Pl	Marinelli Rd	Nebel St	B-13	70	2	2005.02
Woodglen Dr	Edson Ln	Nicholson Ln	B-3	70	2	2005.02 mod.
Woodglen Dr ***	Nicholson Ln	Marinelli Rd	B-3	60	2	2005.02 mod.
Woodglen Dr ***	Marinelli Rd	Mid-Pike Rung (B-16)	B-3	70	2	2005.02 mod.
new street ***	Chapman Ave	Nebel St	B-18	70	2	2005.02
new street ***	Nicholson Ln	Executive Blvd Extended	B-19	70	2	2005.02

*The number of planned through travel lanes for each segment, not including turning, parking, acceleration, deceleration, or other auxiliary lanes.

** The Rockville Pike 150-foot right-of-way can be expanded to 162 feet (additional feet to be obtained through reservation).

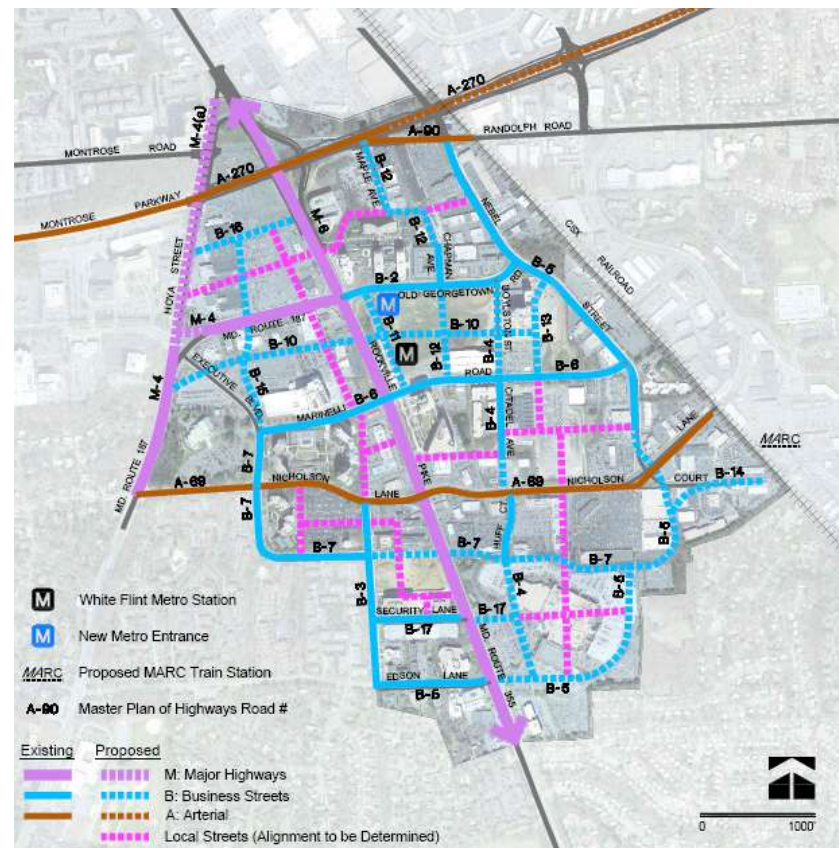
*** New streets B-16, B-19, Huff Court Extended (B-4), and the portion of Woodglen Drive (B-3) north of Nicholson Lane may be constructed as private streets subject to use easements meeting the requirements described in the Plan text.

"mod." indicates that some modification is needed to the referenced design standard to reflect planned elements such as transit priority, bike lanes, or turn lanes.

The target speed for all master planned roadways in the Plan area is 25 m.p.h., except for Montrose Parkway with a target speed of 35 m.p.h. in the Plan area.

White Flint 1 Transportation Policies

- No Local Area Transportation Review (LATR) and Transportation Policy Area Review (TPAR).
- White Flint Special Tax District-10% *ad valorem* tax on all commercial properties, excluding existing multifamily rental, condominiums, townhouses and religious institution.
 - Council Bill No. 50-10
 - Resolution No. 16-1570 (White Flint Sector Plan Implementation Strategy and Infrastructure Improvement List)
- Staging and monitoring of development



White Flint 1 Special Taxing District

To provide greater assurance of achieving this vision, the Plan identified a need for a public financing mechanism to fund a portion of the transportation infrastructure. This public financing mechanism anticipates assessments against property or other means of revenue generation and is intended to replace payments that projects redeveloping in the plan area would have to pay under current adequate public facilities requirements for local area transportation and policy area mobility reviews (LATR and PAMR).

The Council enacted Bill 50-10, creating the White Flint Special Taxing District to raise revenues to fund certain transportation improvements. The White Flint Special Taxing District will provide greater assurances of reliable and consistent revenue generation and materially greater funds for transportation improvements than would be anticipated from combined payments under otherwise applicable transportation development impositions, including LATR, PAMR, and transportation impact taxes.

Policy Area Mobility Review (PAMR) is now Transportation Policy Area Review (TPAR).

WHITE FLINT SPECIAL TAXING DISTRICT
DISTRICT-FUNDED IMPROVEMENTS

Improvement Description	Estimated Cost
Old Georgetown Road (MD 187): Nicholson La./Tilden La. to Executive Blvd.	\$17,774,000
Old Georgetown Road (MD 187): Hoya St. to Rockville Pike (MD 355)	1,789,000
Hoya Street (formerly Old Old Georgetown Rd.): Executive Blvd. to Montrose Pkwy.	15,344,000
Rockville Pike (MD 355): Flanders Ave. to Hubbard Drive	66,961,000
Nicholson Lane: Old Georgetown Rd. (MD 187) to CSX tracks	12,942,000
Executive Blvd. Ext.: Marinelli Rd. to Old Georgetown Rd (MD 187)	23,500,000
Main St./Market St.: Old Georgetown Rd. (MD 187) to Executive Blvd. Extended (Bikeway)	1,713,000
Main St./Market St.: Old Georgetown Rd. (MD 187) to Executive Blvd. Ext.	4,933,000
Main St./Market St.: Executive Blvd. to Rockville Pike (MD 355)	4,661,000
Market Street from Maryland Route 355 to Station Street	7,200,000
Executive Blvd. Ext. (East): Rockville Pike (MD 355) to Nebel St. Ext. (South)	16,700,000
Nebel St. Ext. (South): Nicholson La. to Executive Blvd. Ext. (East)	8,200,000
TOTAL	181,717,000

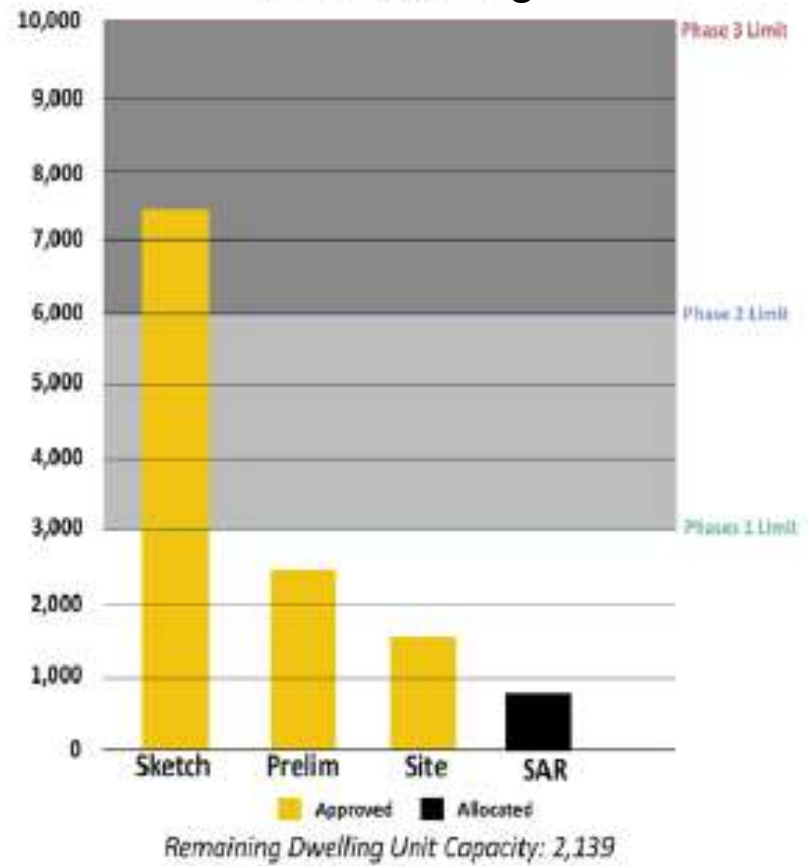
White Flint 1 Staging

Table 6 : Staging Plan

Phase 1 3,000 dwelling units 2 million square feet non-residential	Phase 2 3,000 dwelling units 2 million square feet non-residential	Phase 3 3,800 dwelling units 1.69 million square feet non-residential
<p>Contract for the construction of the realignment of Executive Boulevard and Old Georgetown Road.</p> <p>Contract for construction of Market Street (B-10) in the Conference Center block.</p> <p>Fund streetscape improvements, sidewalk improvements, and bikeways for substantially all of the street frontage within one-quarter mile of the Metro station: Old Georgetown Road, Marinelli Road, and Nicholson Lane.</p> <p>Fund and complete the design study for Rockville Pike to be coordinated with SHA, MCDOT and M-NCPPC.</p> <p>Achieve 34 percent non-auto driver mode share for the Plan area.</p> <p>The Planning Board should assess whether the build out of the Sector Plan is achieving the Plan's housing goals.</p>	<p>Construct streetscape improvements, sidewalk improvements, and bikeways for substantially all of the street frontage within one-quarter mile of the Metro station: Old Georgetown Road, Marinelli Road, and Nicholson Lane.</p> <p>Complete realignment of Executive Boulevard and Old Georgetown Road.</p> <p>Construct the portion of Market Street as needed for road capacity.</p> <p>Fund the second entrance to the White Flint Metro Station.</p> <p>Explore the potential for expediting portions of Rockville Pike where sufficient right-of-way exists or has been dedicated. It should be constructed once the "work-around" roads are open to traffic.</p> <p>Increase non-auto driver mode to 42 percent.</p> <p>The Planning Board should assess whether the build out of the Sector Plan is achieving the Plan's housing goals.</p> <p>The Planning Board must develop a plan to determine how to bring the mode share to 51 percent NADMS for residents and 50 percent NADMS for employees during Phase 3.</p>	<p>Complete all streetscape improvements, sidewalks, and bikeways outside one-quarter mile from the Metro.</p> <p>Reconstruct any remaining portion of Rockville Pike not constructed during prior phases.</p> <p>Achieve the ultimate mode share goals of 51 percent NADMS for residents and 50 percent NADMS for employees.</p>

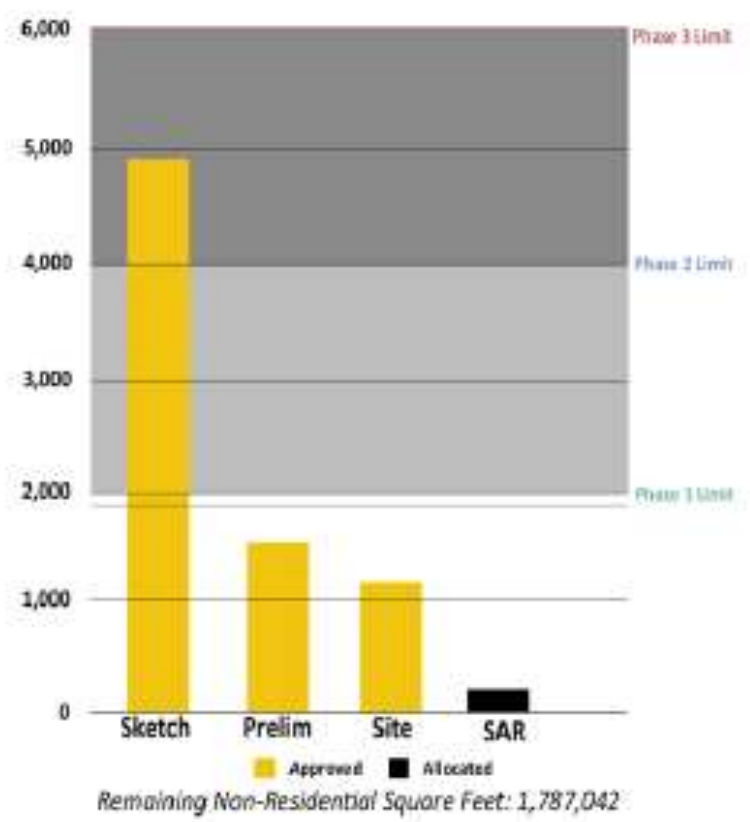
White Flint 1 Development

Residential Dwelling Units



Allocated Residential Development:
861 units (all at Pike & Rose)

Non-Residential



Allocated Non-Residential Development:
212,958 sq.ft. (all at Pike & Rose)

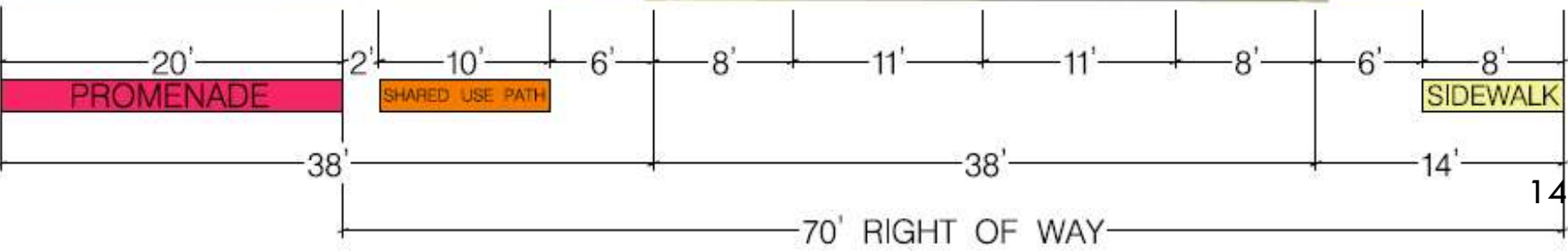
White Flint 1 Western Workaround



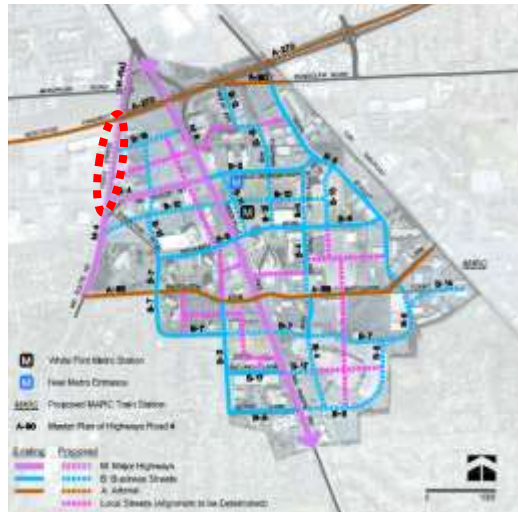
White Flint 1 Western Workaround



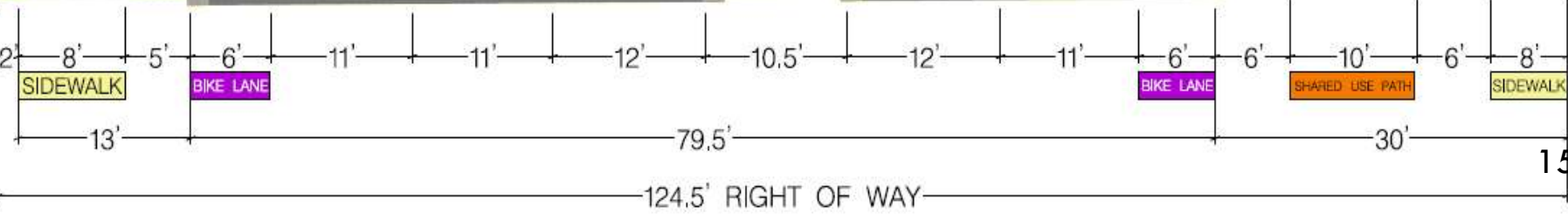
Main/Market Street



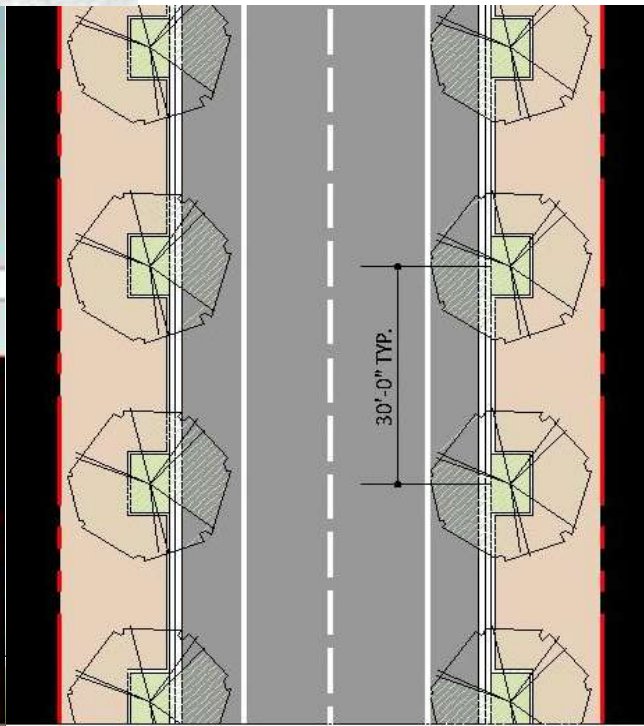
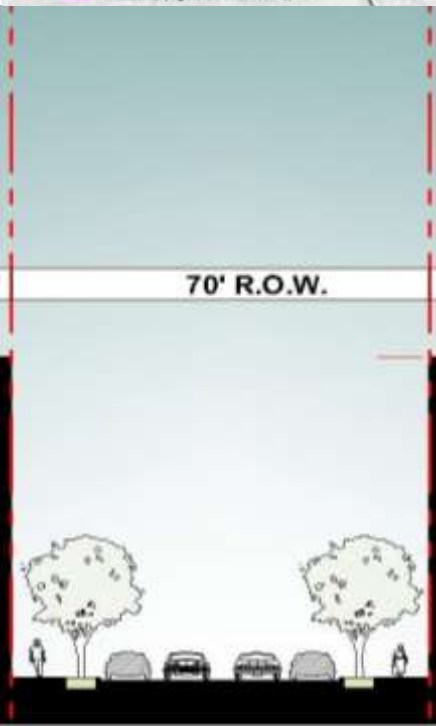
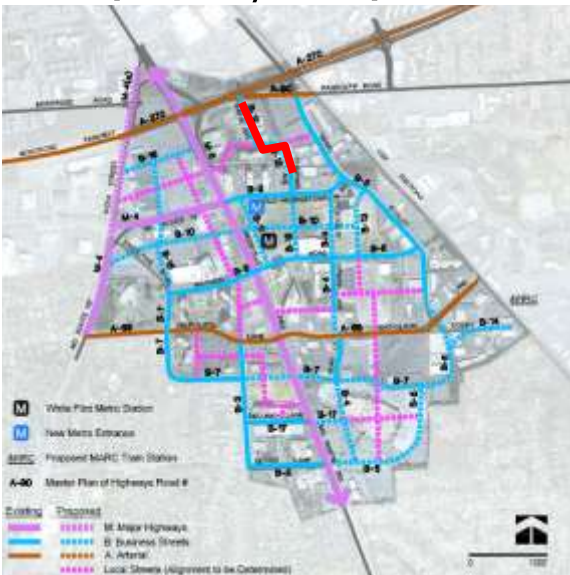
White Flint 1 Western Workaround



Towne Road



Chapman/Maple Avenue



Recent White Flint 1 Traffic Studies

Traffic Impact Study Source	Modeling Tool/Methods	Performance Measures
Stantec, Inc. (MCDOT)	<ul style="list-style-type: none"> ▪ Critical Lane Volume (CLV) ▪ Synchro 	<ul style="list-style-type: none"> ▪ Critical Lane Volume (CLV) ▪ Highway Capacity Manual (HCM) level of service ▪ HCM volume-to-capacity(V/C) ratio
STV Group, Inc. (White Flint Partnership)	<ul style="list-style-type: none"> ▪ VISSIM (micro-simulation) 	<ul style="list-style-type: none"> ▪ CLV ▪ HCM level of service ▪ HCM v/c ratio ▪ Person Throughout
Sabra, Wang & Associates, Inc. (City of Rockville)	<ul style="list-style-type: none"> ▪ Critical Lane Volume ▪ Synchro ▪ VISTRO (micro-simulation) 	<ul style="list-style-type: none"> ▪ CLV ▪ HCM level of service ▪ HCM v/c ratio ▪ Connectivity Index ▪ Person Throughput

Transportation Balance

Current conditions

- Existing roadways
- Transit and TDM

Staff Analysis Tools

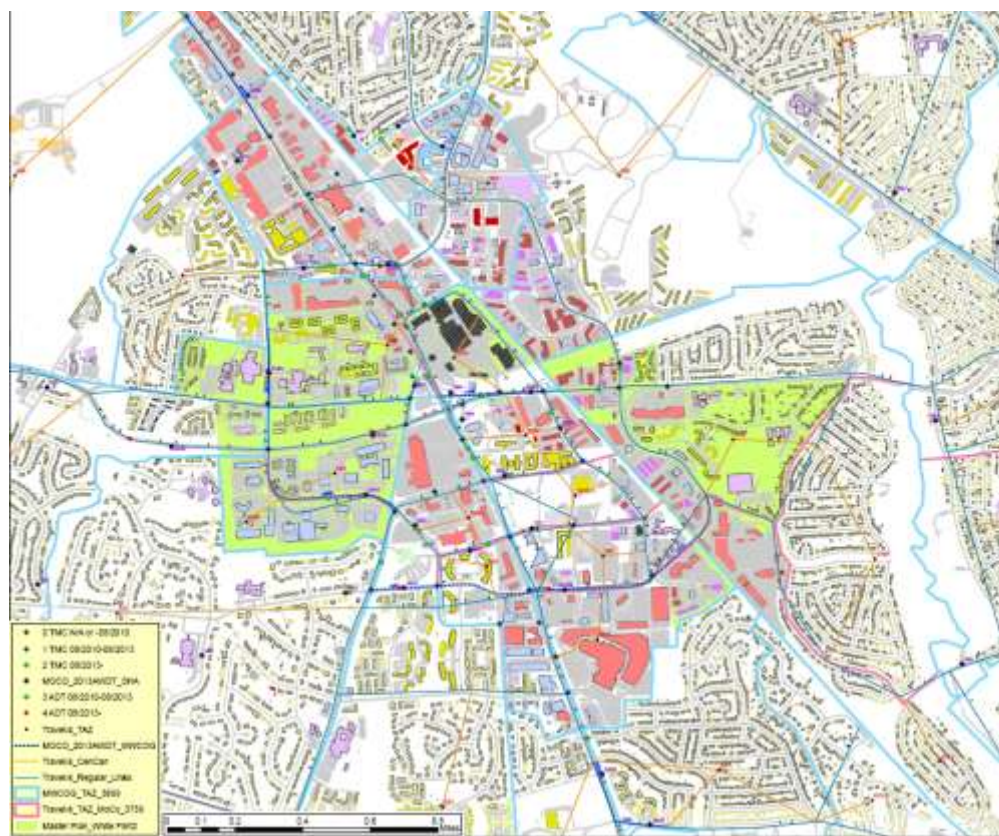
- TRAVEL/4 travel demand model
- Cordon Line Analyses
- Local Area Model (LAM)

County Council findings

- Transportation Policy Area Review (TPAR)
- Local Area Transportation Review (LATR)
- Highway Capacity Manual (HCM)

Other

- Zoning capacity/flexibility



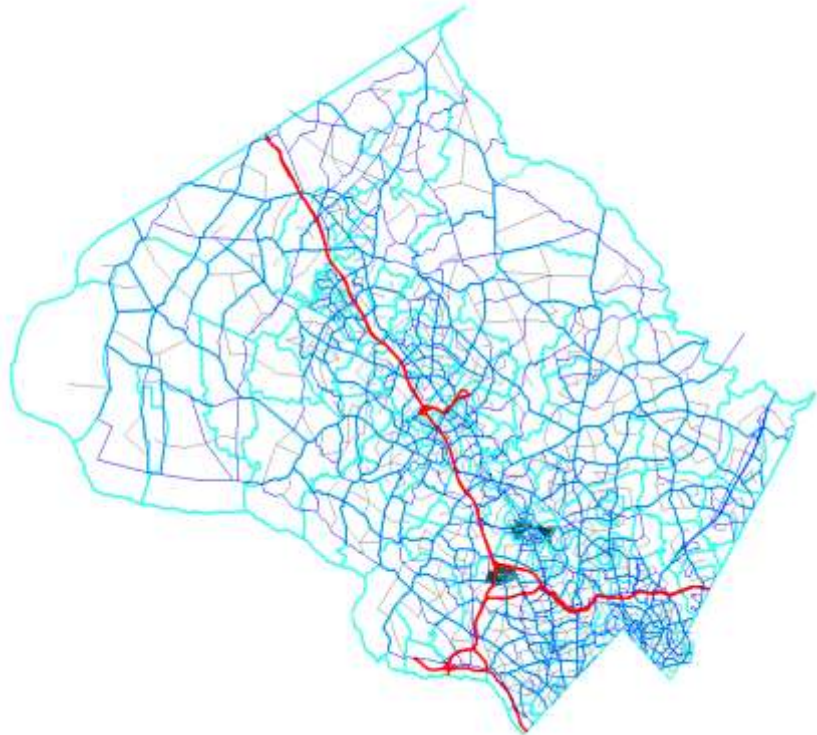
Transportation Modeling Overview

- Regional Modeling Process
- Area-wide Transportation Analysis
- Local Area Transportation Analysis

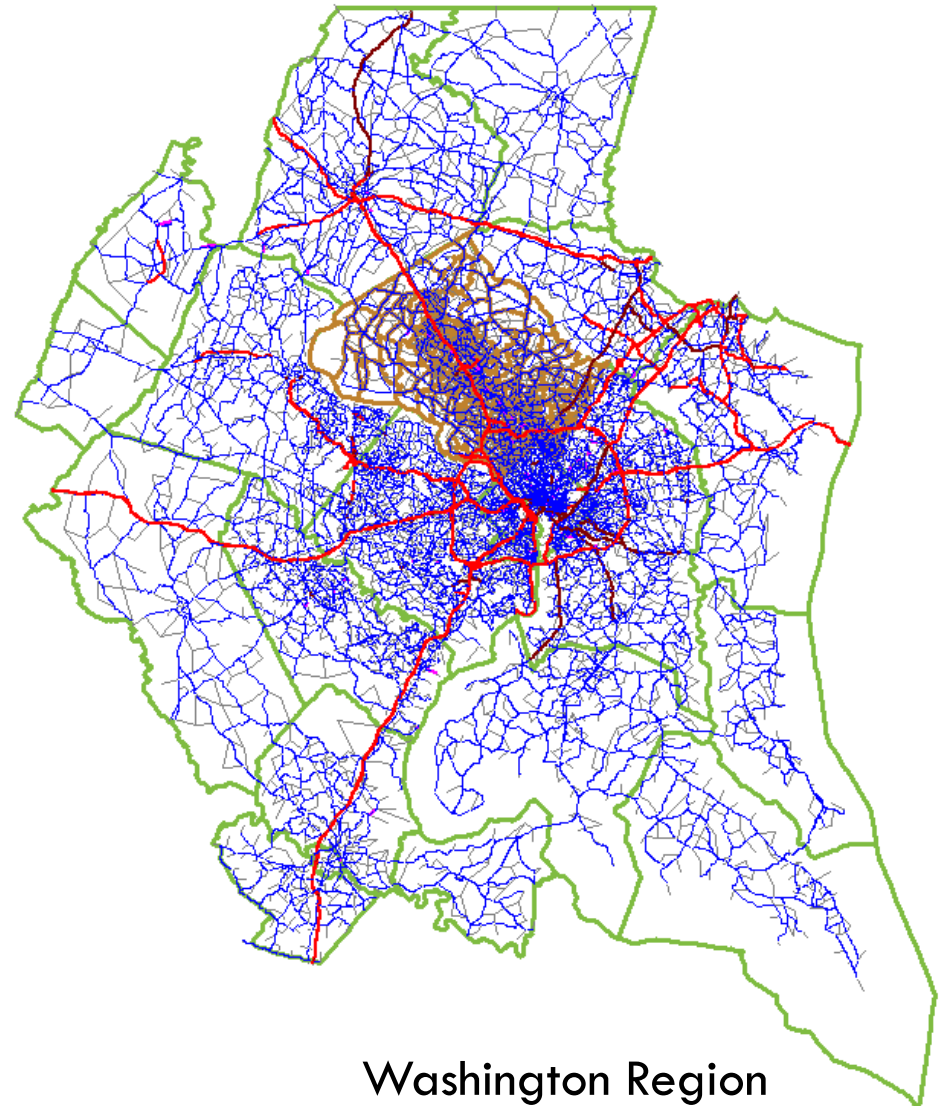
Regional Transportation Model

- Same tool as that used by Metropolitan Washington Council of Governments
- Reflects county-wide and regional traffic effects
- Outputs:
 - Transportation Policy Area Review (TPAR) results. Used to evaluate area-wide land use/transportation balance and transportation adequacy.
 - Through traffic and intersection approach volume results. Used in support of local intersection analysis.

Montgomery County & MWCOG/TPB Model Region

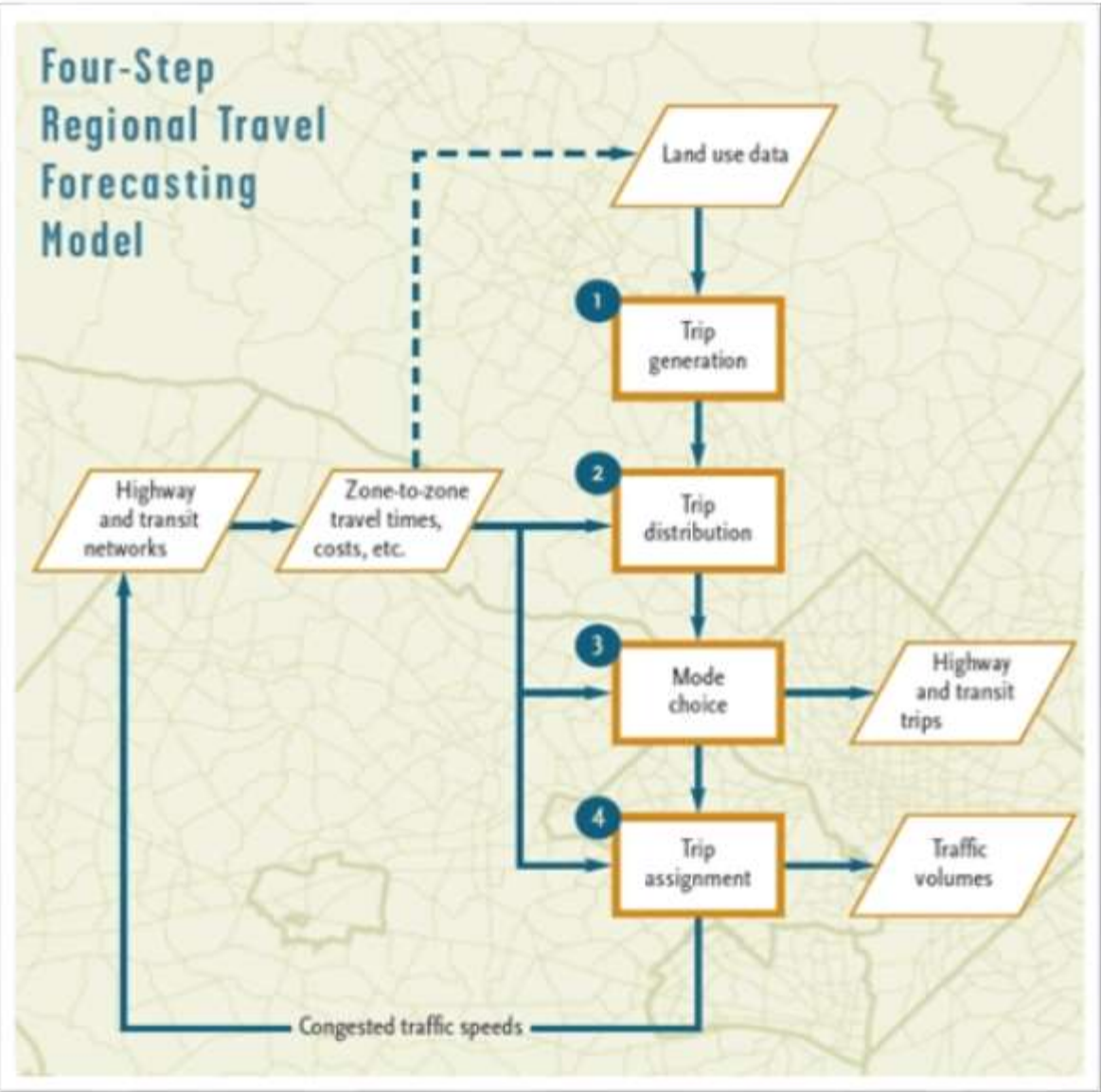


Montgomery County



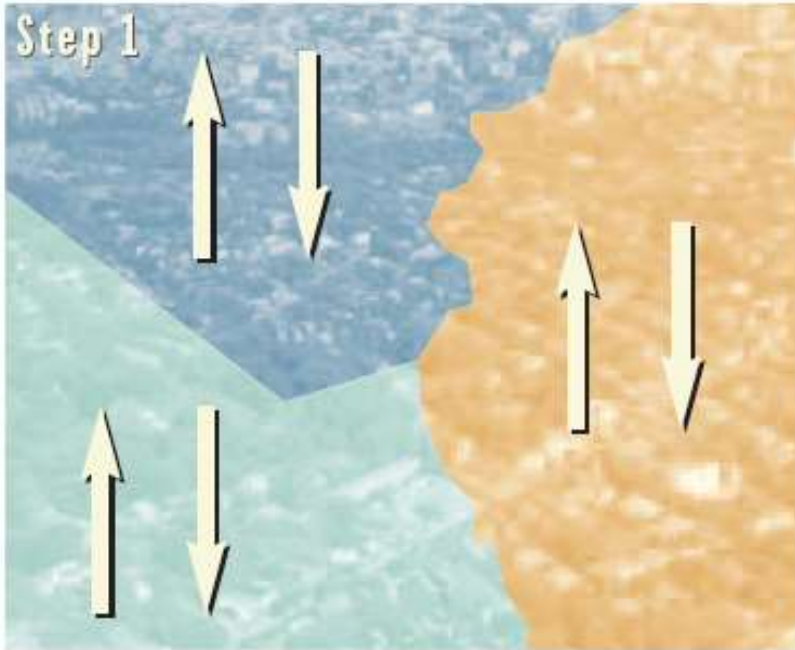
Washington Region

Regional Model Framework

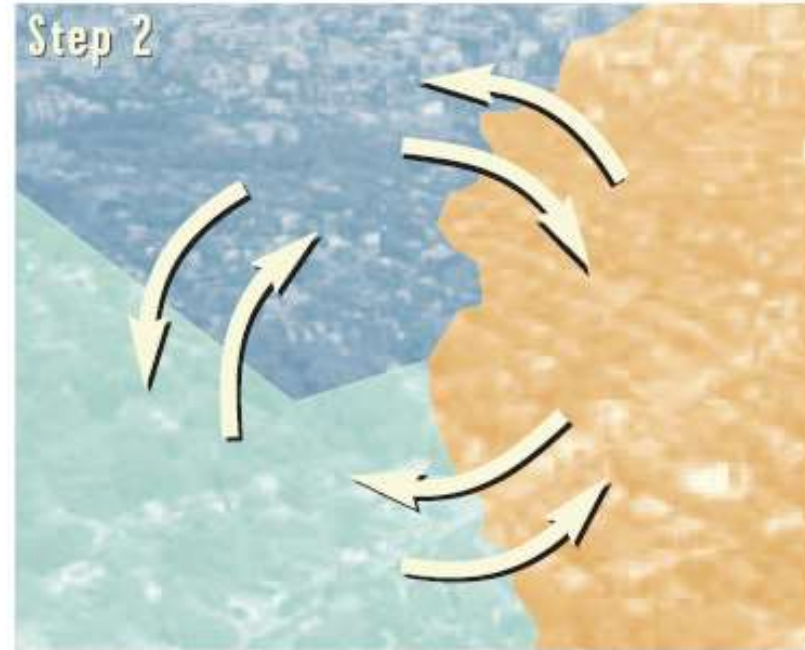


Regional Model Framework

- **Trip Generation:** How many trips are produced?
- **Trip Distribution:** Where are people going?



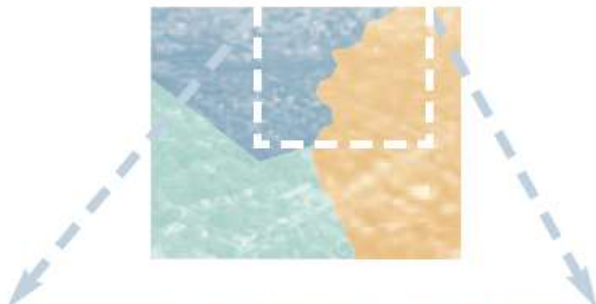
Step 1
Trip generation in three fictitious traffic analysis zones: This step estimates the number of trips produced by and attracted to each zone.



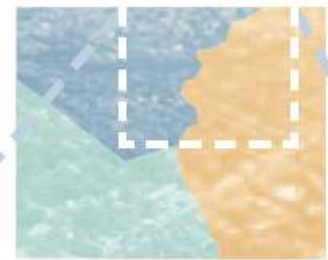
Step 2
Trip distribution among three fictitious zones: This step estimates how many trips are going from zone to zone.

Regional Model Framework

- **Mode Choice:** What method/mode of travel are people using?
- **Trip Assignment:** What route are people taking?



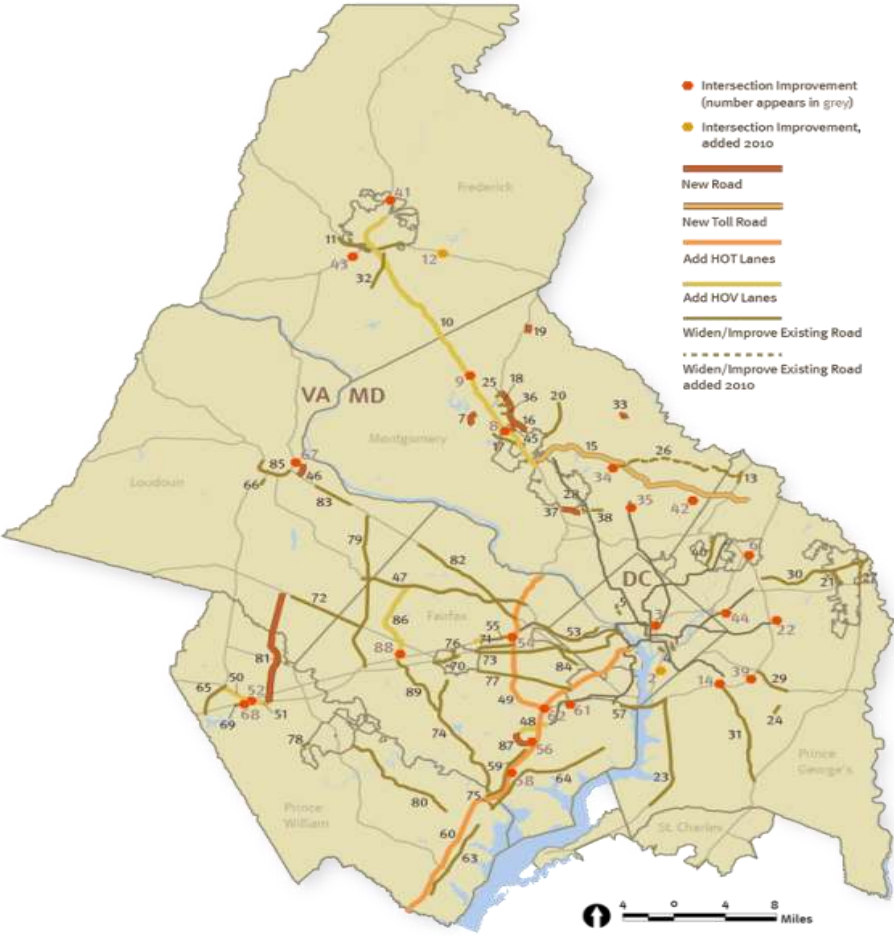
Mode choice between two fictitious traffic analysis zones: Estimating the way people get from zone to zone.



Trip assignment between two fictitious traffic analysis zones: Selecting the fastest route between zones.

Transportation Network Assumptions: Constrained Long Range Transportation Plan (CLRP)

Highways



Transit

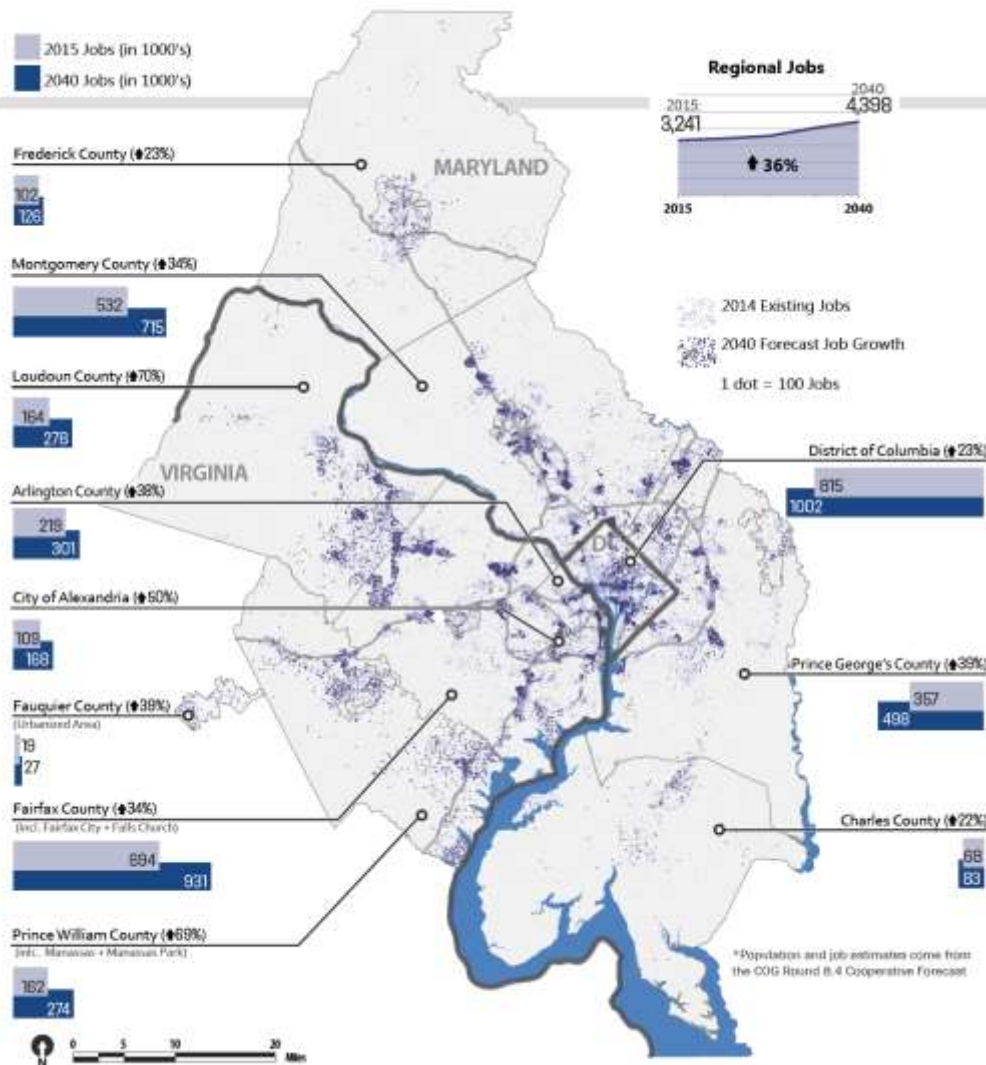


Regional Land Use Assumptions

Job Growth

- By 2040, the regional jobs are expected to grow by 36% to over 4.3 million jobs. This is an increase of 1.1 million new jobs.
- The fastest rates of job growth are expected in the outer jurisdictions of Virginia, while the inner suburban jurisdictions and regional core will continue to be home to the greater number of jobs.
- More new jobs will locate on the western side of the region, and the majority of all new jobs are expected to be in denser population centers throughout the region.

Regional Core: District of Columbia Arlington Co. Alexandria	Outer Suburbs: Charles Co. Frederick Co. Loudoun Co. Prince William Co. Manassas Manassas Park Fauquier Co. Falls Church (Urbanized Area) Fairfax City
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Regional Land Use Assumptions

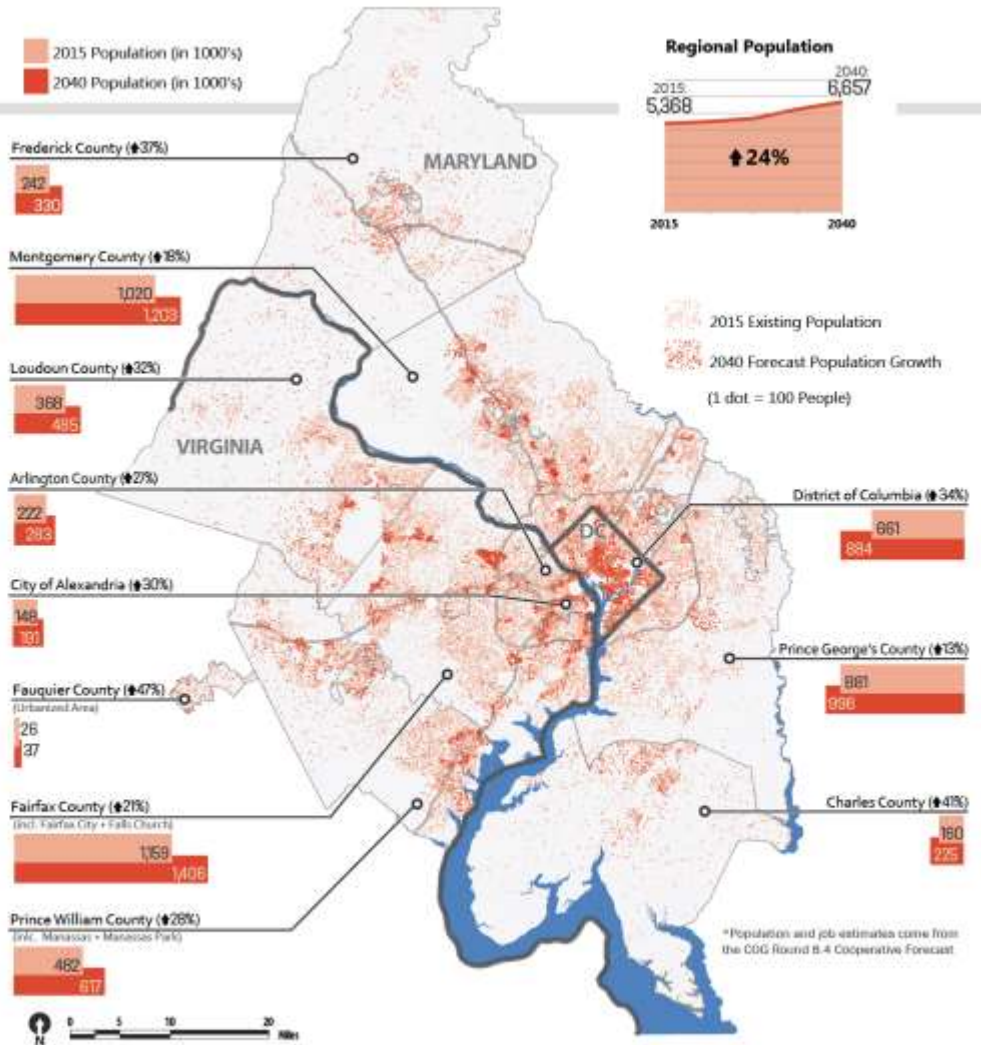
Population Growth

- By 2040, the region is expected to grow by 24% to over 6.6 million people, an increase of 1.3 million people.
- The region's outer suburban jurisdictions are expected to see the highest rates of growth, while the inner suburban jurisdictions and regional core will continue to be home to the most population.
- The majority of new residents are expected to live in denser population centers throughout the region.

Regional Core:
 District of Columbia
 Arlington Co.
 Alexandria

Outer Suburbs:
 Charles Co.
 Frederick Co.
 Loudoun Co.
 Prince William Co.
 Manassas
 Manassas Park
 Fauquier Co.
 (Urbanized Area)

Inner Suburbs:
 Montgomery Co.
 Prince George's Co.
 Fairfax Co.
 Falls Church
 Fairfax City



Area-wide and Local Transportation Analysis



LATR and TPAR

There are two tests for determining transportation adequacy: Local Area Transportation Review (LATR) test and the policy area test called Transportation Policy Area Review (TPAR). These tests are required by the 2012-2016 Subdivision Staging Policy.

Local Area Transportation Review

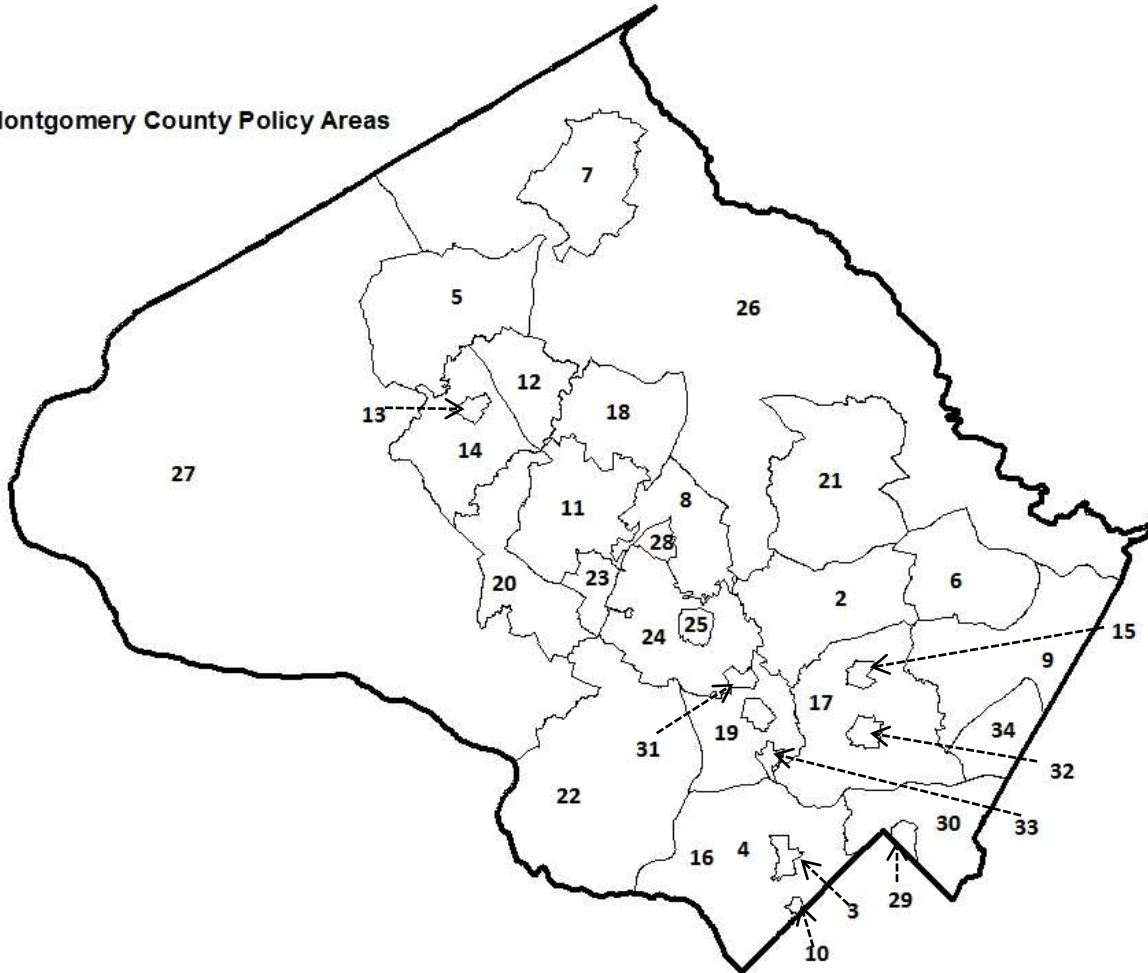
LATR determines the adequacy of local roads by measuring congestion at roadway intersections based on critical lane volume (CLV) and volume to capacity (V/C). The estimated vehicle trips generated by a proposed development are compared to the applicable policy area standard to evaluate likely future congestion. The development's trips that contribute to nearby intersections exceed the standard must be mitigated in some fashion.

Transportation Policy Area Review

TPAR first considers whether a policy area is considered inadequate for transit or roadways (or both). If the area is inadequate, new development in the area must make a Traffic Mitigation Payment based on the number of dwelling units or square footage of nonresidential space, or make improvements that increase transportation capacity in the policy area to address identified specific roadway and transit inadequacies.

Transportation Policy Area Review

Montgomery County Policy Areas



- 2. Aspen Hill
- 3. Bethesda CBD*
- 4. Bethesda/Chevy Chase
- 5. Clarksburg
- 6. Cloverly
- 7. Damascus
- 8. Derwood
- 9. Fairland/White Oak
- 10. Friendship Heights
- 11. Gaithersburg City
- 12. Germantown East
- 13. Germantown Town Center
- 14. Germantown West
- 15. Glenmont*
- 16. Grosvenor*
- 17. Kensington/Wheaton





- 18. Montgomery Village
- 19. North Bethesda
- 20. North Potomac
- 21. Olney
- 22. Potomac
- 23. R&D Village
- 24. Rockville City
- 25. Rockville Town Center*
- 26. Rural East
- 27. Rural West
- 28. Shady Grove*
- 29. Silver Spring CBD*
- 30. Silver Spring/Takoma
- 31. Twinbrook*
- 32. Wheaton*
- 33. White Flint*
- 34. White Oak

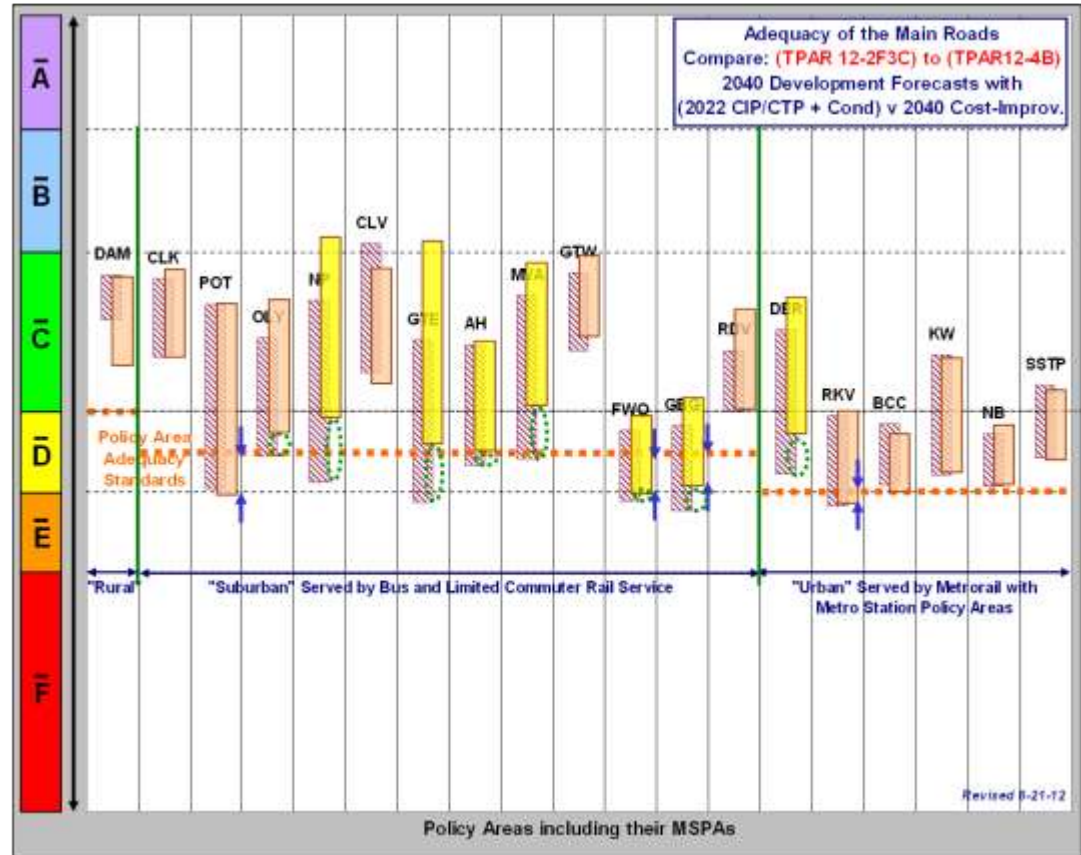
Transportation Policy Area Review is a policy area test of adequacy.

Transportation Policy Area Review (TPAR) Roadway Adequacy

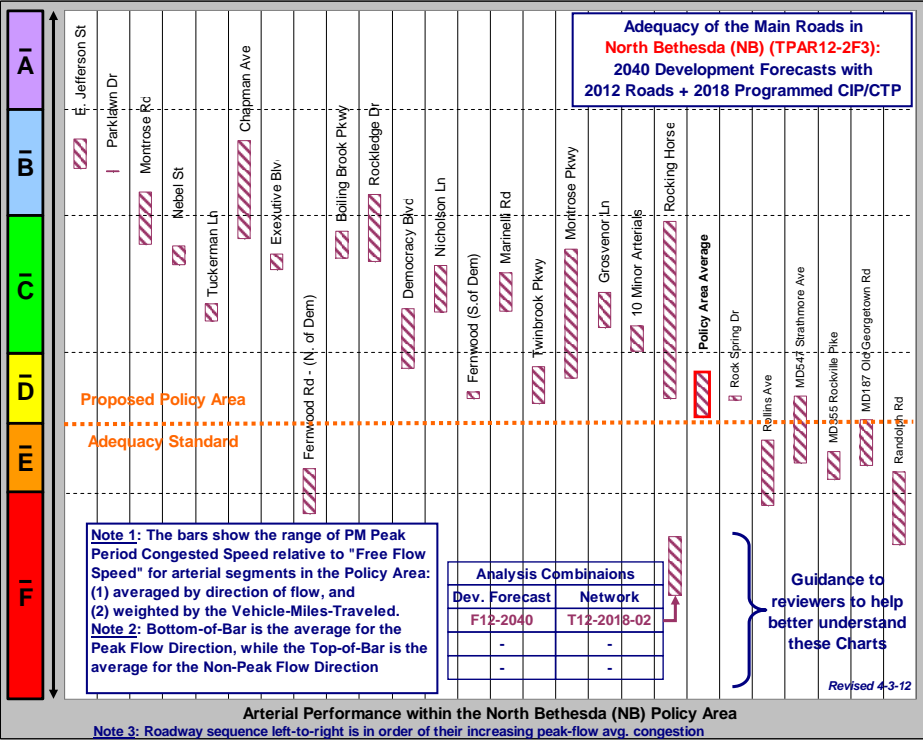
subdivision staging policy 2012-2016

Modeling of Roadway Improvements:

-  Striped bars show conditions in 2040 with no new projects
- Solid bars show the effect of new roadway improvements
 -  Yellow = Direct
 -  Tan = Network (indirect) effects
-  Green ovals indicate improved conditions



Transportation Policy Area Review (TPAR) Roadway Adequacy



❑ Process evaluates the ratio of PM peak period speed relative to “free flow” speed for arterial roadway segments in policy areas.*

❑ Used to assess land use/transportation balance

* Averaged by direction of flow and weighted by vehicle miles traveled

Local Area Transportation Review Intersection Congestion Standard-Critical Lane Volume and Highway Capacity Manual Volume-to-Capacity Equivalencies

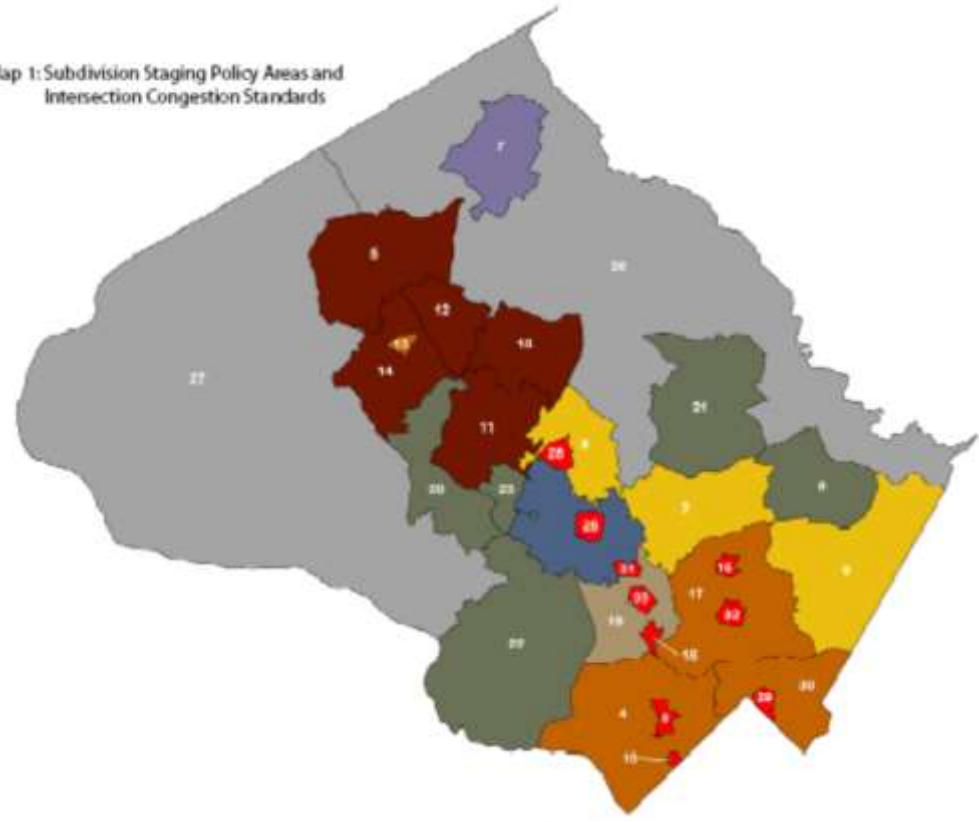
Critical Lane Volume Congestion Standard	Policy Area	HCM volume-to-capacity equivalent
1550	North Bethesda (White Flint 2)	0.97
1500	City of Rockville	0.94
1800	White Flint 1 * Twinbrook * Grosvenor* Rockville Town Center*	1.13
* Metro Station Policy Areas		

Local Area Transportation Review

policy area	critical lane volume standard
26 Rural East 27 Rural West	1,350
7 Damascus	1,400
5 Clarksburg 11 Gaithersburg City 12 Germantown East 14 Germantown West 18 Montgomery Village/Airpark	1,425
6 Clverly 20 North Potomac 21 Olney 22 Potomac 23 R&D Village	1,450
2 Aspen Hill 8 Denwood 9 Fairland/White Oak	1,475

policy area	critical lane volume standard
24 Rockville City 19 North Bethesda	1,500
4 Bethesda-Chevy Chase 17 Kensington-Wheaton 13 Germantown Town Center 30 Silver Spring-Takoma Park	1,600
3 Bethesda CBD 10 Friendship Heights CBD 29 Silver Spring CBD 32 Wheaton CBD 15 Glenmont MSPA 16 Grovesnor MSPA 25 Rockville Town Center MSPA 28 Shady Grove MSPA 31 Twinbrook MSPA 33 White Flint MSPA	1,800

Map 1: Subdivision Staging Policy Areas and Intersection Congestion Standards



Local Area Transportation Review is a test of local intersection adequacy within policy areas.

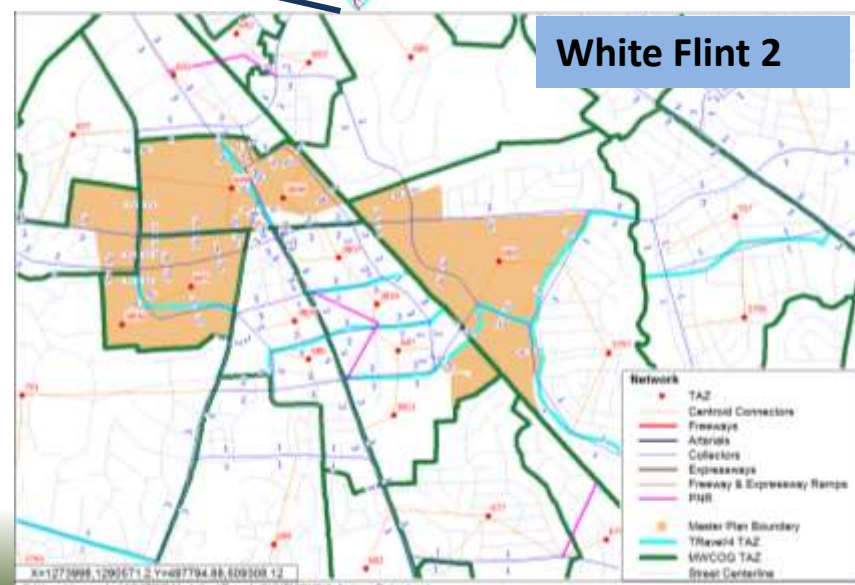
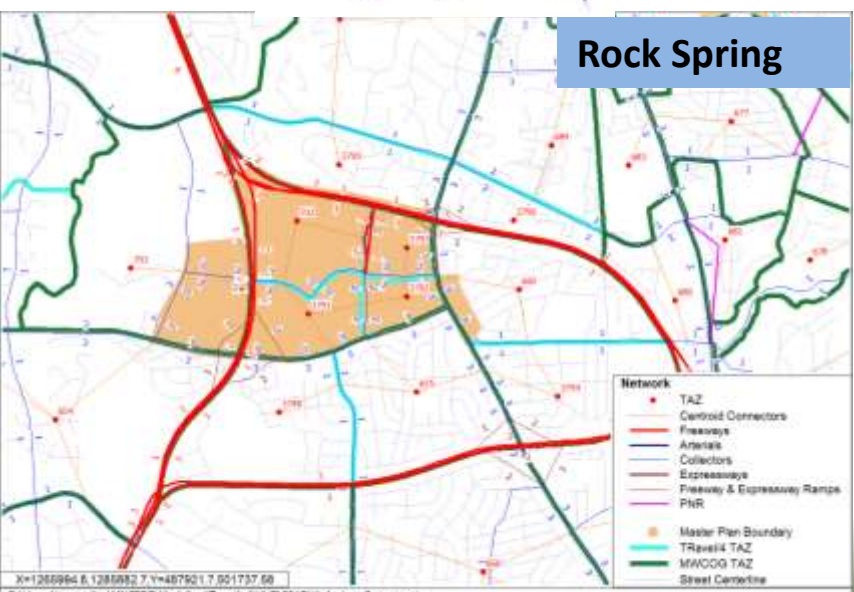
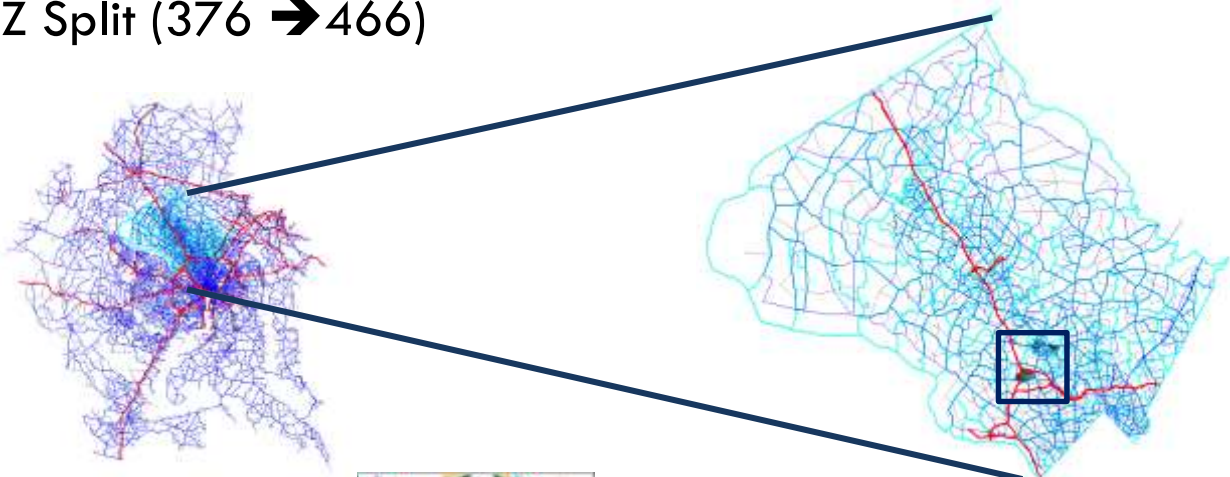
Local Area Transportation Analysis

- Subarea traffic analysis (Master/Sector Plans)
- Intersection level transportation performance analysis
- Reflects changes to the local land use or transportation network
- Results derived from refined regional model support subarea traffic forecasting
- Turning movements derived using NCHRP 765 post-processing techniques
- CLV (Critical Lane Volume) analysis
 - Intersection Performance Metric
 - AWDT and intersection counts support post-processing validation
 - Intersection approach volumes derived from regional model
- HCM analysis (LOS by Intersection Control Delay)

Model Revision for Subarea Traffic Analysis

Windowing and Focusing Approach

- Network expansion (regular links: 3,680 → 4,658)
- TAZ Split (376 → 466)



Proposed Development



- Proposed Development:** Montrose Baptist Church; up to 130 townhouses
- Review:** Rezoning application (G-964)-standard method
- Existing zones:** R-90 and R-60
- Future zone:** Residential Townhouses (RT-15)
- School Cluster:** Downcounty Consortium
- Planning Board Review:** November 19, 2015
- Hearing Examiner Public Hearing:** December 11, 2015
- Council Review:** TBD

Next Meeting

Date: December 9, 2015

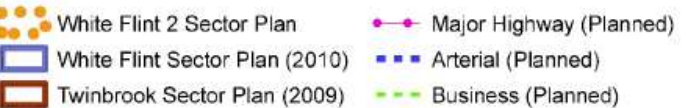
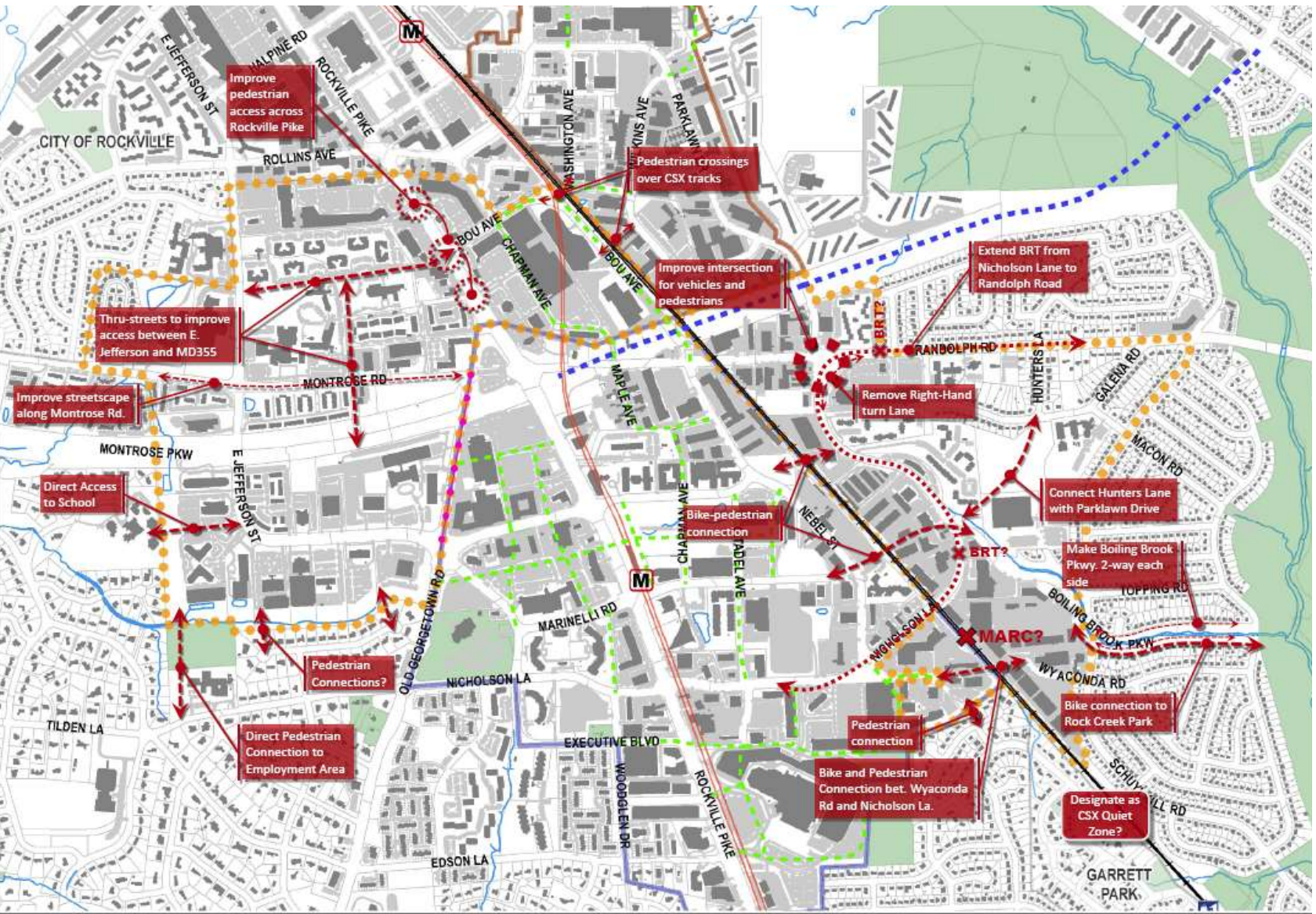
Location: Luxmanor Elementary School-6201 Tilden Lane

Time: 7-9 p.m.

Topic: Parks and Open Space and Land Use Concepts



Questions and Priorities



Summary of comments from Oct. 14 meeting
WF2: Connectivity



